



## GRAND LAKE BOARD OF TRUSTEES WORKSHOP AND MEETING AGENDA

Monday, April 24, 2023, at 4:30 PM

Town Hall Board Room – 1026 Park Avenue

*The Town of Grand Lake upholds the Six Pillars of Character:  
Citizenship, Trustworthiness, Respect, Responsibility, Fairness and Caring*

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**Please join my meeting from your computer, tablet or smartphone.**

<https://us06web.zoom.us/j/86709075148>

**You can also dial in using your phone.**

United States: 719 359 4580

Access Code: 867 0907 5148

### **WORK SESSION 4:30 PM**

1. Call to Order
2. Roll Call
3. Conflicts of Interest
4. Items of Discussion
  - A. Grand Lake Fire Protection District Report
  - B. Creative District Discussion
  - C. Marijuana Ordinance Discussion

### **EVENING MEETING 6:00 PM**

1. Call to Order
2. Pledge of Allegiance
3. Announcements
4. Roll Call
5. Conflicts of Interest
6. Manager's Report
7. Public Comments (Limited to 3 Minutes)
8. Consideration to Approve Meeting Minutes
  - A. April 10, 2023
9. Consideration to Approve Accounts Payable
  - A. April 24, 2023
10. Financial Review
  - A. February Sales Tax
  - B. March Financials
11. Items of Discussion
  - A. Consideration of Ordinance 05-2023, Amending Section 4-3-33 Regarding Building & Use Tax
  - B. Consideration of Bids for Stormwater Analysis & Design Services
  - C. Consideration of Resolution 12-2023; A Resolution Granting a License for the Encroachment into the Public Right of Way of Certain Improvements Located Adjacent to Parcel 4, Daven Haven Cottages of The Town Of Grand Lake.
  - D. **Public Hearing (Quasi-Judicial)** Consideration of Resolution 13-2023; A Resolution Regarding A Petition For Annexation Filed By The Genette Simpkins Revocable Living Trust Regarding An 8.98 Acre Parcel Known As The "Love Tract" And Setting The Matter For A Public Hearing
  - E. Consideration of Actions Regarding a Vacancy on the Board of Trustees
12. Future Items for Consideration
13. Mayor's Report
14. Adjourn Meeting

GRAND  
LAKE  
*Creative*  
DISTRICT



Section 4, Item B.

## MISSION

**To enrich the community and enhance the creative, cultural, and economic vitality of Grand Lake by celebrating the people, places, and partnerships that support an authentic, family-friendly, and inclusive year-round creative economy. To provide opportunities for creatives of all levels and mediums to work, live, and create.**

# VISION

Our vision is a Grand Lake that is a champion and incubator for the arts, a vibrant year-round community that is recognized for its family-friendly creative experiences matched only by the natural beauty that surrounds us.



# Core Pillars



**NATURE**  
majestic natural  
retreat, unspoiled  
setting with dramatic  
views



**INSPIRED**  
inspired as well as  
inspiring environment,  
events, experiences



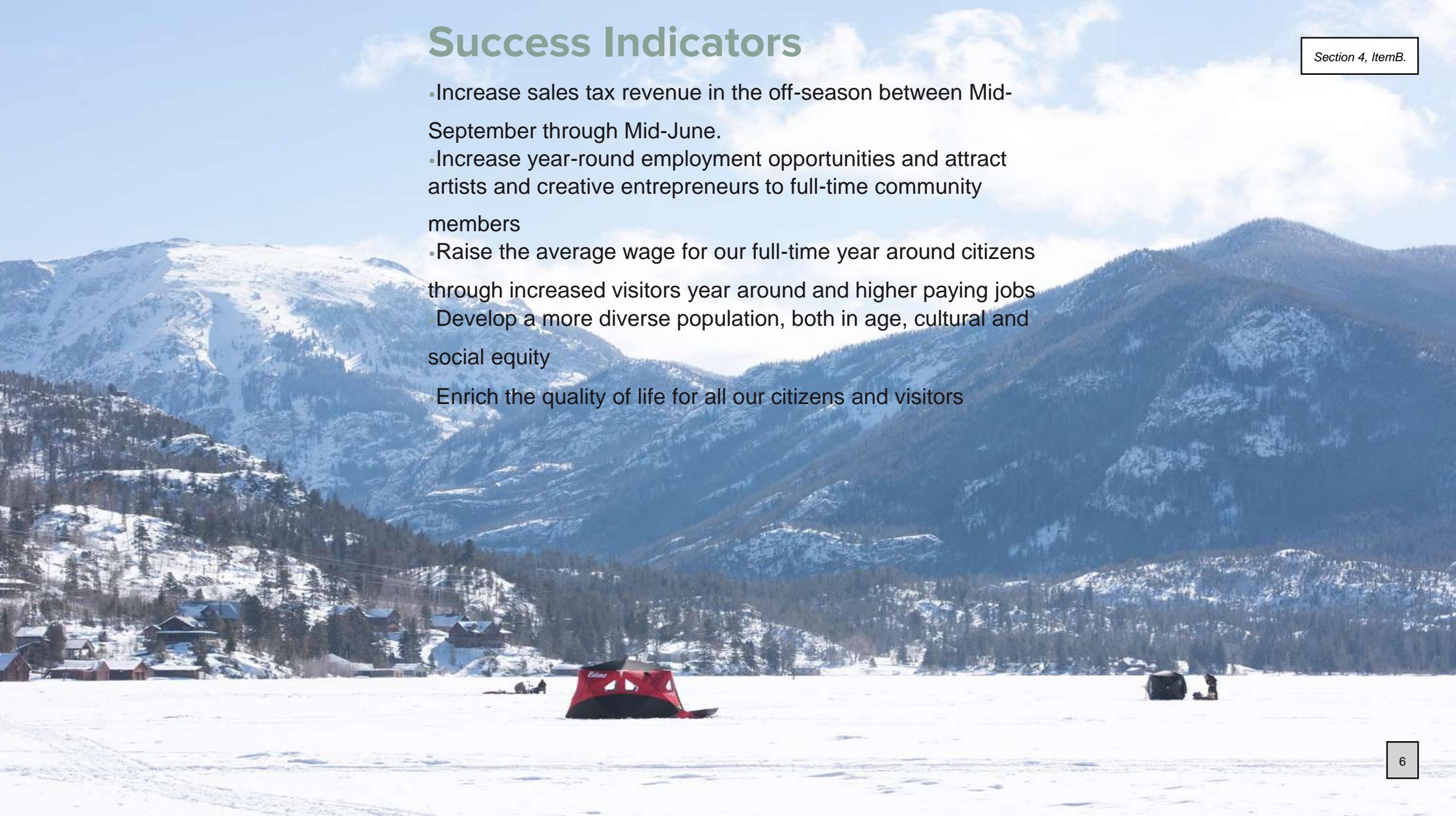
**AUTHENTIC**  
warm and  
welcoming  
community of  
artists and locals



**EVOLVING**  
an eclectic and interesting  
year-round destination with  
opportunities for emerging  
artists as well as amateur  
makers, learners and anyone  
seeking creative experiences

# Success Indicators

- Increase sales tax revenue in the off-season between Mid-September through Mid-June.
- Increase year-round employment opportunities and attract artists and creative entrepreneurs to full-time community members
- Raise the average wage for our full-time year around citizens through increased visitors year around and higher paying jobs
- Develop a more diverse population, both in age, cultural and social equity
- Enrich the quality of life for all our citizens and visitors



**GOAL 1: COLLECTIVE IMPACT PARTNERSHIP:**

**Continue to work with our community partners to develop the creative economy**

**2023**

- **Communication outreach to all members. Quarterly meetings of the Collective Impact group and presentations to the Town Board**
- **Develop a shared Marketing Plan and Event Calendar for stronger cross-promotion**
- **Implement the Town of Grand Lake Program Software for all event/workshop registrations**
- **Build a strong creative brand that serves as an incubator and stimulator of creative opportunities in the community**
- **Serve as the umbrella for all others as a Creative District that supports the Arts.**
- **Continue building awareness and involvement with additional partners to build the creative economy. Community Creative Workshop Fall**
- **Twice a Year (spring/fall) invite the creative community and nonprofits to attend a planning workshop to identify additional partnership events**

**2024**

- **Add 1 to 3 other nonprofits to our collective impact network**
- **Follow up with a survey once a year to businesses and creatives on what is**



## GOAL 2: DEVELOP PROGRAMING OFF SEASON

### 2023 – 2025

- Identify 4 to 6 Signature Events per year that have a following and 2025 bring 50% overnight stays and 50% local attendance.

Fiber: (Partner with the RMFS)

### 2023

- Begin with our 1st Signature Event in the Spring 2023: (Ricky Tim's Quilter Workshop)
- Keith Kemmer Primitive Rug Hooking Event in the Spring 2023

### 2024

- Expand the calendar to a Fiber Week of offerings

Folk music: (partner with the GAC)

### 2024

- Moors and McCumber Folk Event Early Spring
- Ted Vigil: John Denver Tribute Artist Late Fall

### 2025

- Songwriter Workshop and Music Event Week

Community Events and Programming:

Develop a year around the collective calendar of events, workshop, and enrichment programs that support an inclusive of ages, equitable opportunity support, and diverse cultures

### 2024

- Work to bring Cleo Parker Robson or another dance troop ( Section 4, ItemB.)

### 2025

- Develop a week-long variety of workshops and performance events

## GOAL 3: MARKETING AND COMMUNICATIONS

### 2023

- Hire an ad agency to redesign our messaging and logo with our Collective impact partners in mind, hire a consultant as a Program/Marketing Development Coordinator
- Develop a monthly marketing plan for local, regional and state
- Regular article in the Sky Hi News as a special Creative Report Monthly
- Shared, Collective Calendar of Events on all websites
- Promote events, packages and press releases through Colorado Tourism Office and other statewide marketing channels
- Hire consultants to refresh the website

### 2024

- Identify other Creative District Partners for shared events/instructors
- Establish an eblast to all community members quarterly

**GOAL 4: ECONOMIC STABILITY YEAR AROUND**

**2023**

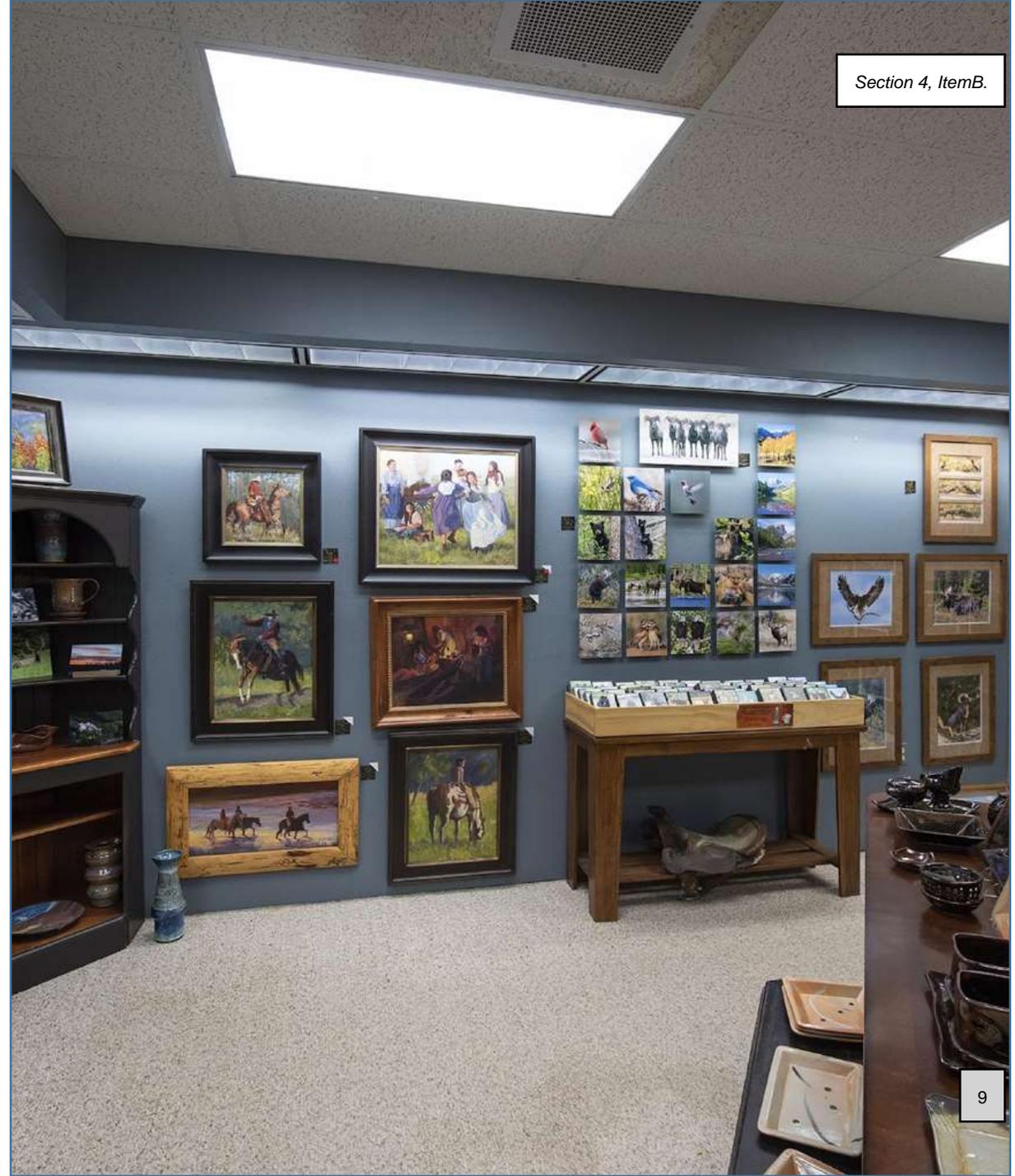
- Pursue the support of workforce housing with Artspace, Town of Grand Lake and the Space to Create Project
- Hire sub-contractors to identify and manage program development
- Hire a CPA to manage budgets
- Develop a Fundraising Sub-Committee
- Track the economic impact indicators of increased sales tax, lodging tax

**2024**

- Budget to hire a full-time executive director
- Identify and develop creative business popups or storefront businesses
- Break ground on the 18 to 20 units for Space to Create
- Develop a match grant campaign for the Town money of \$100,000

**2025**

- Grow the year around economy through the off season workshop/events at a profit of 20% above the investment made



# GRAND LAKE *Creative* DISTRICT

## TOWN OF GRAND LAKE BOARD DISCUSSION QUESTIONS:

**VENUES:** Understanding that any creative nonprofit that is looking to use the town assets/venues will go through the Grand Lake Creative District first to get qualified as a Creative “*sanction*” event. They will then take that form to the Town so that their venue fees can be waived. This will apply to nonprofits that are offering a creative event/workshop or a for profit business that is offering a free, open to the public event. All security deposits and clean up are the responsibility of the nonprofit, not Grand Lake Creative District.

Grand Lake Creative District will pay for the Grand Art Council Wed. Concerts in the Park in the amount of \$2,200.00. This is the only grant that the Town of Grand Lake had budgeted for and is expecting GLCD. All other sponsorships will be at the discretion of GLCD. GLCD will be a premium sponsor with a banner for this event.

# GRAND LAKE *Creative* DISTRICT

TOWN OF GRAND LAKE BUDGET FOR 2023:

- Contractors: \$44,000
- Programming Events \$35,000
- Marketing \$15,000
- Lodging For Artists/instructors \$ 5,000
- Movie Rights \$ 1,000
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# GRAND LAKE *Creative* DISTRICT



## ARTICLE 5 Regulated Marijuana Businesses

On November 8, 2022 the voters of Grand Lake approved Town of Grand Lake Question 2C, “allow[ing] the operation of marijuana businesses in the town and amending the municipal code by the addition of new sections permitting, subject to regulations to be adopted by ordinances of the town, certain activities relating to marijuana, and by so doing repeal the Article 5 of Chapter 7 and Article 11 of Chapter 7, or other section of the Grand Lake Municipal Code, to the extent they are inconsistent with such authorization[.]” The Town of Grand Lake Board of Trustees hereby finds, determines, and declares that it has the power to adopt this Article 5 of Chapter 6 of the Grand Lake Municipal Code pursuant to Chapter XVIII, section 16 of the Colorado Constitution; Colorado Revised Statutes section 44-10-104(3); Chapter XX of the Colorado Constitution; the Town of Grand Lake Charter; and the Local Government Land Use Control Enabling Act, Chapter 20 of title 29, Colorado Revised Statutes. (Ord. 559, Series of 2021).

### Sec. 6-5-1. Definitions.

Unless defined in this Section, or if the context clearly requires otherwise, capitalized terms within this Article shall have the meaning attributed to them in the Code of Colorado Regulations – Colorado Marijuana Rules – 1 CCR 212-3(1-115), adopted by the Colorado Marijuana Enforcement Division, Department of Revenue, as of the effective date hereof.

- (a) *Applicant* means any Person applying to the Town for a License, including without limitation any Entity and/or any Person who qualifies as a Controlling Beneficial Owner.
- (b) *Article* means Article 5 of Chapter 6 of the Grand Lake Municipal Code.
- (c) *Board* means the Town of Grand Lake Board of Trustees.
- (d) *License* means a license issued by the Town to operate a Medical Marijuana Store and a Retail Marijuana Store at one location within the Town.
  - 1. A Licensee shall be required to operate as a Retail Marijuana Store, and shall have the option to also operate as a Medical Marijuana Store.
- (e) *Licensee* means an Applicant who has been issued a License by the Town.
- (f) *Lottery* means the lottery selection process under Section 6-5-7(i) of this Article.
- (g) *MED* means the Colorado, Department of Revenue, Marijuana Enforcement Division.
- (h) *Regulated Marijuana Business* means Medical Marijuana Businesses and Retail Marijuana Businesses.
- (i) *Colorado Marijuana Code* means Colorado Revised Statutes Title 44, Article 10, Section 101 *et seq.*, and the Colorado Marijuana Rules promulgated pursuant thereto at 1 CCR §212-3.
- (j) *Regulated Marijuana Store* means a Medical Marijuana Store or Retail Marijuana Store.
- (k) *State* means the State of Colorado.
- (l) *Town* means the Town of Grand Lake, Colorado.

(m) *Town Code* means the Grand Lake Municipal Code.

**Sec. 6-5-2. License Types Permitted.**

Regulated Marijuana Stores shall be the only Regulated Marijuana Business license type permitted in the Town. All other Regulated Marijuana Business license types shall remain prohibited. It shall furthermore be unlawful for any Person to own or operate a Regulated Marijuana Store without first obtaining all necessary permits, licenses, and approvals to operate such a business from the Town pursuant to this Article and from the State pursuant to the Colorado Marijuana Code.

**Sec. 6-5-3. Local Licensing Authority.**

- (a) The Board is hereby designated the Local Licensing Authority with all powers granted thereto by the provisions of the Colorado Marijuana Code. Any decision made by the Board to (i) grant or deny a License, (ii) revoke or suspend a License, (iii) renew or not renew a License, (iv) fine a Licensee, or (v) place a License on probationary conditions, shall be a final decision and may be appealed to district court pursuant to Rule 106(a)(4) of the Colorado Rules of Civil Procedure.
- (b) In case of an application resubmitted directly to the Town pursuant to Section 16(5)(h) of Article XVIII of the Colorado Constitution, due to the failure of the state licensing authority to act upon an application within ninety (90) days, the Board shall act as the licensing authority thereunder and all requirements of this Article shall apply to such application. In addition to compliance with this Article, the Applicant shall demonstrate compliance with all applicable requirements of the Colorado Marijuana Code and shall pay to the Town the full amount of the application fee if not forwarded by the State. The Board shall approve or deny such application within ninety (90) days after receipt of the resubmitted application.
- (c) The Town Clerk, or their designee, shall assist the Board by receiving all applications, coordinating with other Town officers and departments when relevant, scheduling required public hearings and providing notice in accordance with this Article, the Town Code, and the Colorado Marijuana Code. The Town Clerk, or their designee, shall also act as the local point-of-contact with the MED on all marijuana regulatory matters.

**Sec. 6-5-4. Limitation on Number of Licenses.**

- (a) The Board shall have the authority to initially grant and issue one (1) License pursuant to this Article and the Colorado Marijuana Code. This one (1) License shall be awarded pursuant to the application and Lottery selection process as set forth in this Article.
  - (1) One (1) year from the date the first Licensee opens for sales to the public, , or upon motion by the Board, the Board shall review (i) the results and impacts of marijuana legalization in the Town, and (ii) the operation and implementation of the provisions and procedures in this Article. If upon such review the Board determines it is in the best interest of the Town, the Board shall have the discretionary authority to grant and issue one (1) additional License. This second License shall be awarded pursuant to a

new application and Lottery selection process as set forth in this Article, or pursuant to an alternative process as the Board shall provide by resolution.

- (b) In the event that a previously granted and issued License is revoked, not renewed, surrendered, or terminated, resulting in the permanent loss of that License by a Licensee, and therefore fewer than two (2) Licenses are issued and active within the Town, the Board may, at the Board's discretion, approve and issue additional License(s) pursuant to a new application and Lottery selection process as set forth in this Article, or pursuant to an alternative process as the Board shall provide by resolution.
- (c) At no time shall there be more than two (2) Licenses issued and active within the Town.

**Sec. 6-5-5. Limitations and Requirements Applicable to Regulated Marijuana Stores.**

- (a) *State requirements.* Regulated Marijuana Stores must at all times comply with the regulations and requirements contained in the Colorado Marijuana Code. The Local Licensing Authority may revoke or otherwise penalize a Licensee pursuant to Section 6-5-15 of this Article.
- (b) *Location.* Regulated Marijuana Stores shall only be located on property within the Commercial Zoning District or a planned development district; but shall not be permitted on any parcel east of Broadway Street. Regulated Marijuana Stores shall not be permitted to operate as "home occupations."
- (c) *Separation requirements.*
  - (1) No License shall be approved if, at the time of the initial application for such License, the proposed location is within three hundred (300) feet of:
    - i. Any established and conspicuously identified elementary or secondary school;
    - ii. Existing licensed child care facility; or
    - iii. Any existing Regulated Marijuana Store.
  - (2) The distances set forth in this Subsection shall be computed by direct measurement in a straight line from the nearest property line of the land used for the purposes stated above, respectively, to the nearest portion of the building in which the Regulated Marijuana Store is located. The locational criteria contained in this Section shall apply to all proposed changes in the location of an existing License.
  - (3) The Board may waive the distance requirements set forth in this Subsection for a specified location if an Applicant demonstrates that granting such a waiver will not negatively impact the health, safety, or welfare of the Town.
- (d) *Co-location & Retail Marijuana Store.* Any License issued by the Town shall allow for both a Medical Marijuana Store and a Retail Marijuana Store to operate on the same Licensed Premises under one License.
  - (1) Each Licensee shall be required to operate as a Retail Marijuana Store, and shall have the option to also operate as a Medical Marijuana Store.
- (e) *Signage & Advertisements.* Advertisements, signs, displays or promotional material depicting marijuana, marijuana plants, or any other pictures or symbols commonly

understood to refer to marijuana, shall not be shown or exhibited on the exterior of a Licensed Premises or in any other location within the Town where visible from a public right-of-way. No signage associated with a Regulated Marijuana Store shall use the word "marijuana," "cannabis," or any other word or phrase commonly understood to refer to marijuana. All exterior signage associated with a Regulated Marijuana Store must comply with the Town Sign Code at Chapter 6 of Article 2 of the Town Code and must receive a sign permit pursuant thereto. Existing exemptions in the Town Sign Code shall not apply to exterior signage associated with the Regulated Marijuana Store.

(1) Notwithstanding the foregoing, and so long as in compliance with all other applicable signage and advertisement requirements, a Licensee’s exterior signage shall be permitted to use:

- i. The words “Recreational” and “Dispensary” one (1) time each, the text of which shall be no larger than [enter maximum size];
- ii. One (1) green cross symbol no larger than [enter maximum size];
- iii. If the Licensee also operates as a Medical Marijuana Store, the word “Medical” one (1) time, the text of which shall be no larger than [enter maximum size].

(f) *Indoor Operation.* All Regulated Marijuana Store operations (except transportation) shall be conducted indoors, and shall not be visible from the exterior of the building.

(g) *Inspection of Licensed Premises.* During all business hours and other times of apparent activity, the Licensed Premises and the property associated with a License shall be subject to inspection by Town personnel, or commissioned police officers of the Town, for the purpose of investigating and determining compliance with the provisions of this Article, the Colorado Marijuana Code, and any other applicable state or local law or regulation. Such inspection may include, without limitation, the inspection of books, records and inventory. Where any part of the Licensed Premises or property consists of a locked area, such area shall be made available for inspection, without unreasonable delay, upon request.

(h) *Additional Requirements.* Regulated Marijuana Stores shall be subject to the following additional requirements:

- (1) A Regulated Marijuana Store may only be open to the public during the hours of 8:00 a.m. to 10:00 p.m. unless the Board authorizes extended hours of operation as a provision of the License, but in no event shall such authorization extend past 12:00 a.m. The Board may only authorize such extension after making a determination that such hours of operation are appropriate for the neighborhood.
- (2) No on-site consumption of marijuana is allowed.
- (3) A Town business license and sales tax license shall be required.
- (4) No mobile structure may be used to operate a Regulated Marijuana Store.
- (5) No alcohol sales or consumption shall be permitted on the Licensed Premises.
- (6) A Licensee shall not permit persons who do not possess a valid identification or other appropriate proof of age to enter or loiter on or about the Licensed Premises.

- (7) All Regulated Marijuana Stores, and their owners, officers, employees, and agents must comply at all times with all other applicable provisions of the Town Code.
- (8) Whenever the provisions of the Colorado Marijuana Code require a Licensee to submit licensing, operational, investigative, or incident documentation to the MED or other governmental entities, the Licensee shall provide copies of all such submissions to the Town Clerk.
- (9) All Regulated Marijuana Stores shall post conspicuous signage at each Point of Sale, and at each customer point of egress from the Licensed Premises, printed in red, stating the following:

**WARNING: FEDERAL LANDS  
MARIJUANA USE AND POSSESSION IS  
ILLEGAL ON ALL FEDERAL LANDS  
INCLUDING IN ROCKY MOUNTAIN  
NATIONAL PARK**

- (i) *Proper Ventilation.* All Regulated Marijuana Stores shall be equipped with a proper ventilation system that filters out the odor of marijuana so that the odor is not capable of being detected by a person with a normal sense of smell at the exterior of Licensed Premises or any adjoining business, parcel, or tract of real property. All Applicants for a new License shall submit a ventilation and odor mitigation plan with their Application, which shall be subject to review and approval by the Board prior to issuance of a new License. The lack of an approved ventilation and odor mitigation plan shall be grounds for denial of a new License or renewal of an existing License. Failure to install or maintain the ventilation system required by an approved ventilation and odor mitigation plan shall constitute a violation of this Article and shall be grounds for suspension or revocation of a License pursuant to Section 6-5-15 of this Article.

**Sec. 6-5-6. Retail Marijuana Sales Tax**

- (a) A retail marijuana sales tax is imposed upon all retail sales of retail marijuana and retail marijuana products sold within the Town by Retail Marijuana Stores at the rate of five percent (5%) of the gross price paid by the purchaser, rounded off to the nearest penny. The tax imposed by this Section is in addition to, and not in lieu of, the general sales tax owed to the Town and all taxes owed to the State in connection with the sale of retail marijuana and retail marijuana products. The Board may, by resolution, raise the retail marijuana sales tax under this Section to no higher than fifteen percent (15%). Where possible, retail marijuana sales tax revenues shall be collected pursuant to Section 4-3-8 of the Town Code. The Town Manager may adopt administrative rules and regulations specifying additional or alternative procedures for the collection and enforcement of the retail marijuana sales tax imposed by this Section.
- (b) Medical Marijuana sales shall not be subject to any Town marijuana sales tax, but shall be subject to the general sales tax owed to the Town.

**Sec. 6-5-7. Lottery Phase Application Requirements**

- (a) The Town hereby establishes a two-phase License application process. The Lottery Phase shall consist of application submissions for the purpose of entry into the Lottery to be conducted by the Town pursuant to this Section. The Licensing Phase shall consist of a separate application submitted by the Applicant selected in the Lottery for the purpose of licensing approval and issuance by the Board pursuant to Sections 6-5-8, 6-5-9, and 6-5-10 of this Article.
- (b) Within forty-five (45) days of the effective date of this Article, the Town shall post notice on its website indicating that Lottery Phase applications shall be accepted for a sixty (60) day period.
- (c) *Lottery Phase Applications.* An Applicant shall submit a Lottery Phase application to the Town on forms provided by the Town Clerk and posted on the Town website. As part of the Lottery Phase applications, all Applicants, including all Controlling Beneficial Owners associated therewith, shall submit to the Town Clerk, without limitation:
  - 1. A copy of a form of identification issued by the government of the United States, the government of any state within the United States, or the government of a United States Territory.
    - i. Such identification shall not be expired and shall include name, address, and date of birth.
  - 2. Evidence of lawful presence or residence in the United States.
  - 3. Completion of criminal and moral character disclosure form.
  - 4. Proof of submission to the MED, for all Controlling Beneficial Owners, of an application for Findings of Suitability
    - i. The Applicant must also submit to the Town copies of all such MED applications.
  - 5. Curriculum vitae for the Applicant, each Controlling Beneficial Owner, and any managers associated with the Applicant.
  - 6. If the Applicant is a business entity, information regarding the entity, including without limitation:
    - i. The name and address of the entity;
    - ii. Identification of all Controlling Beneficial Owners of the entity;
    - iii. Certificate of good standing from the Colorado Secretary of State;
    - iv. An organizational chart;
    - v. If a corporation: Articles of Incorporation, Shareholders Agreement, and Bylaws;
    - vi. If a limited liability company: Articles of Organization, and Operating Agreement; and

- vii. Other business entity documentation as may be requested by the Town Clerk.
- 7. Proof of access to adequate funding to cover start-up expenses of not less than \$150,000.
  - i. If the Applicant cannot document proof of access to adequate funding at the time of submission of a Lottery Phase application, the Applicant must submit a written Funding Plan for the purpose of obtaining adequate funding to cover start-up expenses of not less than \$150,000.
- 8. A copy of any deed, lease, letter of intent, or other contract reflecting the right, or the right conditioned on License approval, of the Applicant to possess and operate a Regulated Marijuana Store at a location permitted by this Article.
  - i. If the property of the proposed Regulated Marijuana Store is located within an owners association, or a Planned Development under 12-2-25 of the Town Code, the applicant shall provide proof that the proposed Regulated Marijuana Store use complies with all applicable covenants and required approvals thereunder.
  - ii. If the Applicant cannot provide documentation satisfying this Subsection at the time of submission of a Lottery Phase application, the Applicant must submit a written plan for securing a right to possess and operate a Regulated Marijuana Store at a location permitted by this Article.
- 9. Executive Summaries of Applicant's:
  - i. Business Plan;
  - ii. Operations Plan;
  - iii. Compliance Plan;
  - iv. Security Plan, including without limitation:
    - A. Complying with MED security regulations;
    - B. Theft and diversion prevention; and
    - C. Other locational and community-specific security concerns
  - v. Staffing Plan;
  - vi. Community Engagement Plan, including without limitation, Applicant's history of community service;
  - vii. Odor Mitigation and Ventilation Plan;
  - viii. Personnel Experience, including without limitation:
    - A. Operating a licensed marijuana business in Colorado or another state; or
    - B. Operating a business in a highly regulated industry.

(d) *Bonus Weight Criteria.*

1. An Applicant shall be awarded fifteen percent (15%) bonus weight in the Lottery selection process if the Applicant submits proof that no less than fifty-one percent (51%) of all Controlling Beneficial Owners associated with the Applicant have continuously resided full-time in the Town, or in Grand County, Colorado, for no less than one (1) full year immediately preceding the date of submission of Applicant’s Lottery Phase application.
2. An Applicant shall be awarded ten percent (10%) bonus weight in the Lottery selection process if the Applicant submits proof that the Applicant is a Social Equity Licensee under the Colorado Marijuana Code.
3. Bonus weight under this subsection shall not be cumulative. The maximum bonus weight an Applicant can receive, even if the Applicant qualifies under both bonus criteria, is fifteen percent (15%).

(e) *Lottery Phase Application Fees.* Along with the Lottery Phase application, all Applicants must submit a Lottery Phase application fee to the Town to cover costs associated with processing, investigating and administering the Lottery Phase application process. The Lottery Phase application fee shall be established by the Town by resolution.

(f) *Common Control Prohibition.* No Person or Entity may apply on behalf of another Person or Entity. Multiple Lottery Phase application submissions by the same Person or Entity, or applications by multiple entities with substantially the same ownership or who are Affiliated Entities (as defined below), are prohibited and will be rejected. No Applicant shall provide, rely on, or include in their Funding Plan under Section 6-5-7(C)(7), any funding which is shared, or in any way associated with, another Applicant’s source or plan for funding. All Controlling Beneficial Owners associated with an Applicant shall be required to attest, subject to criminal penalties for perjury, that they are not affiliated with any other Applicant, and that they do not share common control or funding with any other Applicant as set forth in this Subsection. Submission of a Lottery Phase application in violation of this Subsection shall result in the rejection of all Lottery Phase applications associated with such violation.

1. For purposes of this Subsection, “substantially the same ownership” and “Affiliated Entities” are defined as follows:
  - i. “Substantially the same ownership” means that entities share any Controlling Beneficial Owners in common.
  - ii. “Affiliated Entities” means:
    - A. A Person having ownership or any level of control in common with an entity, in whole or in part, including, without limitation, an entity’s parent corporation, franchisor, licensor, and any subsidiaries or affiliates of such parent corporations; or
    - B. A Person who has a direct business or an immediate familial relationship with another person or a person or entity using the same trade name as another person or entity.

2. Applicants may not transfer an Application to a third party at any time during any stage of the Lottery Phase or Licensing Phase of the application process.
  3. To ensure compliance with the prohibitions of this Subsection, during the first two years following the License issuance date, the Licensee shall not transfer its License, alter its ownership or ownership structure as it pertains to Controlling Beneficial Owners, or change its name or trade name.
    - i. The Board may waive this requirement if good cause is shown, and if such waiver will neither undermine the purpose of this Section nor negatively impact the health, safety, or welfare of the Town.
  4. The Board may promulgate rules and regulations as needed to carry out the intent of this Section to ensure and confirm that each Applicant is a wholly separate business owned, operated, funded, and controlled by a wholly separate Person or Entity, with no affiliation to any other Applicant.
- (g) *Completeness Review.* The Town Clerk, or their designee, shall review Lottery Phase applications for completeness as they are received. If a Lottery Phase application is found to be incomplete, the Town Clerk, or their designee, shall notify the Applicant in writing, via email and U.S. mail, of the Application’s deficiencies, and the Applicant shall have fifteen (15) days from the date of the deficiency notice to remedy the deficiency(ies). If the Applicant fails to remedy the deficiency(ies) within the specified period, the Town Clerk, or their designee, shall deny the Application and notify the Applicant of the denial.
1. Denial of an Application at the completeness review stage under this Subsection is appealable to the Town Manager by filing an appeal with the Town within ten (10) days of the date the notification of the denial was mailed. The Town Manager shall schedule a hearing within twenty (20) days of the filing of the appeal. The Town shall provide at least seven (7) days’ notice to the appellant of the hearing. The Town Manager shall make a determination of the appeal within ten (10) days of the hearing and shall notify the appellant of the decision in writing.
- (h) *Board Review.* At the end of the completeness review period under this Section, including the appeals process thereunder, if any, the Town Clerk, or their designee, shall submit to the Board all Lottery Phase applications determined to be complete. At its next regular public meeting, the Board shall review each complete Lottery Phase application to determine qualification, pursuant to this Section, for entry into the Lottery. The Board shall make such determinations and notify each Applicant, in writing, no later than thirty (30) days from such public hearing. Applicants shall qualify for entry into the Lottery by demonstrating, through the Lottery Phase application materials submitted to the Town, that the Applicant possesses sufficient:
1. Knowledge of applicable state and local laws and regulations,

2. Knowledge of the legal marijuana industry and/or competence in operating a business in another highly regulated industry, and
  3. Professionalism in business plans, operational plans, and other submitted materials.
- (i) *Lottery Selection.* Upon final determination by the Board of all Lottery Phase applications that qualify for entry into the Lottery, the Town shall conduct a random Lottery at its next regular public meeting, subject to Subsection (d) of this Section, to select which Applicant shall proceed with the License Application process under Section 6-5-8. Following such selection, and at the same public meeting, the Town shall also conduct a random Lottery to select alternate Applicants by assigning each alternate Applicant an alternate preference number corresponding to the order in which they were selected.
1. The Town may adopt administrative rules and regulations specifying the policies and procedures for conducting the Lottery.

**Sec. 6-5-8. License Phase Application Requirements**

- (a) *License Phase Application.* No later than sixty (60) days from the date of the Lottery, or from the date an alternate Applicant is notified by the Town pursuant to Section 6-5-8(D)(2), the Applicant selected in the Lottery shall submit a License Phase application to the Town on forms provided by the Town Clerk and posted on the Town website.
- (b) As part of the License Phase application, the Applicant shall submit, without limitation:
2. A copy of any deed, lease, or contract reflecting the right, or the right conditioned on License approval, of the Applicant to possess and operate a Regulated Marijuana Store at the location specified in the License Phase application.
  3. Updated and comprehensive business plans, tailored to the location specified in the License Phase application, covering all subject areas set forth in Section 6-5-7(c)(9).
  4. Proof of Findings of Suitability issued by the MED for all Controlling Beneficial Owners of the Applicant.
  5. Proof of submission to MED of a Regulated Marijuana Business License Application.
    - i. The Applicant must also submit to the Town copies of such MED application(s).
  6. Town Sales Tax License.
  7. Town Business License.
  8. Proof of submission to the Town of a Conditional Use Permit Application pursuant to Town Code 12-2-31(B).
  9. If any information about the Applicant has changed since the submission of the Lottery Phase application, the Applicant shall disclose and submit all such updated information with the License Phase application.

10. Any additional information or documentation that the Board or Town staff determines to be reasonably related to investigating the Applicant's plans, qualifications, and fitness for operating a Regulated Marijuana Store at the location specified in the License Phase application.
- (c) *License Phase Application Fees.* Along with the License Phase application, the Applicant must submit a License Phase application fee to the Town to cover costs associated with processing, investigating and administering the License Phase application process. The Licensing Phase application fee shall be established by the Town by resolution.
  - (d) *Completeness Review.* Within fifteen (15) days of receiving a timely submitted License Phase application, the Town Clerk, or their designee, shall review such application for completeness. If a License Phase application is deemed incomplete, the Town Clerk, or their designee, shall notify the Applicant in writing, via email and U.S. mail, of the application's deficiencies, and the Applicant shall have forty-five (45) days from the date of the deficiency notice to remedy the deficiency(ies). If the Applicant fails to remedy the deficiency(ies) within the specified period, the Town Clerk shall deny the application and notify the Applicant of the denial.
    - 1. Denial of an Application at the completeness review stage under this Subsection is appealable to the Town Manager by filing an appeal with the Town within ten (10) days of the date the notification of the denial was mailed. The Town Manager shall schedule a hearing within twenty (20) days of the filing of the appeal. The Town shall provide at least seven (7) days' notice to the appellant of the hearing. The Town Manager shall make a determination of the appeal within ten (10) days of the hearing and shall notify the appellant of the decision in writing.
    - 2. If a License Phase application is denied under this Section, the Town shall, within forty-five (45) days of such denial, notify the next alternate Applicant as selected under Section 6-5-7(i) to proceed with the License Application process under this Section 6-5-8.
  - (e) *Staff Review.* Upon receipt of a completed License Phase application, the Town Clerk, or their designee, shall transmit copies of the application to all Town agencies and staff who the Board or Town staff determines should participate in the review and investigation of the application.
    - 1. Town staff, or other governmental agencies authorized by the Town, may visit and inspect the property and Licensed Premises of the proposed Regulated Marijuana Store.
    - 2. In investigating the fitness of the Applicant, the Town may obtain criminal history record information furnished by a criminal justice agency subject to any restrictions imposed by such agency. In the event the Town takes into consideration information concerning the Applicant's criminal history record, the Town shall also consider any information provided by the Applicant regarding such criminal history record, including without limitation, evidence of rehabilitation, community service, character references and educational achievements, especially those items

pertaining to the period of time between the Applicant's last criminal conviction and the consideration of the License Phase application.

- 3. Not more than thirty (30) days from the date the Town Clerk has deemed a License Phase application to be complete, and not less than fourteen (14) days prior to a public hearing held pursuant to Section 6-5-9, the Town Clerk shall report to the Board and the Applicant any findings or recommendations made on the License Phase application as a result of the investigation and review conducted pursuant to this Section.

**Sec. 6-5-9. Public Hearing**

- (a) The Town Clerk shall schedule a public hearing before the Board on the License Phase application.
  - 1. The public hearing shall be held not less than fourteen (14) days from the date the Town Clerk reported the findings under Section 6-5-8(e)(3).
  - 2. The public hearing shall only be held after the Town Planning Commission has reported its recommendations to the Board, pursuant to Town Code 12-2-31(B)(3)(a)(3), on the Applicant's Conditional Use Permit application.
- (b) The Town shall post and publish public notice of the hearing not less than fourteen (14) days prior to the hearing. The Town shall give public notice by the posting of a sign in a conspicuous place at the property of the proposed Regulated Marijuana Store, and by publication in a newspaper of general circulation in the Town.

**Sec. 6-5-10. Issuance or Denial of License.**

- (a) For the purpose of voting to approve or deny a License, the Board may consider the facts and evidence adduced as a result of:
  - 1. The review and investigation under Section 6-5-8(e).
  - 2. Review and investigation of the License Phase application by the Board.
  - 3. The recommendations of the Planning Commission.
  - 4. The testimony and evidence presented by the Applicant, the public, or Town staff at the public hearing under Section 6-5-9, including any written or oral public comments submitted in conjunction therewith.
  - 5. Any other facts pertinent to the qualifications of the Applicant.
- (b) The Board has the authority to refuse to approve a License for good cause, including without limitation, if the Board has made the following findings:
  - 1. The Applicant has violated, does not meet, or has failed to comply with any of the terms, requirements, conditions, or provisions of the License, the Town Code, the Colorado Marijuana Code, or any applicable state or local law, rule, or regulation.
  - 2. The Board has determined that the Applicant's character, record, or reputation is not satisfactory after consideration of factors, which include without limitation:

- i. The Applicant has knowingly submitted false information, made willful misrepresentations, knowingly committed fraudulent acts, or omitted material facts;
    - ii. The Applicant has a criminal history of crimes of moral turpitude, which may include without limitation murder, burglary, robbery, arson, kidnapping, or sexual assaults;
    - iii. The Applicant has had a professional license, including without limitation a government-issued marijuana license, denied or revoked as a result of violations of law, rule, or regulation, or a finding of bad moral character by a government entity;
    - iv. The Applicant has been found to be currently delinquent in the payment of any state or local taxes, and has shown a pattern of failing to correct such delinquency;
  - 3. Specific evidence pertaining to the Applicant that approving the License at the location specified in the License Phase application will adversely affect the public health, safety, or welfare.
- (c) No later than thirty (30) days from the date of the public hearing under Section 6-5-9, the Board shall issue its decision approving or denying the License. The decision shall be in writing and shall state the reasons for the decision. The Board shall send a copy of the decision, by email and U.S. mail, to the Applicant at the address shown in the application, and shall make its decision available to the public.
- (d) The Board may impose reasonable conditions upon a License.
- (e) After approval of a License, the Board shall not issue the License until:
  - 1. The Applicant has obtained all other required licenses and permits related to the operation of the Regulated Marijuana Store, and has satisfied all pre-issuance license conditions, if any.
  - 2. The Regulated Marijuana Store building and site is approved for occupancy with such furniture, fixtures and equipment in place as are necessary to comply with the applicable provisions of all state and local laws and regulations, and any License conditions imposed by the Board.
  - 3. The Board has voted to approve the Applicant's Conditional Use Permit.
  - 4. The Applicant has complied with Section 6-5-17 of this Article.
- (f) After approval of a License, the Board, or its designee, shall notify the MED of such approval.

**Sec. 6-5-11. License Renewal**

- (a) A License issued pursuant to this Article shall be valid for a period of one (1) year from the date of issuance and shall be renewed pursuant to this Section. An application for renewal shall be made to the Town Clerk not less than thirty (30) days prior to the date of expiration. The renewal application shall be accompanied by the annual operating fees for the renewal term.

- (b) A public hearing shall be conducted by the Board on the first renewal application of the License.
  - 1. The Board has the authority to refuse to renew a License for good cause, including without limitation, making findings as set forth in Section 6-5-10(b), or as follows:
    - i. A continuing pattern of disorderly conduct or drug-related criminal conduct upon or in the immediate vicinity of the Licensed Premises;
    - ii. A continuing pattern of criminal conduct directly related to or arising from the operation of the Regulated Marijuana Store;
    - iii. An ongoing nuisance condition emanating from or caused by the Regulated Marijuana Store; or
    - iv. The Applicant has failed to comply with any applicable law, regulation, or term or conditions of the License.
- (c) For all subsequent renewal applications timely filed, the License may be administratively renewed by the Town Clerk; *provided, however*, the Board shall have the discretionary authority to require a renewal hearing.

**Sec. 6-5-12. Contents and Display of License.**

The Licensee shall post the License in a conspicuous location at the Regulated Marijuana Store. A License shall contain at minimum the following information:

- (a) The name and any tradename of the Licensee;
- (b) The date of issuance of the License;
- (c) The street address of the Regulated Marijuana Store;
- (b) Any conditions of approval imposed upon the License by the Board;
- (c) The date of expiration of the License; and
- (d) The signatures of the Licensee and Town Clerk.

**Sec. 6-5-13. Change in Ownership Structure.**

- (a) In determining whether to permit a change in ownership structure, the Board shall require any proposed new Controlling Beneficial Owner(s) to submit to the Town:
  - 1. A copy of a form of identification issued by the government of the United States, the government of any state within the United States, or the government of a United States Territory.
    - i. Such identification shall not be expired and shall include name, address, and date of birth.
  - 2. Evidence of lawful presence or residence in the United States.
  - 3. Completion of criminal and moral character disclosure form.
  - 4. Proof of Findings of Suitability issued by the MED.

5. Proof of approval by the MED of a Marijuana Business License – Change of Controlling Beneficial Owner Application.
  - i. The applicant must also submit to the Town copies of such MED application(s) and all application materials.
6. Curriculum vitae.
7. Any additional information or documentation that the Board or Town staff determines to be reasonably related to investigating the proposed new Controlling Beneficial Owner’s plans, qualifications, and fitness for operating, or holding controlling beneficial ownership in, a Regulated Marijuana Store.

**Sec. 6-5-14. Transfer of Ownership**

- (a) For a Licensee to transfer fifty-one percent (51%) or more of its ownership to a third party transferee (including all Controlling Beneficial Owners associated therewith, the “Transferee”), the Transferee shall submit a Transfer of Ownership application to the Town Clerk, including without limitation:
  1. A copy of a form of identification issued by the government of the United States, the government of any state within the United States, or the government of a United States Territory.
    - i. Such identification shall not be expired and shall include name, address, and date of birth.
  2. Evidence of lawful presence or residence in the United States.
  3. Completion of criminal and moral character disclosure form.
  4. Proof of Findings of Suitability issued by the MED for all Controlling Beneficial Owners of the Transferee.
    - i. The Transferee must also submit to the Town copies of such MED application(s) and all application materials.
  5. Curriculum vitae for the Transferee, each Controlling Beneficial Owner, and any managers associated with the Transferee.
  6. If the Transferee is a business entity, information regarding the entity, including without limitation:
    - i. The name and address of the entity;
    - ii. Identification of all Controlling Beneficial Owners of the entity;
    - iii. Certificate of good standing from the Colorado Secretary of State;
    - iv. An organizational chart;
    - v. If a corporation: Articles of Incorporation, Shareholders Agreement, and Bylaws;

- vi. If a limited liability company: Articles of Organization, and Operating Agreement; and
  - vii. Other business entity documentation as may be requested by the Town Clerk.
7. A copy of any deed, lease, letter of intent, or other contract reflecting the right, or the right conditioned on License approval, of the Transferee to possess and operate a Regulated Marijuana Store at a location permitted by this Article.
    - i. If the property of the proposed Regulated Marijuana Store is located within an owners association, or a Planned Development under 12-2-25 of the Town Code, the Transferee shall provide proof that the proposed Regulated Marijuana Store use complies with all applicable covenants and required approvals thereunder.
  8. Comprehensive business plans, tailored to the location of the Regulated Marijuana Store, covering all subject areas set forth in Section 6-5-7(c)(9).
  9. Proof of submission to MED of a Marijuana Business License – Change of Controlling Beneficial Owner Application.
    - i. The Transferee must also submit to the Town copies of such MED application(s) and all application materials.
  10. Town Sales Tax License.
  11. Town Business License.
  12. Any additional information or documentation that the Board or Town staff determines to be reasonably related to investigating the proposed new Transferee’s plans, qualifications, and fitness for operating, or holding controlling beneficial ownership in, the Regulated Marijuana Store.
- (b) *Staff Review.* Upon receipt of a completed Transfer of Ownership Application, the Town Clerk, or their designee, shall transmit copies of the application to all Town agencies and staff who the Board determines should participate in the review and investigation of the application.
1. Town staff, or other governmental agencies authorized by the Town, may visit and inspect the property and Licensed Premises of the Regulated Marijuana Store.
  2. In investigating the fitness of the Transferee, the Town may obtain criminal history record information furnished by a criminal justice agency subject to any restrictions imposed by such agency. In the event the Town takes into consideration information concerning the Transferee’s criminal history record, the Town shall also consider any information provided by the Transferee regarding such criminal history record, including without limitation, evidence of rehabilitation, community service, character references and educational achievements, especially those items pertaining to the period of time between the last criminal conviction and the consideration of the Transfer of Ownership Application.

3. Not more than thirty (30) days from the date the Town Clerk has deemed a Transfer of Ownership Application to be complete, and not less than fourteen (14) days prior to a public hearing held pursuant to Section 6-5-14(c), the Town Clerk shall report to the Board and the Transferee any findings or recommendations made on the Transfer of Ownership Application as a result of the investigation and review conducted pursuant to this Section.
- (c) The Town Clerk shall schedule a public hearing before the Board on the Transfer of Ownership Application.
1. The public hearing shall be held not less than fourteen (14) days from the date the Town Clerk reported the findings under Section 6-5-14(c)(3).
  2. The Town shall post and publish public notice of the hearing not less than fourteen (14) days prior to the hearing. The Town shall give public notice by the posting of a sign in a conspicuous place at the property of the Regulated Marijuana Store, and by publication in a newspaper of general circulation in the Town.
  3. An application fee shall accompany each Transfer of Ownership Application, in such amount as is established from time to time by resolution of the Board.
- (f) For the purpose of voting to approve or deny a Transfer of Ownership, the Board may consider the facts and evidence adduced as a result of:
1. The review and investigation under Section 6-5-14(b).
  2. Review and investigation of the Transfer of Ownership Application by the Board.
  3. The testimony and evidence presented by the Transferee, the public, and Town staff at the public hearing, including any written or oral public comments submitted in conjunction therewith.
  4. Any other facts pertinent to the qualifications of the Transferee.
- (g) The Board has the authority to refuse to approve a Transfer of Ownership for good cause, including without limitation, if the Board has made the following findings:
1. The Transferee has violated, does not meet, or has failed to comply with any of the terms, requirements, conditions, or provisions of this Article, the Town Code, the Colorado Marijuana Code, or any applicable state or local law, rule, or regulation.
  2. The Board has determined that the Transferee's character, record, or reputation is not satisfactory after consideration of factors, which include without limitation:
    - i. The Transferee has knowingly submitted false information, made willful misrepresentations, knowingly committed fraudulent acts, or omitted material facts;
    - ii. The Transferee has a criminal history of crimes of moral turpitude, which may include without limitation murder, burglary, robbery, arson, kidnapping, or sexual assaults;
    - iii. The Transferee has had a professional license, including without limitation a government-issued marijuana license, denied or revoked as a result of

- violations of law, rule, or regulation, or a finding of bad moral character by a government entity;
- iv. The Transferee has been found to be currently delinquent in the payment of any state or local taxes, and has shown a pattern of failing to correct such delinquency;
- 3. Specific evidence that approving the License will adversely affects the public health, safety, or welfare.
- (h) No later than thirty (30) days from the date of the public hearing under this Section, the Board shall issue its decision approving or denying the Transfer of Ownership. The decision shall be in writing and shall state the reasons for the decision. The Board shall send a copy of the decision, by email and U.S. mail, to the transferring Licensee and the Transferee at the addresses on record.
- (i) The Board may impose new reasonable conditions upon a transferred License.
- (j) After approval of a Transfer of Ownership, the Board shall not issue the transferred License until:
  - 1. The Transferee has obtained all other required state and local licenses and permits related to the transfer and the operation of the Regulated Marijuana Store, and has satisfied all pre-issuance license conditions, if any.
- (k) After approval of a transferred License, the Board, or its designee, shall notify the MED of such approval.

**Sec. 6-5-15. Suspension or revocation.**

- (a) At any time after the date of License approval, the Board may revoke or elect not to renew any License if it determines that the Licensed Premises has been inactive, or fails to open for marijuana sales to the public, without good cause, for at least one (1) year.
- (b) The Board has the authority to impose reasonable sanctions on a License and/or Licensee for violation by the Licensee, or any of its owners, agents, operators, employees, or contractor's, of the provisions of this Article, the Town Code, the Colorado Marijuana Code, or of any of the terms, conditions or provisions of the License.
  - 1. Sanctions may include, without limitation:
    - a. Suspension,
    - b. Fine,
    - c. Revocation, and/or
    - d. Probation.
  - 2. Prior to imposing any sanction under this Subsection, the Board shall conduct an investigation into the alleged violation and hold a public hearing at which the Licensee shall be afforded an opportunity to be heard.

3. The Board has the power to administer oaths and issue subpoenas to require the presence of persons and the production of papers, books and records necessary to impose a sanction or conduct a public hearing pursuant to this Subsection.
  4. Any License may be summarily suspended by the Board without notice pending a prosecution, investigation or public hearing pursuant to the Summary Suspension provisions of the Colorado Marijuana Code, 1 CCR §212-3(8-210(A)).
- (c) Whenever a decision of the Board suspending a license for thirty (30) days or less becomes final, the Licensee may, before the operative date of the suspension, petition for permission to pay a fine in lieu of suspension for all or part of the suspension period. Upon the receipt of the petition, the Board may, in its sole discretion, stay the proposed suspension and cause any investigation to be made which it deems desirable and may, in its sole discretion, grant the petition if the Board is satisfied that such a grant will not negatively impact the health, safety, or welfare of the Town, and that the payment of the fine will achieve the desired disciplinary purpose(s).

**Sec. 6-5-17. Incorporation of state law.**

The provisions of the Colorado Marijuana Code, and any rules and regulations promulgated thereunder, are incorporated herein by reference, except to the extent that more restrictive or additional regulations are set forth in this Article.

**Sec. 6-5-18. Licensee Acknowledgements.**

Before issuing a License, the Board shall obtain written confirmation from an Applicant that the Licensee acknowledges, understands, and agrees to the following:

- (a) As of the date of the adoption of this Article, the cultivation, sale, possession, distribution and use of marijuana remains a violation of federal law, and this Article does not provide Licensee, or Licensee’s owners, agents, operators, employees, customers or clients, with any protection from criminal prosecution or civil liability under such federal law. Licensees and their owners, operators, employees, customers and clients assume any and all risk and liability under federal law arising or resulting from the operation of the Regulated Marijuana Store.
- (b) The Town has no liability to a Licensee or any other Person for injuries, damages or liabilities of any kind, under any legal theory, arising out of the enforcement or application of any federal laws.
- (c) To the greatest extent permitted by law, any action taken under the provisions of this Article by any public officers, elected or appointed officials, employees, attorneys and agents of the Town, is not a personal liability of such person or of the Town.
- (d) Any documents and records submitted to the Town in regards to an application or License under this Article may be subject to disclosure pursuant to the Colorado Open Records Act.
- (e) By applying for a License under this Article, and (if approved and issued), by accepting a License from the Town of Grand Lake Board of Trustees, acting as the Local Licensing Authority, the Applicant/Licensee, and each of them, jointly and severally if more than one, agrees to indemnify, defend and hold harmless the Town of Grand Lake, and its elected officials, employees, agents, insurers and attorneys, and each of them, against all

liability, claims and demands, of any nature whatsoever arising out of or in any manner related to the operation of the Regulated Marijuana Store that is the subject of the License.



# GRAND LAKE BOARD OF TRUSTEES WORKSHOP AND MEETING MINUTES

Monday, April 10, 2023, at 6:00 PM

Town Hall Board Room – 1026 Park Avenue

*The Town of Grand Lake upholds the Six Pillars of Character:  
Citizenship, Trustworthiness, Respect, Responsibility, Fairness and Caring*

**A. Call to Order**

The regular meeting of the Board of Trustees was called to order by Mayor Pro-Tem Bjorkman at 6:15 P.M. in the Town Hall Board Room.

**B. Pledge of Allegiance**

Mayor Pro-Tem Bjorkman led everyone in reciting the Pledge of Allegiance.

**C. Announcements**

Mayor Pro-Tem Bjorkman announced: Please turn off all cell phones during the meeting.

**D. Roll Call**

Mayor Pro-Tem Bjorkman, Trustees Arntson, Strachan, and Sobon were present. Town Clerk Carrell and Town Manager Crone.

Trustee Strachan made a motion to excuse Mayor Kudron from the workshop and evening meeting. Trustee Arntson seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Aye
Trustee Bergquist	Absent
Trustee Arntson	Aye
Trustee Strachan	Aye
Trustee Sobon	Aye

Trustee Sobon made a motion to excuse Trustee Bergquist from the workshop and evening meeting. Trustee Arntson seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Nay
Trustee Bergquist	Absent
Trustee Arntson	Aye
Trustee Strachan	Abstain
Trustee Sobon	Aye

**E. Conflicts of Interest**

None.

**F. Manager's Report**

Wildlife Issues

We still have some winter left, so that means that there are still moose wandering around Town. Please make sure to give our wildlife a wide berth and keep your dogs away.

We will see bears coming out pretty soon. Remember, trash kills bears. Keep your trash secured. The Town will be ticketing those people and businesses that don't properly secure trash.

Winter Closings

With the advent of Spring temperatures, the Town has decided to close the ice rink and the Town Trail. We have scheduled the Christmas lights to come down in May (after some more of the snow melts).

Upcoming Events

It truly is off season in Grand Lake. We are scheduling the Town Cleanup and Gardeners’ Exchange for May 19. The Chamber has started putting together the Memorial Day parade and events. If you want to be in the parade, you will have to apply through the Chamber. The library and many of our local businesses will continue to host events throughout mud season. Please support our local businesses during the offseason. Various staff members will be taking vacation time over the next couple of months.

Road Striping

The Town will have road strippers coming in this week to lay down our double lines and middle of the road stripes. The Town just bought a striper; however, it is designed to do small jobs, not to put down the center stripes.

Spring Runoff

The Town is working on developing a stormwater plan; but we won’t have anything for several months (best case scenario). That means that we are going to be facing this spring’s runoff with the same infrastructure that we have always had. With are big snow year, this season could result in more flooding. We will be working hard on controlling the runoff but there is still going to be some very wet days. Please be careful, pay attention to emergency reports, and let the Town know if you see anything that appears to be dangerous.

Board Vacancy

Trustee Packer has submitted her resignation from the Board effective today. Staff will be presenting options to the Board at the next meeting.

Next Meeting

The next scheduled meeting will be held in two weeks. It is scheduled for April 24, 2023.

**G. Public Comments (Limited to 3 Minutes)**

None.

**H. Consideration to Approve Meeting Minutes**

**3. March 27, 2023**

Trustee Sobon made a motion to approve the meeting minutes for March 27, 2023. Trustee Strachan seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Aye
Trustee Bergquist	Absent
Trustee Arntson	Abstain
Trustee Strachan	Aye
Trustee Sobon	Aye

**I. Consideration to Approve Accounts Payable**

**4. April 10, 2023**

Presented by Town Treasurer Wilson.

Trustee Strachan made a motion to approve accounts payable for April 10, 2023. Trustee Sobon seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Aye
Trustee Bergquist	Absent

Trustee Arntson	Aye
Trustee Strachan	Aye
Trustee Sobon	Aye

**J. Financial Review**

Moved to April 24, 2023, Board of Trustees meeting.

**K. Items of Discussion**

**1. Consideration of Ordinance 03-2023, Amending Grand Lake Municipal Code Section 10-1-8(C) Regarding Water Usage Charges**

Presented by Town Treasurer Wilson.

Trustee Strachan made a motion to approve Ordinance 03-2023, Amending Grand Lake Municipal Code Section 10-1-8(C). Trustee Arntson seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Aye
Trustee Bergquist	Absent
Trustee Arntson	Aye
Trustee Strachan	Aye
Trustee Sobon	Aye

**2. Consideration of Ordinance 04-2023, Amending Grand Lake Municipal Code Section 10-1-6 (B) Regarding Water Service Lines**

Presented by Town Treasurer Wilson.

Trustee Arntson made a motion to approve Ordinance 04-2023, amending Grand Lake Municipal Code Section 10-1-6(B), regarding water service lines. Trustee Strachan seconded the motion. Town Clerk Carrell called the vote:

Mayor Kudron	Absent
Mayor Pro-Tem Bjorkman	Aye
Trustee Bergquist	Absent
Trustee Arntson	Aye
Trustee Strachan	Aye
Trustee Sobon	Aye

**3. (QUASI JUDICIAL) PUBLIC HEARING - Resolution 10-2023 Consideration to Approve a Special Use Permit (SUP), to Allow a Food Truck Business in a Temporary Non-Fixed Structure, Known As TruePenny Pitstop, on Property Located at Block 3, Lot 4-6, Town of Grand Lake.**

Mayor Pro-Tem Bjorkman opened for public hearing.

Presented by Town Permit Technician Irish.

The owner, Blake Barbie was present via zoom and available for questions.

No public comment.

Mayor Pro-Tem Bjorkman closed the public hearing.

Trustee Sobon made a motion to approve Resolution 10-2023, approving the annual renewal of a Special Use Permit (SUP), to allow a food truck business in a temporary non-fixed structure,

known as TruePenny Pitstop, on Property Located at Block 3, Lot 4-6, Town of Grand Lake.  
Trustee Arntson seconded the motion. Town Clerk Carrell called the vote:

<b>Mayor Kudron</b>	<b>Absent</b>
<b>Mayor Pro-Tem Bjorkman</b>	<b>Aye</b>
<b>Trustee Bergquist</b>	<b>Absent</b>
<b>Trustee Arntson</b>	<b>Aye</b>
<b>Trustee Strachan</b>	<b>Aye</b>
<b>Trustee Sobon</b>	<b>Aye</b>

**4. Consideration of Approval of Resolution 11-2023 in Opposition to SB23-213**

Presented by Town Manager Crone.

Trustee Strachan made a motion to approve Resolution 11-2023, opposing SB23-213 and instruct the Town Manager to sign on two letters of opposition as presented by CML. Trustee Sobon seconded the motion. Town Clerk Carrell called the vote:

<b>Mayor Kudron</b>	<b>Absent</b>
<b>Mayor Pro-Tem Bjorkman</b>	<b>Aye</b>
<b>Trustee Bergquist</b>	<b>Absent</b>
<b>Trustee Arntson</b>	<b>Aye</b>
<b>Trustee Strachan</b>	<b>Aye</b>
<b>Trustee Sobon</b>	<b>Aye</b>

**L. Future Items for Consideration**

- Marijuana Ordinance
- Acceptance of Bid of Storm Water Study
- Ordinance Regarding Use Tax

**M. Mayor's Report**

Mayor Pro-Tem Bjorkman had no report to provide.

**N. Adjourn Meeting**

Trustee Strachan made a motion to adjourn the meeting. Trustee Arntson seconded the motion. Town Clerk Carrell called the vote:

<b>Mayor Kudron</b>	<b>Absent</b>
<b>Mayor Pro-Tem Bjorkman</b>	<b>Aye</b>
<b>Trustee Bergquist</b>	<b>Absent</b>
<b>Trustee Arntson</b>	<b>Aye</b>
<b>Trustee Strachan</b>	<b>Aye</b>
<b>Trustee Sobon</b>	<b>Aye</b>

This meeting of the Board of Trustees was adjourned at 7:15 PM.

**(Attest)**

-

\_\_\_\_\_  
Alayna Carrell, Town Clerk

\_\_\_\_\_  
Ernie Bjorkman, Mayor Pro-Tem



Town of Grand Lake will post Accounts Payable online after Board of Trustees Approves it.

Feel free to reach out to Heike Wilson, Treasurer at [hwilson@toglco.com](mailto:hwilson@toglco.com) or call 970-776-0779 if would like to view Accounts Payable before the Board of Trustees Approves it. List will be available the Thursday before the 2<sup>nd</sup> and 4<sup>th</sup> Monday of each month by request

**4% SALES TAX CASH FLOW REPORT:  
TOWN OF GRAND LAKE  
FISCAL YEAR 2023**

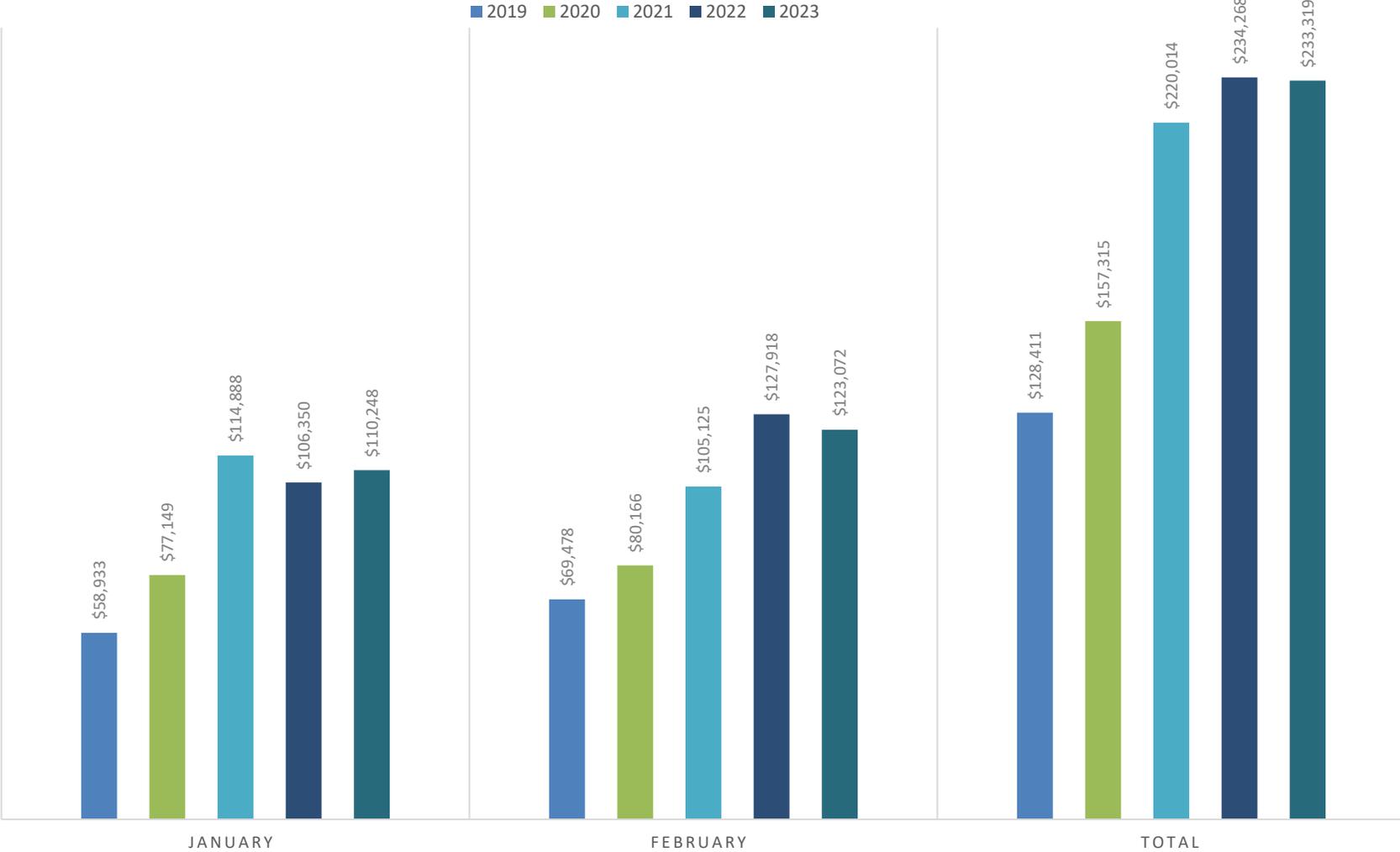
Sales Month	Fiscal Year				
	2023	2022	2021	2020	2019
January	\$110,248	\$106,350	\$114,888	\$77,149	\$58,933
February	\$123,072	\$127,918	\$105,125	\$80,166	\$69,478
March		\$151,941	\$126,469	\$60,184	\$74,443
April		\$104,344	\$110,867	\$49,912	\$47,378
May		\$172,788	\$164,901	\$104,689	\$92,138
June		\$360,464	\$377,346	\$277,913	\$240,589
July		\$472,409	\$442,768	\$346,264	\$304,721
August		\$369,399	\$370,626	\$335,005	\$254,709
September		\$324,475	\$304,337	\$318,513	\$322,285
October		\$181,308	\$164,428	\$118,313	\$110,559
November		\$100,997	\$109,224	\$85,868	\$65,583
December		\$129,464	\$132,476	\$125,334	\$95,751

Total

**YEAR TO DATE CASH FLOW COMPARISON**

	Year to Date Total	Percent of Budget	Percent change from previous Year to Date	Dollar change from previous Year to Date	Budgeted Amount
<b>2023</b>	\$233,319	9.98%	-0.40%	\$ (948.25)	\$2,337,968
<b>2022</b>	\$234,268	9.52%	6.48%	\$ 14,253.79	\$2,461,018
<b>2021</b>	\$220,014	12.63%	39.86%	\$ 62,698.72	\$1,741,825
<b>2020</b>	\$157,315	9.48%	22.51%	\$ 28,903.84	\$1,659,230
<b>2019</b>	\$128,411	9.18%	20.37%	\$ 21,734.29	\$1,398,967

### 4% SALES TAX CASH FLOW 2023 YTD THROUGH FEBRUARY



**1% SALES TAX CASH FLOW REPORT:  
TOWN OF GRAND LAKE  
FISCAL YEAR 2023**

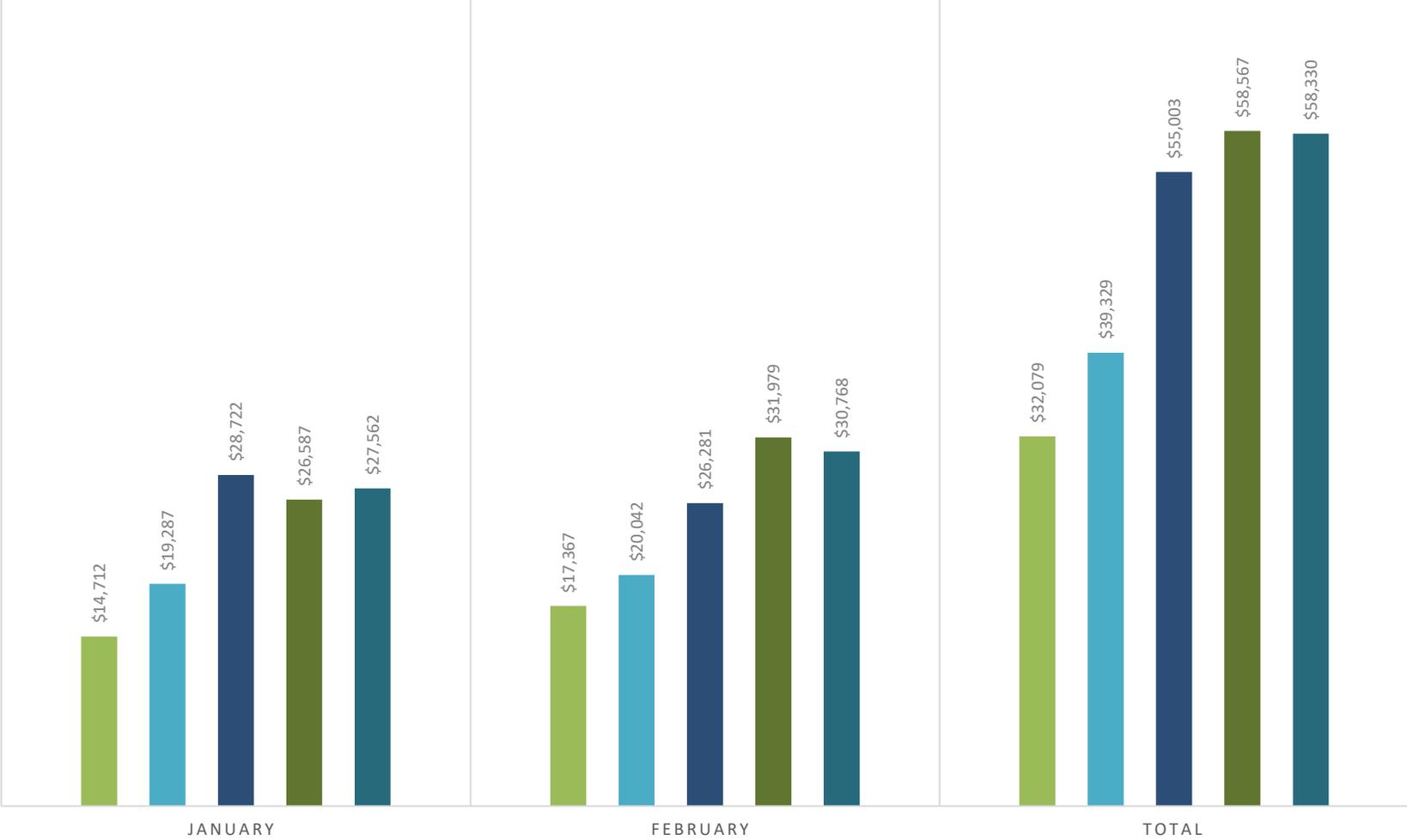
Sales		FISCAL YEAR			
Month	2023	2022	2021	2020	2019
January	\$27,562	\$26,587	\$28,722	\$19,287	\$14,712
February	\$30,768	\$31,979	\$26,281	\$20,042	\$17,367
March		\$37,985	\$31,617	\$15,046	\$18,583
April		\$26,086	\$27,717	\$12,478	\$11,844
May		\$43,197	\$41,225	\$26,172	\$23,035
June		\$90,116	\$94,336	\$69,478	\$60,147
July		\$118,102	\$110,692	\$86,566	\$76,180
August		\$92,350	\$92,656	\$83,751	\$63,677
September		\$81,119	\$76,084	\$79,628	\$80,571
October		\$45,327	\$41,107	\$29,578	\$27,640
November		\$25,249	\$27,306	\$21,467	\$16,396
December		\$32,366	\$33,119	\$31,333	\$23,938

**YEAR TO DATE CASH FLOW COMPARISON**

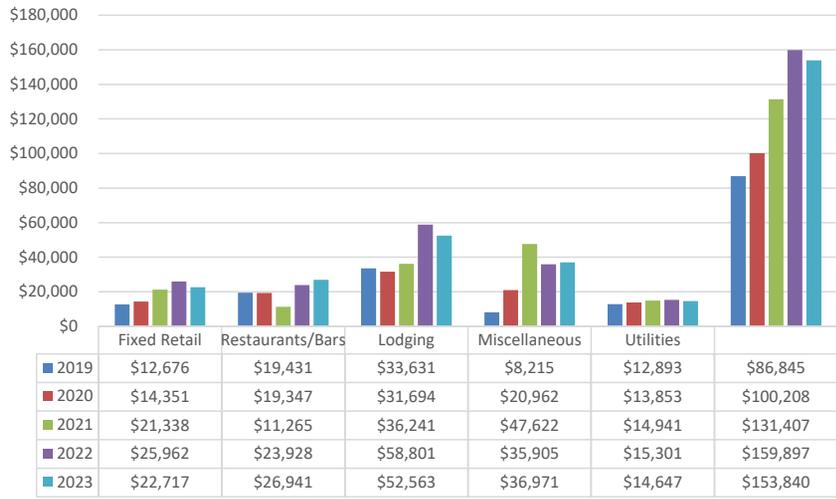
	Year to Date Total	Percent of Budget	Percent change from previous Year to Date	Dollar change from previous Year to Date	Budgeted Amount
<b>2023</b>	\$58,330	9.98%	-0.40%	\$ (237)	\$584,250.00
<b>2022</b>	\$58,567	9.52%	6.48%	\$ 3,563	\$615,252.00
<b>2021</b>	\$55,003	12.64%	39.86%	\$ 15,675	\$435,000.00
<b>2020</b>	\$39,329	8.83%	22.60%	\$ 7,250	\$445,635.00
<b>2019</b>	\$32,079	9.01%	27.69%	\$ 6,956	\$355,882.00

### 1% SALES TAX CASH FLOW 2023 YTD THROUGH FEBRUARY

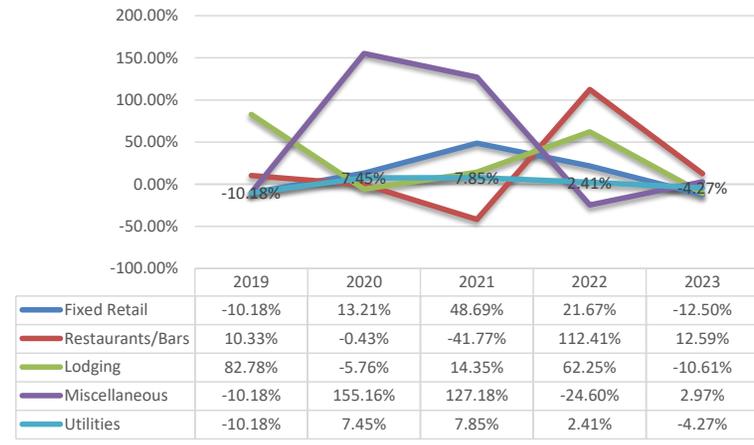
2019 2020 2021 2022 2023



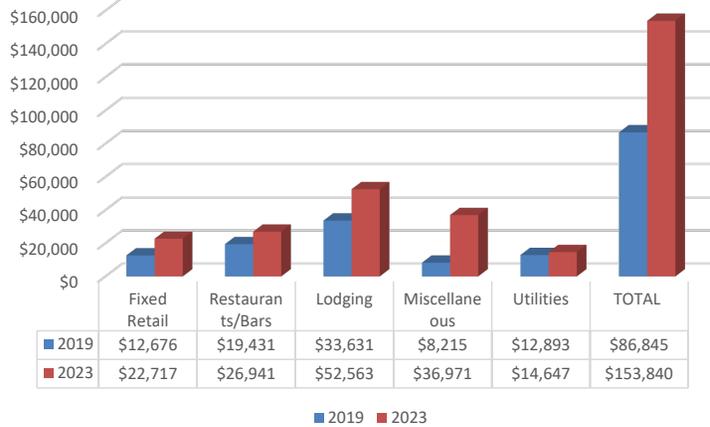
February 2023 Sales Tax by Industry



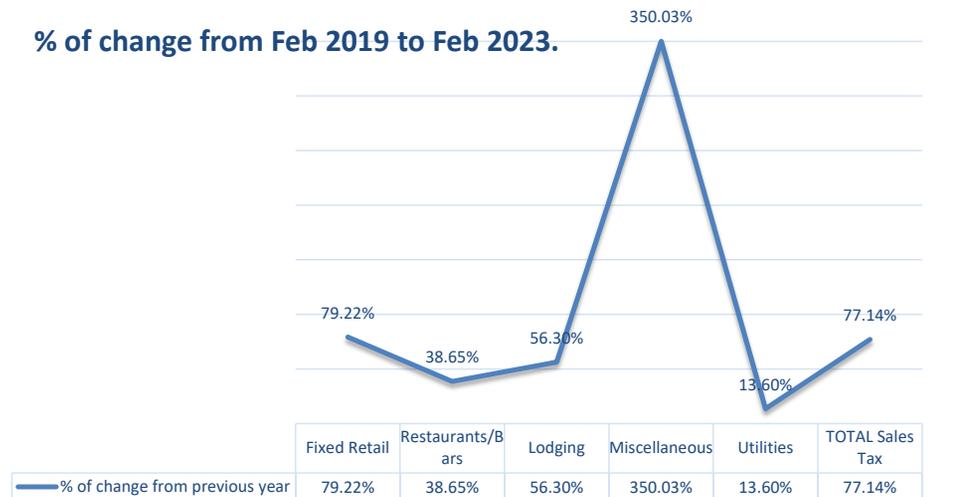
% change from previous Feb.



Feb. sales Tax Growth by \$ from 2019 to 2023



% of change from Feb 2019 to Feb 2023.



Town of Grand Lake Balances as of 3/31/23

**BANK CASH BALANCES**

ColoTrust	\$3,703,424.38
CSAFE	\$1,489,750.24
UBB	\$434,522.39
US Bank	\$369,996.72
CBC - Bank Midwest	\$1,171,725.52
<b>TOTAL</b>	<b>\$7,169,419.25</b>

**FUND CASH BALANCES**

General fund	\$ 3,447,565.00
Water fund	\$ 2,087,491.46
Marina fund	\$ 745,899.92
PAYT fund	\$ 176,940.84
Capital Improvement fund	\$ 616,193.86
<b>TOTAL</b>	<b>\$ 7,074,091.08</b> Diff is AP & AR

**COMMITTED FUNDS**

Parking Fee-In-Lieu	\$ -
Cemetery Funds	\$ 99,488.09
Conservation Trust Funds	\$ 38,555.06
Attainable Housing Fund	\$ 234,501.93
Emergency Reserves	\$ 80,400.00
<b>TOTAL</b>	<b>\$ 452,945.08</b> balances are adjusted at year end

**LIABILITIES over \$50K**

COP	\$ 1,389,937.00
DWRF	\$ 1,257,945.86
BONDS	\$ 3,455,000.00
<b>TOTAL</b>	<b>\$ 6,102,882.86</b>

Town of Grand Lake Pre Pairs and Transfer for March 2023

<b>Company</b>	<b>Date</b>	<b>Amount</b>
Paychex Payroll	3/15/2023	\$ 37,238.22
Paychex Payroll Taxes	3/15/2023	\$ 13,988.93
ICMA Retirement	3/15/2023	\$ 5,609.62
Paychex Payroll	3/31/2023	\$ 46,558.29
Paychex Payroll Taxes	3/31/2023	\$ 18,819.15
ICMA Retirement	3/31/2023	\$ 6,820.28
Hartford life/AD&D Insurance	3/14/2023	\$ 206.31
Health Saving Reimbursement	3/7/2023	\$ 470.93
Health Saving Reimbursement	3/21/2023	\$ 197.92
Health Saving Reimbursement	3/28/2023	\$ 335.35
CEBT - Health ins	3/10/2023	\$ 30,766.81

**Bank Transfers**

<b>From</b>	<b>To</b>	<b>Date</b>	<b>Amount</b>
UBB Money Market	UBB Operating	3/2/2023	\$ 35,000.00
UBB Money Market	US Bank Payroll	3/13/2023	\$ 70,000.00
UBB Money Market	UBB Operating	3/28/2023	\$ 130,000.00
UBB Money Market	UBB Payroll	3/30/2023	\$ 90,000.00

## TOWN OF GRAND LAKE

**GENERAL FUND**  
**STATEMENT OF REVENUES, EXPENDITURES**  
**AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL**  
**For the Month Ended March 2023**  
**- Unadjusted**

Revenues	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	Notes
<b>Taxes</b>					
Property Tax	\$ 396,973	\$ 173,189	\$ (223,784)	43.6	
Specific Ownership Tax	15,000	5,342	(9,658)	35.6	
General Sales Tax	2,337,968	110,248	(2,227,720)	4.7	Sales tax revenues run 2 months behind
Building Use Tax	25,000	-	(25,000)	-	Adjustments usually done at end of year
Motor Vehicle Use Tax	40,000	8,410	(31,590)	21.0	
Cigarette Tax	3,000	1,104	(1,896)	36.8	tax revenues run 2 months behind
Franchise Tax	75,000	15,715	(59,285)	21.0	Quarterly payments
Subtotal Taxes	<u>2,892,941</u>	<u>314,007</u>	<u>(2,578,934)</u>	<u>10.9</u>	
<b>Licenses &amp; Permits</b>					
Business Licenses	30,000	451	(29,549)	1.5	annual event
Rental Licenses	50,000	53,404	3,404	106.8	annual event for STR license
Liquor License	3,750	3,043	(708)	81.1	
Other Licenses	3,700	627	(3,073)	16.9	sign, grading, animal, boardwalk permits
Subtotal Licenses & Permits	<u>87,450</u>	<u>57,525</u>	<u>(29,925)</u>	<u>65.8</u>	
<b>Intergovernmental</b>					
County Road and Bridge	9,520	-	(9,520)	-	Quarterly revenue
Grants	250,000	-	(250,000)	-	
Highway Users Tax	31,952	4,156	(27,796)	13.0	tax revenues run 2 months behind
Conservation Trust Fund	3,000	857	(2,143)	28.6	Quarterly revenue
Other Intergovernmental	1,000	-	(1,000)	-	State severance tax and federal mineral funds
Subtotal Intergovernmental	<u>295,472</u>	<u>5,013</u>	<u>(290,459)</u>	<u>1.7</u>	
<b>Charges for Services</b>					
Attainable Housing Fee	2,000	-	(2,000)	-	Part of the building application fees
Zoning and Subdivision Review	2,000	4,379	2,379	218.9	
Cemetery	12,000	500	(11,500)	4.2	Perpetual fees
Grand Lake Center	67,000	29,123	(37,877)	43.5	Memberships, rec fees, rental income
Other Charges for Services	17,000	2,484	(14,516)	14.6	EV charging rev and nightly rental app fee and fuel surcharges
Subtotal Charges for Services	<u>100,000</u>	<u>36,486</u>	<u>(63,514)</u>	<u>36.5</u>	
<b>Fines and Forfeitures</b>	1,500	120	(1,380)	8.0	Ordinances and parking fines
<b>Fees and Leases</b>	2,500	625	(1,875)	25.0	Quarterly payment for Chamber rent
<b>Net Investment Income</b>	10,000	24,013	14,013	240.1	interest income
<b>Contributions</b>	-	-	-	-	
<b>Other Revenue</b>	29,002	42,362	13,360	146.1	sale of vehicles & event fees
<b>Capital Specific Revenue</b>	202,241	202,241	-	100.0	Dock insurance funds
<b>Total Revenues</b>	<u>\$ 3,621,106</u>	<u>\$ 682,392</u>	<u>\$ (2,938,714)</u>	<u>18.8</u>	

TOWN OF GRAND LAKE

GENERAL FUND  
 STATEMENT OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March 2023  
 - Unadjusted

Expenditures	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	
<b>Current:</b>					
<b>Boards and Committees</b>					
Board of Trustees	\$ 111,950	71,034	\$ 40,916	63.5	Community grants and donations
Cemetery Committee	8,000	-	8,000	-	
Planning Commission & Board of A	41,600	5,516	36,084	13.3	Consultant & training
Greenways Committee	68,918	-	68,918	-	Town flowers, planters, Arbor day
Subtotal Boards and Committees	230,468	76,550	153,918	33.2	
<b>Administration</b>					
Personnel	613,838	188,153	425,685	30.7	wages and benefits
Supplies	40,000	7,853	32,147	19.6	office supplies
Repairs and Maintenance	17,200	1,200	16,000	7.0	
Purchased Services	66,350	15,527	50,823	23.4	postage, computer services, building maint
Utility Services	20,500	6,423	14,077	31.3	Water and Sewer are billed quarterly
Professional Services	49,000	5,006	43,995	10.2	Legal
Marketing	136,732	63,908	72,824	46.7	Quarterly contribution to Chamber and county treasure fee
Other	129,150	28,596	100,554	22.1	Quarterly property insurance
MSOB Grant Expenses	-	-	-	-	
Subtotal Administration	1,072,770	316,666	756,104	29.5	
<b>Economic Development Grants</b>	135,000	100,000	35,000	74.1	
<b>Public Safety</b>					
Personnel	-	-	-	-	
Purchased Services	277,858	-	277,858	-	Dispatch and Sheriff annual contract
Subtotal Public Safety	277,858	-	277,858	-	
<b>Public Works</b>					
Personnel	611,953	183,332	428,621	30.0	Wages and benefits - Comp time payout
Supplies	23,000	1,856	21,144	8.1	
Repairs and Maintenance	275,500	30,478	245,022	11.1	
Purchased Services	22,440	3,734	18,706	16.6	
Utility Services	43,700	8,566	35,134	19.6	
Professional Services	5,000	-	5,000	-	
Other	10,000	1,191	8,809	11.9	
Subtotal Public Works	\$ 991,593	\$ 229,158	\$ 762,435	23.1	

TOWN OF GRAND LAKE

GENERAL FUND  
 STATEMENT OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March 2023  
 - Unadjusted

Expenditures	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	
<b>Grand Lake Center</b>					
Personnel	\$ 218,605	\$ 60,116	\$ 158,489	27.5	Wages and benefits
Supplies	8,700	2,868	5,832	33.0	
Repairs and Maintenance	44,458	12,812	31,646	28.8	
Purchased Services	-	-	-	-	
Utility Services	43,300	8,223	35,077	19.0	
Professional Services	5,600	3,063	2,537	54.7	Computer Service
Other	49,300	5,021	44,279	10.2	Marketing, Training, Insurance
Subtotal Grand Lake Center	369,963	92,103	277,860	24.9	
<b>Parks</b>					
Personnel	79,692	-	79,692	-	Wages and benefits
Supplies	42,500	937	41,563	2.2	Cleaning and bathroom supplies
Repairs and Maintenance	129,760	1,436	128,324	1.1	
Purchased Services	-	-	-	-	
Utility Services	24,040	5,140	18,900	21.4	
Professional Services	-	-	-	-	
Other	10,000	2,491	7,509	24.9	
Parks Capital	410,516	96,663	313,853	23.5	Down payment on new docks
Subtotal Parks	696,508	106,668	589,840	15.3	
<b>Capital Outlay</b>	300,000	24,623	275,377	8.2	
<b>Debt service</b>					
Lease Principal	90,000	-	90,000	-	COP
Lease Interest	39,615	-	39,615	-	COP
Subtotal Debt Service	129,615	-	129,615	-	
<b>Reserves</b>	-	-	-	-	
<b>Total Expenditures</b>	4,203,775	945,767	3,258,008	22.5	
<b>Net Balance*</b>	(582,669)	(263,375)	319,294		

\*Excess Revenues Over (Under) Expenditures

TOWN OF GRAND LAKE

Section 10, Item B.

CAPITAL IMPROVEMENT FUND  
 SCHEDULE OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March 2023  
 - Unadjusted

Revenues	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	Notes
Taxes					
General Sales Tax	\$ 584,250	\$ 27,562	\$ (556,688)	4.7	tax revenues run 2 months behind
Subtotal Taxes	584,250	27,562	(556,688)	4.7	
Intergovernmental					
Grants	-	-	-	-	
Other Intergovernmental	-	-	-	-	
Subtotal Intergovernmental	-	-	-	-	
Other Revenue	-	-	-	-	
Net Investment Income	6,000	8,494	2,494	141.6	
<b>Total Revenues</b>	<b>590,250</b>	<b>36,056</b>	<b>(554,194)</b>	<b>6.1</b>	
<b>Expenditures</b>					
Grant Expenses	-	-	-	-	
Operations	300	-	(300)	-	
Capital Outlay	313,000	-	(313,000)	-	
Debt service					
Bond Principal	120,000	-	(120,000)	-	annual payment
Bond Interest	157,050	-	(157,050)	-	semi annual payments
Subtotal Debt Service	277,050	-	(277,050)	-	
Reserves	-	-	-	-	
<b>Total Expenditures</b>	<b>590,350</b>	<b>-</b>	<b>(590,350)</b>	<b>-</b>	
<b>Net Balance*</b>	<b>(100)</b>	<b>36,056</b>	<b>36,156</b>		

\*Excess Revenues Over (Under) Expenditures

TOWN OF GRAND LAKE

WATER FUND  
 SCHEDULE OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March, 2023  
 - Unadjusted

	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	Notes
<b>Revenues</b>					
Water Sales	\$ 675,000	\$ 163,177	\$ (511,823)	24.2	Billed quarterly (Jan, April, July, Oct)
Tap Fees	32,500	26,000	(6,500)	80.0	
Resale Meters	3,000	2,878	(122)	95.9	New meters purchased by owner
Bulk Water Permits	500	-	(500)	-	
Miscellaneous	-	-	-	-	
Sale of Assets	-	-	-	-	
Interest Income	10,000	18,991	8,991	189.9	
Reimbursement Income	-	-	-	-	
Capital Lease Proceeds	-	-	-	-	
Total Revenues	721,000	211,046	(509,954)	29.3	
<b>Expenditures</b>					
Personnel	396,089	78,130	(317,959)	19.7	Wages and Benefits - Down one employ
Office Supplies	33,000	-	(33,000)	-	
Operations Supplies	17,300	6,715	(10,585)	38.8	
Repairs and Maintenance	45,850	6,707	(39,143)	14.6	
Resale Supplies	6,150	8,028	1,878	130.5	water meters purchased
Purchased Services	23,000	5,499	(17,501)	23.9	
Utilities	32,500	9,580	(22,920)	29.5	Water and Sewer are billed quarterly
Professional Services	8,600	403	(8,198)	4.7	
Other Expenses	20,100	7,993	(12,107)	39.8	Quarterly property insurance
Water Capital	48,000	43,098	(4,902)	89.8	New truck
Debt Service-Principal	69,977	-	(69,977)	-	
Debt Service-Interest	24,811	-	(24,811)	-	
Total Expenditures	725,377	166,152	(559,225)	22.9	
<b>Net Balance*</b>	(4,377)	44,894	49,271		

TOWN OF GRAND LAKE

Section 10, Item B.

MARINA FUND  
 SCHEDULE OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March 2023  
 -Unadjusted

	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	Notes
<b>Revenues</b>					
Marina Rentals	\$ 300,000	\$ -	\$ (300,000)	-	
Tours	55,000	-	(55,000)	-	
Space Rentals	8,084	-	(8,084)	-	
Miscellaneous	1,000	-	(1,000)	-	
Interest Income	4,000	4,954	954	123.8	
Sale of Assets	-	-	-	-	
Total Revenues	368,084	4,954	(363,130)	1.3	
<b>Expenditures</b>					
Personnel	264,059	20,130	243,929	7.6	Wages and benefits
Office Supplies	1,100	-	1,100	-	
Operations Supplies	15,000	-	15,000	-	
Fireworks	45,000	12,500	32,500	-	Winter carnival fire works
Repairs and Maintenance	17,500	-	17,500	-	
Permits and Fees	1,000	-	1,000	-	
Purchased Services	13,575	1,827	11,748	13.5	Computer service & office supplies
Utilities	3,163	906	2,257	28.6	Water and Sewer are billed quarterly
Professional Services	2,000	-	2,000	-	
Other Expenses	11,301	1,777	9,524	15.7	Insurance
Capital Outlay	80,000	-	80,000	-	Replace Wall
Total Expenditures	453,698	37,140	416,558	8.2	
<b>Net Balance*</b>	(85,614)	(32,186)	(53,428)		

TOWN OF GRAND LAKE

Section 10, Item B.

PAY AS YOU THROW FUND  
 SCHEDULE OF REVENUES, EXPENDITURES  
 AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL  
 For the Month Ended March 2023- UNADJUSTED

	Original Budget	Actual Amounts	Variance with Budget - Positive (Negative)	%	Notes
<b>Revenues</b>					
Bag Sales	\$ 79,000	\$ 5,133	\$ (73,867)	6.5	
Interest Income	\$ 300	-	(300)	-	adjusted at year end
Total Revenues	<u>79,300</u>	<u>5,133</u>	<u>(74,167)</u>	<u>6.5</u>	
<b>Expenditures</b>					
Operations Supplies	8,800	6,396	2,404	72.7	PAYT bags
Repairs and Maintenance	25,000	8	24,992	0.0	a year adjustment
Purchased Services	36,950	8,320	28,630	22.5	Dumpster service
Professional Services	450	-	450		
Other Expenses	866	-	866	-	
Capital Outlay	20,000	-	20,000	-	Move facility
Total Expenditures	<u>92,066</u>	<u>14,724</u>	<u>77,342</u>	<u>16.0</u>	
<b>Net Balance*</b>	<u>(12,766)</u>	<u>(9,591)</u>	<u>(3,175)</u>		

TOWN OF GRAND LAKE  
 COMBINED CASH INVESTMENT  
 MARCH 31, 2023

Section 10, Item B.
---------------------

COMBINED CASH ACCOUNTS

01-102000	USB CHECKING - PAYROLL	88,158.64
01-104000	2019 UBB MONEY MARKET	152,704.23
01-104500	2019 UBB CHKG - OPERATIONS	221,125.19
01-106000	RETURNED CHECK CLEARING ACCT	.00
01-106500	BANK MIDWEST / CCB	1,171,725.52
01-107500	UTILITY CASH CLEARING ACCT	( 54.00)
01-107600	AR CASH CLEARING ACCT	( 2,241.74)
TOTAL COMBINED CASH		1,631,417.84
01-100000	CASH ALLOCATED TO OTHER FUNDS	( 1,631,417.84)
TOTAL UNALLOCATED CASH		.00

CASH ALLOCATION RECONCILIATION

10	ALLOCATION TO GENERAL FUND	1,074,854.23
20	ALLOCATION TO WATER FUND	168,635.87
40	ALLOCATION TO MARINA FUND	320,085.16
50	ALLOCATION TO PAY-AS-YOU-THROW FUND	186,240.84
90	ALLOCATION TO CAPITAL IMPROVEMENT FUND	( 118,398.26)
TOTAL ALLOCATIONS TO OTHER FUNDS		1,631,417.84
	ALLOCATION FROM COMBINED CASH FUND - 01-100000	( 1,631,417.84)
ZERO PROOF IF ALLOCATIONS BALANCE		.00

TOWN OF GRAND LAKE  
BALANCE SHEET  
MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

ASSETS

10-10000	CASH IN COMBINED CASH FUND	1,074,854.23	
10-10300	CSAFE	203,595.16	
10-10310	CSAFE - CORE	1,218,141.16	
10-10910	COLOTRUST	970,532.49	
10-11600	PETTY CASH	100.00	
10-11650	GLC PETTY CASH	100.00	
10-11651	AFTER SCHOOL PROG PETTY CASH	.00	
10-11700	ACCOUNTS RECEIVABLE	( 63,271.15)	
10-11710	PROPERTY TAXES RECEIVABLE	402,753.00	
10-11750	ACCOUNTS RECIVABLE - AR	( 7,296.70)	
10-12300	FUEL AR - FUEL PAYMENTS	5,149.74	
10-12900	UNLEADED GAS INVENTORY	8,645.01	
10-13000	DIESEL INVENTORY	17,994.46	
10-13100	DUE FROM WATER FUND	.00	
10-13101	DUE FROM MARINA FUND	.00	
10-13102	DUE FROM PAYT	.00	
10-14310	GF PREPAID EXPENSES	.00	
10-14350	GLC PREPAID EXPENSES	.00	
10-14900	DEPOSITS PAID BY THE TOWN	.00	
	TOTAL ASSETS		3,831,297.40

LIABILITIES AND EQUITY

TOWN OF GRAND LAKE  
 BALANCE SHEET  
 MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

LIABILITIES

10-200000	ACCOUNTS PAYABLE GENERAL		8,536.32
10-205000	RETAINAGE PAYABLE		.00
10-217100	SOCIAL SECURITY WITHHOLDING		.00
10-217200	FEDERAL W/H PAYABLE		.00
10-217300	STATE W/H PAYABLE		.00
10-217400	MEDICARE WITHHOLDING		.00
10-217500	SUTA PAYABLE		.00
10-217600	WC PAYABLE		.00
10-219100	FLEX MEDICAL		18,801.18
10-219200	MEDICAL BENEFIT PAYABLE		.00
10-220000	ICMA W/H PAYABLE		.00
10-221000	ICMA EMP LOAN PAYABLE		.00
10-221001	ICMA/ROTH IRA		.00
10-221100	MISC DEDUCTIONS PAYABLE		.00
10-222000	DEFERRED REVENUE-PROPERTY TAX		402,753.00
10-223100	PREPAID FEES	(	1,873.00)
10-223180	PREPAID NRL	(	222.00)
10-225000	ESCROW MONIES GENERAL		.00
10-226000	USE TAX DEFERRED REVENUE		323,460.07
10-228100	GLC CUSTOMER DEPOSITS		1,500.00
10-228200	GLC PREPAID RENTAL FEES		.00
10-228400	EVENT DEPOSITS		.00
10-228500	LAND USE/MUNI PROP DEPOSITS		2,000.00
10-228600	ATTORNEY RETAINER	(	10,000.00)
10-230000	HEADSTONE DEPOSIT		2,400.00
10-231000	FOLK SCHOOL PAYMENTS		.00
10-232000	DUE TO WATER FROM GF		.00
10-233000	DUE TO MARINA FROM GF		.00
10-234000	AEROLAB, INC PAYMENTS		.00
			<hr/>
	TOTAL LIABILITIES		747,355.57

FUND EQUITY

10-270000	PARKING FEE-IN-LIEU		.00
10-275000	FUND BALANCE		2,885,939.84
10-281000	CEMETERY FUNDS		99,488.09
10-283000	CONSERVATION TRUST FUNDS		38,555.06
10-284000	ATTAINABLE HOUSING FUNDS		234,501.93
10-285000	FUND BAL RESVD - INV & PRE PDS		5,091.51
10-286000	EMERGENCY RESERVES		80,400.00
	UNAPPROPRIATED FUND BALANCE:		
	REVENUE OVER EXPENDITURES - YTD	(	263,375.25)
			<hr/>
	BALANCE - CURRENT DATE	(	263,375.25)
			<hr/>
	TOTAL FUND EQUITY		3,080,601.18
			<hr/>
	TOTAL LIABILITIES AND EQUITY		3,827,956.75
			<hr/> <hr/>

TOWN OF GRAND LAKE  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%	
<u>GENERAL TAXES</u>						
10-311-100	PROPERTY TAXES	144,344.02	173,187.58	396,673.00	223,485.42	43.7
10-311-110	SPECIFIC OWNERSHIP	3,708.51	5,341.52	15,000.00	9,658.48	35.6
10-311-120	INTEREST & PENALTY-PROP TAXES	1.83	1.83	300.00	298.17	.6
10-311-130	MOTOR VEHICLE USE & SALES TAX	2,928.95	8,409.60	40,000.00	31,590.40	21.0
10-311-140	SALES TAX 4%	110,247.64	110,247.64	2,337,968.00	2,227,720.36	4.7
10-311-150	BUILDING USE TAX	.00	.00	25,000.00	25,000.00	.0
10-311-160	CIGARETTES-SELECT SALES TAX	.00	1,104.43	3,000.00	1,895.57	36.8
	<b>TOTAL GENERAL TAXES</b>	<b>261,230.95</b>	<b>298,292.60</b>	<b>2,817,941.00</b>	<b>2,519,648.40</b>	<b>10.6</b>
<u>UTILITY FRANCHISE TAX</u>						
10-316-170	FRANCHISE CABLE	.00	.00	20,000.00	20,000.00	.0
10-316-171	FRANCHISE TELEPHONE	343.74	7,540.75	5,000.00	( 2,540.75)	150.8
10-316-172	FRANCHISE ELECTRIC	.00	.00	35,000.00	35,000.00	.0
10-316-173	FRANCHISE NATURAL GAS	8,174.09	8,174.09	15,000.00	6,825.91	54.5
	<b>TOTAL UTILITY FRANCHISE TAX</b>	<b>8,517.83</b>	<b>15,714.84</b>	<b>75,000.00</b>	<b>59,285.16</b>	<b>21.0</b>
<u>LICENSES &amp; PERMITS</u>						
10-321-100	LIQUOR LICENSE FEE	141.25	3,042.50	3,750.00	707.50	81.1
10-321-120	SALES TAX LICENSE \$5	20.00	340.00	425.00	85.00	80.0
10-321-130	MOTOR VEHICLE LICENSE (RURAL)	96.95	247.01	2,000.00	1,752.99	12.4
10-321-140	SIGN PERMIT	.00	.00	100.00	100.00	.0
10-321-150	GRADING PERMIT	.00	.00	50.00	50.00	.0
10-321-160	ANIMAL LICENSE	10.00	40.00	50.00	10.00	80.0
10-321-170	ENCROACHMENT PERMIT/LICENSE	.00	.00	400.00	400.00	.0
10-321-175	BUSINESS LICENSE COMMISSION	82.50	451.25	30,000.00	29,548.75	1.5
10-321-180	NIGHTLY RENTAL LICENSE \$600	9,003.90	53,403.90	50,000.00	( 3,403.90)	106.8
10-321-190	BOARDWALK SALES PERMIT	.00	.00	150.00	150.00	.0
	<b>TOTAL LICENSES &amp; PERMITS</b>	<b>9,354.60</b>	<b>57,524.66</b>	<b>86,925.00</b>	<b>29,400.34</b>	<b>66.2</b>
<u>GRANTS</u>						
10-334-900	GRANTS - OTHER	.00	.00	250,000.00	250,000.00	.0
	<b>TOTAL GRANTS</b>	<b>.00</b>	<b>.00</b>	<b>250,000.00</b>	<b>250,000.00</b>	<b>.0</b>

TOWN OF GRAND LAKE  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>INTERGOVERNMENTAL</u>					
10-335-130 GRAND CNTY ROAD & BRIDGE	.00	.00	9,520.00	9,520.00	.0
10-335-200 HIGHWAY USER TAX FUND	1,770.43	4,156.08	31,952.00	27,795.92	13.0
10-335-800 CONSERVATION TRUST FUND	856.71	856.71	3,000.00	2,143.29	28.6
10-335-900 OTHER INTERGOVERNMENTAL	.00	.00	1,000.00	1,000.00	.0
<b>TOTAL INTERGOVERNMENTAL</b>	<b>2,627.14</b>	<b>5,012.79</b>	<b>45,472.00</b>	<b>40,459.21</b>	<b>11.0</b>
<u>CHARGES FOR SERVICES</u>					
10-341-200 CEMETERY	500.00	500.00	12,000.00	11,500.00	4.2
10-341-202 CEMETERY GRANTS AND DONATION	.00	.00	.00	.00	.0
10-341-300 ZONING & SUBDIVISION REVIEW	3,828.56	4,378.56	2,000.00	( 2,378.56)	218.9
10-341-400 ATTAINABLE HOUSING FEE	.00	.00	2,000.00	2,000.00	.0
10-341-500 EV CHARGING STATION REVENUE	283.72	283.72	4,000.00	3,716.28	7.1
10-341-600 FUEL DEPOT SURCHARGE	272.90	542.72	2,000.00	1,457.28	27.1
10-341-700 COPIES/FAXES/SODA	.00	8.00	.00	( 8.00)	.0
10-341-850 NIGHTLY RENTAL APP FEE \$165	990.00	1,650.00	5,000.00	3,350.00	33.0
10-341-900 CEMETERY EXCAVATING FEE	.00	.00	6,000.00	6,000.00	.0
<b>TOTAL CHARGES FOR SERVICES</b>	<b>5,875.18</b>	<b>7,363.00</b>	<b>33,000.00</b>	<b>25,637.00</b>	<b>22.3</b>
<u>GRAND LAKE CENTER REVENUES</u>					
10-350-101 GL CENTER - RENTAL FEES	1,160.00	6,360.00	15,000.00	8,640.00	42.4
10-350-111 GL CENTER - (T) MERCH SALES	.00	.00	.00	.00	.0
10-350-115 GL CENTER - (N) MERCH SALES	.00	.00	.00	.00	.0
10-350-121 GL CENTER - MEMBERSHIPS	4,588.00	16,715.00	40,000.00	23,285.00	41.8
10-350-131 GL CENTER - REC FEES	1,677.00	4,834.00	12,000.00	7,166.00	40.3
10-350-132 GL CENTER GOLF SIM REVENUE	250.00	430.00	.00	( 430.00)	.0
10-350-201 GL CENTER - DONATIONS	.00	784.00	.00	( 784.00)	.0
<b>TOTAL GRAND LAKE CENTER REVENUES</b>	<b>7,675.00</b>	<b>29,123.00</b>	<b>67,000.00</b>	<b>37,877.00</b>	<b>43.5</b>
<u>FINES AND FORFEITURES</u>					
10-351-100 ORDINANCE/TRAFFIC FINES	105.00	120.00	1,500.00	1,380.00	8.0
<b>TOTAL FINES AND FORFEITURES</b>	<b>105.00</b>	<b>120.00</b>	<b>1,500.00</b>	<b>1,380.00</b>	<b>8.0</b>
<u>FEES AND LEASES</u>					
10-353-180 RENT - VISITORS CENTER	625.00	625.00	2,500.00	1,875.00	25.0
<b>TOTAL FEES AND LEASES</b>	<b>625.00</b>	<b>625.00</b>	<b>2,500.00</b>	<b>1,875.00</b>	<b>25.0</b>

TOWN OF GRAND LAKE  
REVENUES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>INVESTMENT INCOME</u>					
10-355-100 INTEREST REVENUE	9,948.97	24,013.13	10,000.00	( 14,013.13)	240.1
<b>TOTAL INVESTMENT INCOME</b>	<b>9,948.97</b>	<b>24,013.13</b>	<b>10,000.00</b>	<b>( 14,013.13)</b>	<b>240.1</b>
<u>OTHER</u>					
10-360-110 SALE OF ASSETS	16,500.00	29,130.00	25,000.00	( 4,130.00)	116.5
10-360-130 MUNICIPAL FEE	.00	6.81	.00	( 6.81)	.0
10-360-140 RENT - LAND, BUILDINGS	650.00	2,900.00	4,000.00	1,100.00	72.5
10-360-160 RENT - ENTERPRISE FUND SITES	.00	.00	2.00	2.00	.0
10-360-200 MISC. REVENUES - GENERAL	10,325.40	10,325.40	.00	( 10,325.40)	.0
10-360-350 MSOB REVENUE	.00	.00	.00	.00	.0
<b>TOTAL OTHER</b>	<b>27,475.40</b>	<b>42,362.21</b>	<b>29,002.00</b>	<b>( 13,360.21)</b>	<b>146.1</b>
<u>CAPITAL SPECIFIC</u>					
10-377-140 GRANTS - CAPITAL	.00	.00	.00	.00	.0
10-377-145 COMMUNITY HOUSE UPGRADES GRANT	.00	.00	.00	.00	.0
10-377-160 SPACE TO CREATE REVENUE	.00	.00	.00	.00	.0
10-377-165 REVITALIZING MAIN STREET REV	.00	.00	.00	.00	.0
10-377-166 EV GRANT REVENUE	.00	.00	.00	.00	.0
10-377-170 INSURANCE PROCEEDS DOCK	.00	202,241.00	202,241.00	.00	100.0
10-377-175 COLORADO TREE CO REVENUE	.00	.00	.00	.00	.0
<b>TOTAL CAPITAL SPECIFIC</b>	<b>.00</b>	<b>202,241.00</b>	<b>202,241.00</b>	<b>.00</b>	<b>100.0</b>
<b>TOTAL FUND REVENUE</b>	<b>333,435.07</b>	<b>682,392.23</b>	<b>3,620,581.00</b>	<b>2,938,188.77</b>	<b>18.9</b>

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>CEMETERY COMMITTEE</u>					
10-410-211 CEMETERY SUPPLIES/MISC EXP	.00	.00	2,000.00	2,000.00	.0
10-410-215 GRAVE MARKERS	.00	.00	1,000.00	1,000.00	.0
10-410-242 CEMETERY MAINTENANCE	.00	.00	5,000.00	5,000.00	.0
<b>TOTAL CEMETERY COMMITTEE</b>	<b>.00</b>	<b>.00</b>	<b>8,000.00</b>	<b>8,000.00</b>	<b>.0</b>
 <u>PC/BOA</u>					
10-412-211 GENERAL OFFICE SUPPLIES	.00	.00	300.00	300.00	.0
10-412-311 POSTAGE/ADS/LEGAL NOTICES	69.36	101.54	1,000.00	898.46	10.2
10-412-314 PURCHASED SERVICES	1,747.50	2,913.75	18,000.00	15,086.25	16.2
10-412-319 MISC.-PLANNING COMMISSION/BOA	.00	.00	300.00	300.00	.0
10-412-320 COMPUTER HARDWARE	.00	.00	1,000.00	1,000.00	.0
10-412-351 PLANNING LEGAL SERVICES	.00	1,570.00	10,000.00	8,430.00	15.7
10-412-370 TRAINING/TRAVEL	588.49	930.43	6,000.00	5,069.57	15.5
10-412-380 COMP PLAN UPDATE	.00	.00	5,000.00	5,000.00	.0
<b>TOTAL PC/BOA</b>	<b>2,405.35</b>	<b>5,515.72</b>	<b>41,600.00</b>	<b>36,084.28</b>	<b>13.3</b>
 <u>BOARD OF TRUSTEES</u>					
10-413-142 WORKERS' COMPENSATION	118.50	301.48	400.00	98.52	75.4
10-413-143 BOT COMPENSATION	1,100.00	1,300.00	.00	( 1,300.00)	.0
10-413-211 OFFICE/MEETING SUPPLIES	175.82	523.33	5,000.00	4,476.67	10.5
10-413-215 ELECTIONS	.00	.00	2,500.00	2,500.00	.0
10-413-316 DUES/MEMBERSHIPS	2,846.00	16,564.00	18,000.00	1,436.00	92.0
10-413-370 TRAINING/TRAVEL	.00	303.50	7,500.00	7,196.50	4.1
10-413-460 LONG RANGE/MISC	.00	.00	500.00	500.00	.0
10-413-461 APPRECIATION PROGRAM	.00	.00	9,000.00	9,000.00	.0
10-413-462 COMPUTER EQUIPMENT	.00	.00	2,500.00	2,500.00	.0
10-413-463 WATER QUALITY ISSUES	.00	.00	.00	.00	.0
10-413-465 COMPUTER SOFTWARE	31.98	541.94	1,200.00	658.06	45.2
10-413-728 MISCELLANEOUS DONATIONS	.00	.00	13,750.00	13,750.00	.0
10-413-843 ROCKY MTN REP THEATRE	.00	.00	1,350.00	1,350.00	.0
10-413-859 GRAND FOUNDATION	51,500.00	51,500.00	50,000.00	( 1,500.00)	103.0
10-413-870 BOARD CONTINGENCY	.00	.00	250.00	250.00	.0
<b>TOTAL BOARD OF TRUSTEES</b>	<b>55,772.30</b>	<b>71,034.25</b>	<b>111,950.00</b>	<b>40,915.75</b>	<b>63.5</b>

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

<i>Section 10, Item B.</i>
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GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>GREENWAYS COMMITTEE</u>					
10-414-211 GENERAL SUPPLIES	.00	.00	10,334.00	10,334.00	.0
10-414-238 TREES/SHRUBS/PLANTINGS	.00	.00	10,334.00	10,334.00	.0
10-414-241 ARBOR DAY SUPPLIES	.00	.00	250.00	250.00	.0
10-414-319 CONTRACT LABOR	.00	.00	48,000.00	48,000.00	.0
10-414-726 MISCELLANEOUS SERVICES	.00	.00	.00	.00	.0
10-414-870 CONTINGENCY	.00	.00	.00	.00	.0
TOTAL GREENWAYS COMMITTEE	.00	.00	68,918.00	68,918.00	.0

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>ADMINISTRATION</u>					
10-415-100 GROSS WAGES - ADMINISTRATION	42,104.21	119,065.50	378,347.00	259,281.50	31.5
10-415-103 OT/COMP TIME BUYOUT	300.18	415.63	500.00	84.37	83.1
10-415-105 BONUS	.00	.00	7,000.00	7,000.00	.0
10-415-110 GROSS WAGES-ADMIN PT/SEASONAL	.00	.00	.00	.00	.0
10-415-130 GL CENTER MEMBERSHIP BENIFIT	.00	.00	1,925.00	1,925.00	.0
10-415-132 ICMA TOWN PAID BENEFIT	2,976.92	8,737.22	30,268.00	21,530.78	28.9
10-415-133 HEALTH/DENTAL-EMPLOYEE	5,265.39	23,594.51	81,120.00	57,525.49	29.1
10-415-134 ALTERNATIVE BENEFIT	550.00	1,375.00	6,600.00	5,225.00	20.8
10-415-135 DEP HEALTH/DENTAL	5,503.11	19,981.66	66,000.00	46,018.34	30.3
10-415-136 MEDICAL BENEFIT ALLOWANCE	405.96	1,421.90	8,400.00	6,978.10	16.9
10-415-141 UNEMPLOYMENT INSURANCE	72.08	358.52	1,135.00	776.48	31.6
10-415-142 WORKERS' COMPENSATION	1,489.55	2,979.10	3,600.00	620.90	82.8
10-415-143 SOCIAL SECURITY MATCH	2,901.72	8,285.84	23,457.00	15,171.16	35.3
10-415-144 MEDICARE MATCH	678.62	1,937.85	5,486.00	3,548.15	35.3
10-415-145 FAMILI BENEFIT ADMIN	.00	.00	.00	.00	.0
10-415-211 GENERAL OFFICE SUPPLIES	1,219.51	2,327.91	8,000.00	5,672.09	29.1
10-415-215 COMPUTER SOFTWARE	1,957.52	4,833.55	22,000.00	17,166.45	22.0
10-415-220 COMPUTER HARDWARE	.00	.00	7,000.00	7,000.00	.0
10-415-226 SMALL EQUIPMENT	346.00	692.00	3,000.00	2,308.00	23.1
10-415-231 GAS/FUEL	.00	222.65	1,200.00	977.35	18.6
10-415-232 VEHICLE MAINTENANCE	.00	.00	1,000.00	1,000.00	.0
10-415-233 OFFICE EQUIPMENT MAINTENANCE	319.02	461.98	2,500.00	2,038.02	18.5
10-415-237 BUILDING MAINTENANCE	17.28	514.91	11,000.00	10,485.09	4.7
10-415-238 TOWN HALL FURNISHINGS	.00	.00	1,500.00	1,500.00	.0
10-415-311 POSTAGE/FREIGHT	1,184.62	2,229.74	5,000.00	2,770.26	44.6
10-415-312 COMPUTER SERVICES	2,695.36	10,916.13	50,000.00	39,083.87	21.8
10-415-314 ADS & LEGAL NOTICES	443.32	510.46	5,000.00	4,489.54	10.2
10-415-316 DUES & MEMBERSHIPS	.00	.00	1,650.00	1,650.00	.0
10-415-318 JANITORIAL SERVICES	.00	.00	.00	.00	.0
10-415-319 MISCELLANEOUS SERVICES	.00	1,865.00	3,200.00	1,335.00	58.3
10-415-330 BANK FEES	4.00	6.00	1,500.00	1,494.00	.4
10-415-341 ELECTRIC UTILITY	440.95	1,044.67	4,000.00	2,955.33	26.1
10-415-342 SEWER UTILITY	.00	319.80	1,000.00	680.20	32.0
10-415-343 WATER UTILITY	.00	384.00	1,200.00	816.00	32.0
10-415-344 TELEPHONE/INTERNET UTILITY	772.94	2,734.92	7,500.00	4,765.08	36.5
10-415-345 NATURAL GAS UTILITY	1,262.73	1,939.35	6,000.00	4,060.65	32.3
10-415-346 WEBSITE HOSTING SERVICES	.00	.00	800.00	800.00	.0
10-415-351 LEGAL SERVICES	4,110.50	4,745.50	30,000.00	25,254.50	15.8
10-415-352 AUDIT	.00	.00	8,500.00	8,500.00	.0
10-415-353 JUDGE-MUNICIPAL COURT	.00	.00	500.00	500.00	.0
10-415-355 PROFESSIONAL SERVICES-OTHER	130.00	260.00	10,000.00	9,740.00	2.6
10-415-370 TRAINING/TRAVEL	202.93	2,046.14	13,000.00	10,953.86	15.7
10-415-371 MISC EMPLOYEE EXPENSES	.00	553.80	15,000.00	14,446.20	3.7
10-415-385 TRANSIT SERVICE	.00	.00	40,000.00	40,000.00	.0
10-415-386 TRANSIT PLANNING	.00	.00	10,000.00	10,000.00	.0
10-415-387 TRANSIT CAPITAL INVESTMENT	.00	.00	.00	.00	.0
10-415-393 DOCUMENT RECORDING	.00	.00	250.00	250.00	.0
10-415-394 DEVELOPER REIMBURSEMENT	.00	.00	1,000.00	1,000.00	.0
10-415-513 PROPERTY/CASUALTY INSURANCE	7,445.02	15,996.22	27,000.00	11,003.78	59.3
10-415-514 POSITION BONDS	.00	.00	400.00	400.00	.0
10-415-560 TREASURER'S FEES	2,886.92	3,463.79	9,000.00	5,536.21	38.5
10-415-721 CHAMBER SERVICE AGREEMENT	8,808.00	16,991.00	35,232.00	18,241.00	48.2

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GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
10-415-722 BLC FEE REMITTANCE	9,500.00	19,000.00	38,000.00	19,000.00	50.0
10-415-723 VISITOR CENTER REPAIRS & MAINT	.00	.00	1,500.00	1,500.00	.0
10-415-724 NRL VC OP	7,500.00	15,000.00	30,000.00	15,000.00	50.0
10-415-800 ATTAINABLE HOUSING EXPENSES	.00	3,804.12	12,000.00	8,195.88	31.7
10-415-870 CONTINGENCY - GENERAL ADMIN	2,750.00	5,649.55	11,000.00	5,350.45	51.4
10-415-875 MARKETING CONTINGENCY	.00	.00	.00	.00	.0
10-415-880 CHAMBER PUBLIC RELATIONS	2,500.00	5,000.00	10,000.00	5,000.00	50.0
10-415-885 TOWN EVENTS	2,500.00	5,000.00	12,500.00	7,500.00	40.0
10-415-886 MSOB EXPENSES	.00	.00	.00	.00	.0
10-415-887 CONTINENTAL DIVIDE TRAIL	.00	.00	2,500.00	2,500.00	.0
TOTAL ADMINISTRATION	121,244.36	316,665.92	1,075,270.00	758,604.08	29.5
<u>ECONOMIC DEVELOPMENT GRANTS</u>					
10-416-100 TRAIL GROOMERS	.00	.00	30,000.00	30,000.00	.0
10-416-250 HEADWATERS TRAIL ASSOC- HTA	.00	.00	5,000.00	5,000.00	.0
10-416-260 GRAND ART COUNCIL	.00	.00	.00	.00	.0
10-416-261 CREATIVE DISTRICT	.00	100,000.00	100,000.00	.00	100.0
TOTAL ECONOMIC DEVELOPMENT GRANTS	.00	100,000.00	135,000.00	35,000.00	74.1
<u>PUBLIC SAFETY</u>					
10-421-100 GROSS WAGES - PUBLIC SAFETY	.00	.00	.00	.00	.0
10-421-105 BONUS	.00	.00	.00	.00	.0
10-421-110 GROSS WAGES-PUBLIC SAFETY PT	.00	.00	.00	.00	.0
10-421-130 GLC MEMBERSHIP BENEFIT	.00	.00	.00	.00	.0
10-421-131 LONGEVITY BENEFIT	.00	.00	.00	.00	.0
10-421-132 ICMA TOWN PAID BENEFIT	.00	.00	.00	.00	.0
10-421-133 HEALTH/DENTAL-EMPLOYEE	.00	.00	.00	.00	.0
10-421-135 DEP HEALTH/DENTAL	.00	.00	.00	.00	.0
10-421-136 MEDICAL BENEFIT	.00	.00	.00	.00	.0
10-421-141 UNEMPLOYMENT INSURANCE	.00	.00	.00	.00	.0
10-421-142 WORKERS' COMPENSATION	.00	.00	.00	.00	.0
10-421-143 SOCIAL SECURITY MATCH	.00	.00	.00	.00	.0
10-421-144 MEDICARE MATCH	.00	.00	.00	.00	.0
10-421-314 DISPATCH OPERATIONS	.00	.00	20,858.00	20,858.00	.0
10-421-339 SHERIFF'S CONTRACT	.00	.00	257,000.00	257,000.00	.0
10-421-340 SPECIAL EVENT SECURITY	.00	.00	.00	.00	.0
TOTAL PUBLIC SAFETY	.00	.00	277,858.00	277,858.00	.0

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	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>PUBLIC WORKS</u>					
10-431-100 GROSS WAGES - PUBLIC WORKS	33,777.14	97,075.78	345,630.00	248,554.22	28.1
10-431-103 OT/COMP TIME BUYOUT	1,076.16	13,432.89	40,000.00	26,567.11	33.6
10-431-105 BONUS	.00	.00	5,000.00	5,000.00	.0
10-431-111 ON CALL PAY	1,500.00	4,250.00	10,350.00	6,100.00	41.1
10-431-130 GLC MEMBERSHIP BENEFIT	.00	.00	.00	.00	.0
10-431-131 LONGEVITY	.00	.00	.00	.00	.0
10-431-132 ICMA TOWN PAID BENEFIT	1,327.40	4,119.92	20,000.00	15,880.08	20.6
10-431-133 HEALTH/DENTAL-EMPLOYEE	5,987.41	28,706.40	70,720.00	42,013.60	40.6
10-431-135 DEP HEALTH/DENTAL	4,020.24	15,102.64	48,240.00	33,137.36	31.3
10-431-136 MEDICAL BENEFIT ALLOWANCE	537.71	1,308.75	4,800.00	3,491.25	27.3
10-431-141 UNEMPLOYMENT INSURANCE	66.72	362.23	1,157.00	794.77	31.3
10-431-142 WORKERS' COMPENSATION	4,717.25	9,434.50	35,000.00	25,565.50	27.0
10-431-143 SOCIAL SECURITY MATCH	2,428.12	7,731.13	23,909.00	16,177.87	32.3
10-431-144 MEDICARE MATCH	567.88	1,808.10	5,592.00	3,783.90	32.3
10-431-145 FAMILI BENEFIT PW	.00	.00	1,555.00	1,555.00	.0
10-431-222 GENERAL SUPPLIES	98.70	482.76	7,000.00	6,517.24	6.9
10-431-224 SAFETY SUPPLIES	294.00	294.00	7,000.00	6,706.00	4.2
10-431-226 VEHICLE SUPPLIES	.00	.00	4,000.00	4,000.00	.0
10-431-227 SMALL TOOLS	161.97	1,079.29	5,000.00	3,920.71	21.6
10-431-231 GAS/FUEL/LIQUIDS	214.96	9,723.87	30,000.00	20,276.13	32.4
10-431-232 VEHICLE MAINTENANCE	.00	1,257.00	10,000.00	8,743.00	12.6
10-431-233 EQUIPMENT MAINTENANCE	3,497.69	5,045.33	25,000.00	19,954.67	20.2
10-431-235 TIRES/CHAINS	4,640.49	4,765.24	15,000.00	10,234.76	31.8
10-431-236 MISC. BRIDGE WORK	.00	.00	5,000.00	5,000.00	.0
10-431-237 BUILDING MAINTENANCE	.00	.00	6,000.00	6,000.00	.0
10-431-238 STREET LIGHT MAINTENANCE	.00	248.51	3,000.00	2,751.49	8.3
10-431-239 MISCELLANEOUS MAINTENANCE	.00	.00	2,500.00	2,500.00	.0
10-431-242 ROAD MAINTENANCE	1,311.00	9,438.36	150,000.00	140,561.64	6.3
10-431-245 BOARDWALK MAINTENANCE	.00	.00	.00	.00	.0
10-431-253 TREE REMOVAL	.00	.00	5,000.00	5,000.00	.0
10-431-254 TREE SPRAYING	.00	.00	4,000.00	4,000.00	.0
10-431-255 STORMWATER FILTER MAINTENANCE	.00	.00	20,000.00	20,000.00	.0
10-431-256 EV STATION MAINTENANCE	.00	.00	.00	.00	.0
10-431-312 COMPUTER SERVICES	105.96	299.76	3,000.00	2,700.24	10.0
10-431-314 ADS/BID NOTICES	.00	.00	2,000.00	2,000.00	.0
10-431-317 UNIFORM ALLOWANCE	300.00	900.00	2,940.00	2,040.00	30.6
10-431-318 TRASH/RECYCLE SERVICES	664.68	2,173.40	12,000.00	9,826.60	18.1
10-431-319 MISC. PURCHASED SERVICES	95.00	360.72	2,500.00	2,139.28	14.4
10-431-341 ELECTRIC UTILITY	550.83	2,538.29	12,000.00	9,461.71	21.2
10-431-343 WATER UTILITY	.00	147.00	700.00	553.00	21.0
10-431-344 TELEPHONE/INTERNET UTILITY	491.24	1,803.63	6,000.00	4,196.37	30.1
10-431-345 NATURAL GAS UTILITY	1,077.82	2,557.39	5,000.00	2,442.61	51.2
10-431-349 STREET LIGHT ELECTRIC UTILITY	1,519.90	1,519.90	20,000.00	18,480.10	7.6
10-431-354 ENGINEERING/SURVEYING SERVICES	.00	.00	5,000.00	5,000.00	.0
10-431-370 TRAINING/TRAVEL	343.75	1,191.18	5,000.00	3,808.82	23.8
10-431-399 EQUIP RENTAL	.00	.00	5,000.00	5,000.00	.0
10-431-400 CHRISTMAS LIGHTS	.00	.00	50,000.00	50,000.00	.0
10-431-870 CONTINGENCY- PUBLIC WORKS	.00	.00	.00	.00	.0
<b>TOTAL PUBLIC WORKS</b>	<b>71,374.02</b>	<b>229,157.97</b>	<b>1,041,593.00</b>	<b>812,435.03</b>	<b>22.0</b>

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
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GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%	
<u>GRAND LAKE CENTER EXPENDITURES</u>						
10-450-100	GROSS WAGES - GL CENTER	12,814.33	38,628.38	121,086.00	82,457.62	31.9
10-450-103	OT/COMP TIME BUYOUT	.00	.00	.00	.00	.0
10-450-105	BONUS	.00	.00	2,000.00	2,000.00	.0
10-450-110	GROSS WAGES-GLC PT/SEASONAL	.00	.00	20,800.00	20,800.00	.0
10-450-130	GLC MEMBERSHIP BENEFIT	.00	.00	770.00	770.00	.0
10-450-132	ICMA TOWN PAID BENEFIT	736.14	2,165.15	11,351.00	9,185.85	19.1
10-450-133	HEALTH/DENTAL-EMPLOYEE	2,336.76	10,101.17	32,953.00	22,851.83	30.7
10-450-135	DEP. HEALTH/DENTAL	1,035.00	4,140.00	12,420.00	8,280.00	33.3
10-450-136	MEDICAL BENEFIT ALLOWANCE	537.60	858.21	2,400.00	1,541.79	35.8
10-450-141	UNEMPLOYMENT INSURANCE	22.47	106.87	426.00	319.13	25.1
10-450-142	WORKERS' COMPENSATION	854.95	1,709.90	3,000.00	1,290.10	57.0
10-450-143	SOCIAL SECURITY MATCH	696.51	1,949.96	8,797.00	6,847.04	22.2
10-450-144	MEDICARE MATCH	162.90	456.05	2,057.00	1,600.95	22.2
10-450-145	FAMILI BENEFIT (GLC)	.00	.00	545.00	545.00	.0
10-450-211	GEN OFFICE SUPPLIES	.00	310.16	1,500.00	1,189.84	20.7
10-450-220	GENERAL OPERATING SUPPLIES	.00	646.71	3,000.00	2,353.29	21.6
10-450-226	OFFICE EQUIP LEASE	82.32	164.64	1,200.00	1,035.36	13.7
10-450-233	OFFICE EQUIP MAINT	60.00	58.53	600.00	541.47	9.8
10-450-234	SIGNAGE	.00	.00	.00	.00	.0
10-450-235	FITNESS EQUIP MAINT	.00	.00	1,500.00	1,500.00	.0
10-450-236	MINOR/MISC EQUIPMENT	129.99	1,746.67	1,000.00	( 746.67)	174.7
10-450-237	BUILDING MAINTENANCE	9,487.62	11,943.30	35,000.00	23,056.70	34.1
10-450-238	MINOR/MISC FURNISHINGS	.00	.00	2,000.00	2,000.00	.0
10-450-239	MINOR INFRASTRUCTURE MAINT	.00	.00	2,000.00	2,000.00	.0
10-450-250	BACKFLOW MAINTENANCE	.00	.00	600.00	600.00	.0
10-450-252	RESALE SUPPLIES	.00	.00	.00	.00	.0
10-450-312	COMPUTER SERVICES	1,111.16	2,753.24	3,000.00	246.76	91.8
10-450-317	UNIFORM ALLOWANCE	.00	.00	.00	.00	.0
10-450-318	TRASH/RECYCLE SERVICES	.00	.00	.00	.00	.0
10-450-320	MARKETING	307.68	( 856.20)	5,000.00	5,856.20	( 17.1)
10-450-341	ELECTRIC UTILITY	1,096.91	2,327.23	15,000.00	12,672.77	15.5
10-450-342	SEWER UTILITY	.00	1,127.91	4,600.00	3,472.09	24.5
10-450-343	WATER UTILITY	.00	294.00	1,200.00	906.00	24.5
10-450-344	TELEPHONE/INTERNET/TV UTILITY	555.61	1,558.42	7,500.00	5,941.58	20.8
10-450-345	NATURAL GAS UTILITY	1,185.25	2,915.77	15,000.00	12,084.23	19.4
10-450-350	MAINTENANCE AGREEMENT	.00	.00	4,758.00	4,758.00	.0
10-450-351	LEGAL SERVICES	.00	.00	.00	.00	.0
10-450-352	AUDIT	.00	.00	1,100.00	1,100.00	.0
10-450-355	PURCHASED PROFESSIONAL SERV.	.00	309.51	1,500.00	1,190.49	20.6
10-450-360	GLC SALES TAX	.00	.00	.00	.00	.0
10-450-361	GL OVER/SHORT CASH	.00	.00	.00	.00	.0
10-450-370	TRAINING/TRAVEL	.00	192.00	300.00	108.00	64.0
10-450-400	GOLF SIMULATOR EXPENSE	.00	810.00	3,000.00	2,190.00	27.0
10-450-513	PROPERTY/CASUALTY INSURANCE	2,517.06	5,034.12	10,000.00	4,965.88	50.3
10-450-755	EXERCISE EQUIPMENT	.00	98.33	4,000.00	3,901.67	2.5
10-450-869	SUMMER CAMP	.00	.00	30,000.00	30,000.00	.0
10-450-870	CONTINGENCY - GL CENTER	402.59	552.59	.00	( 552.59)	.0
TOTAL GRAND LAKE CENTER EXPENDITUR		36,132.85	92,102.62	372,963.00	280,860.38	24.7

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	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>PARKS</u>					
10-452-100 GROSS WAGES - PARKS	.00	.00	50,776.00	50,776.00	.0
10-452-103 OT/COMP TIME BUYOUT	.00	.00	.00	.00	.0
10-452-105 BONUS	.00	.00	.00	.00	.0
10-452-130 GLC MEMBERSHIP BENEFIT	.00	.00	.00	.00	.0
10-452-131 LONGEVITY	.00	.00	.00	.00	.0
10-452-132 ICMA TOWN PAID BENEFIT	.00	.00	4,062.00	4,062.00	.0
10-452-133 HEALTH/DENTAL-EMPLOYEE	.00	.00	12,480.00	12,480.00	.0
10-452-135 DEP. HEALTH/DENTAL	.00	.00	4,397.00	4,397.00	.0
10-452-136 MEDICAL BENEFIT ALLOWANCE	.00	.00	1,013.00	1,013.00	.0
10-452-141 UNEMPLOYMENT INSURANCE	.00	.00	152.00	152.00	.0
10-452-142 WORKERS' COMPENSATION	.00	.00	2,700.00	2,700.00	.0
10-452-143 SOCIAL SECURITY MATCH	.00	.00	3,148.00	3,148.00	.0
10-452-144 MEDICARE MATCH	.00	.00	736.00	736.00	.0
10-452-145 FAMILI BENEFIT PARKS	.00	.00	228.00	228.00	.0
10-452-220 OPERATING SUPPLIES	920.53	937.31	35,000.00	34,062.69	2.7
10-452-226 SMALL EQUIPMENT	.00	.00	5,000.00	5,000.00	.0
10-452-227 SMALL TOOLS	.00	.00	2,500.00	2,500.00	.0
10-452-232 BEAR-RESISTANT CANS MAINT	.00	.00	2,500.00	2,500.00	.0
10-452-233 EQUIPMENT MAINTENANCE	.00	.00	2,500.00	2,500.00	.0
10-452-234 INFORMATION SIGNS	.00	.00	2,500.00	2,500.00	.0
10-452-235 GREENBELT MAINTENANCE	.00	.00	7,000.00	7,000.00	.0
10-452-236 SAND & DREDGE	.00	.00	5,000.00	5,000.00	.0
10-452-237 BUILDING MAINTENANCE	.00	535.65	55,000.00	54,464.35	1.0
10-452-238 DOCK MAINTENANCE	.00	.00	25,000.00	25,000.00	.0
10-452-239 MISCELLANEOUS MAINTENANCE	.00	.00	5,000.00	5,000.00	.0
10-452-243 BENCHES/PLANTERS/FENCES	.00	.00	5,000.00	5,000.00	.0
10-452-244 THOMASSON PARK MAINTENANCE	.00	.00	4,000.00	4,000.00	.0
10-452-248 IRRIGATION SYSTEM MAINTENANCE	.00	.00	4,000.00	4,000.00	.0
10-452-250 BACKFLOW MAINTENANCE	.00	.00	3,000.00	3,000.00	.0
10-452-317 UNIFORM ALLOWANCE	.00	.00	660.00	660.00	.0
10-452-319 MISCELLANEOUS SERVICES	300.00	300.00	3,000.00	2,700.00	10.0
10-452-341 ELECTRIC UTILITY	791.37	1,342.82	6,500.00	5,157.18	20.7
10-452-342 SEWER UTILITY	.00	141.45	540.00	398.55	26.2
10-452-343 WATER UTILITY	.00	2,098.00	13,000.00	10,902.00	16.1
10-452-345 NATURAL GAS UTILITY	688.55	1,558.06	4,000.00	2,441.94	39.0
10-452-399 EQUIPMENT RENTAL	.00	600.00	5,600.00	5,000.00	10.7
10-452-400 GRAND AVENUE GARDENS	.00	.00	.00	.00	.0
10-452-450 PARK IMPROVEMENTS	2,491.48	2,491.48	10,000.00	7,508.52	24.9
10-452-870 CONTINGENCY - PARKS	.00	.00	.00	.00	.0
10-452-961 MEMORIAL BENCHES	.00	.00	.00	.00	.0
<b>TOTAL PARKS</b>	<b>5,191.93</b>	<b>10,004.77</b>	<b>285,992.00</b>	<b>275,987.23</b>	<b>3.5</b>
<u>DEPARTMENT 460</u>					
10-460-750 FIREWORKS	.00	.00	.00	.00	.0
<b>TOTAL DEPARTMENT 460</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>

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	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%	
<u>ADMIN CERTIFICATE OF PARTICIPA</u>						
10-815-982	LAND ACQUISITION - PRINCIPAL	.00	.00	90,000.00	90,000.00	.0
10-815-983	LAND ACQUISITION-INTEREST	.00	.00	39,615.00	39,615.00	.0
	<b>TOTAL ADMIN CERTIFICATE OF PARTICIPA</b>	<b>.00</b>	<b>.00</b>	<b>129,615.00</b>	<b>129,615.00</b>	<b>.0</b>
<u>PUBLIC WORKS DEBT SERVICE</u>						
10-831-500	CAPITAL EQUIP LEASE PRINCIPAL	.00	.00	.00	.00	.0
10-831-510	CAPITAL EQUIP LEASE INTEREST	.00	.00	.00	.00	.0
	<b>TOTAL PUBLIC WORKS DEBT SERVICE</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>
<u>ADMIN CAPITAL</u>						
10-915-922	ADMIN CAPITAL EXPENDITURES	.00	.00	.00	.00	.0
10-915-923	TOWN HALL CAPITAL OUTLAY	.00	17,723.09	25,000.00	7,276.91	70.9
10-915-950	SPACE TO CREATE EXPENDITURES	.00	.00	.00	.00	.0
10-915-986	REPLACEMENT VEHICLE	.00	.00	.00	.00	.0
	<b>TOTAL ADMIN CAPITAL</b>	<b>.00</b>	<b>17,723.09</b>	<b>25,000.00</b>	<b>7,276.91</b>	<b>70.9</b>
<u>PUBLIC WORKS CAPITAL</u>						
10-931-910	CAPITAL EQUIPMENT PURCHASE	6,900.00	6,900.00	120,000.00	113,100.00	5.8
10-931-911	CAPITALIZED EQUIPMENT REPAIR	.00	.00	.00	.00	.0
10-931-921	PAVING	.00	.00	100,000.00	100,000.00	.0
10-931-922	DRAINAGE	.00	.00	50,000.00	50,000.00	.0
10-931-923	TOWN SHOP CAPITAL OUTLAY	.00	.00	.00	.00	.0
10-931-972	W PORTAL BRIDGE REHAB	.00	.00	.00	.00	.0
10-931-973	PUBLIC WAY FINDING SIGNS	.00	.00	5,000.00	5,000.00	.0
10-931-974	STREETSCAPE PROJECT FUNDING	.00	.00	.00	.00	.0
	<b>TOTAL PUBLIC WORKS CAPITAL</b>	<b>6,900.00</b>	<b>6,900.00</b>	<b>275,000.00</b>	<b>268,100.00</b>	<b>2.5</b>
<u>PARKS CAPITAL</u>						
10-952-500	DOCK IMPROVEMENTS	.00	96,323.22	160,516.00	64,192.78	60.0
10-952-600	COMMUNITY HOUSE UPGRADES EXPEN	339.92	339.92	.00	( 339.92)	.0
10-952-970	LAND PURCHASE	.00	.00	.00	.00	.0
10-952-971	PARK IMPROVEMENTS	.00	.00	250,000.00	250,000.00	.0
10-952-972	BOARDWALKS	.00	.00	.00	.00	.0
10-952-995	LAKEFRONT IMPROVEMENTS	.00	.00	.00	.00	.0
10-952-996	REVITALIZING MAIN STREET EXP	.00	.00	.00	.00	.0
	<b>TOTAL PARKS CAPITAL</b>	<b>339.92</b>	<b>96,663.14</b>	<b>410,516.00</b>	<b>313,852.86</b>	<b>23.6</b>

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
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GENERAL FUND					
	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
TOTAL FUND EXPENDITURES	299,360.73	945,767.48	4,259,275.00	3,313,507.52	22.2
NET REVENUE OVER EXPENDITURES	34,074.34	( 263,375.25)	( 638,694.00)	( 375,318.75)	( 41.2)

TOWN OF GRAND LAKE  
 BALANCE SHEET  
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WATER FUND

ASSETS

20-100000	CASH IN COMBINED CASH FUND	168,635.87	
20-101000	US BANK	281,838.08	
20-102000	CSAFE	68,013.92	
20-109100	COLOTRUST	1,569,902.91	
20-117000	ACCTS RECEIVABLE/WATER SALES	64,174.30	
20-117099	ACCTS RECEIVABLE-OTHER	.00	
20-117500	ACCOUNTS RECIVABLE - AR	27,905.60	
20-118000	ASSET - LAND	2,270.00	
20-119000	ASSET - DISTRIBUTION SYSTEM	2,831,627.28	
20-122000	ASSET-TREATMENT FACILITY	145,465.94	
20-124000	ASSET - WELLS	109,870.82	
20-125000	ASSET-TANK RESERVOIR	1,466,565.72	
20-126000	ASSET-EQUIPMENT	388,004.73	
20-127000	ASSET-METERS/INSTL IN PROGRESS	7,146.80	
20-128000	ASSET-CONSTRUCTION IN PROGRESS	.00	
20-129000	ACCUM. DEPRECIATION/ALL PRPRTY	( 2,843,556.98)	
20-133000	ASSET/BLDG-TOWN HALL	26,934.62	
20-135000	DUE FROM GENERAL FUND	.00	
20-136000	DUE FROM MARINA FUND	.00	
20-143100	PREPAID EXPENSES	.00	
			4,314,799.61

TOTAL ASSETS

LIABILITIES AND EQUITY

LIABILITIES

20-200000	ACCOUNTS PAYABLE GENERAL	3,364.65	
20-201001	DWRP PAYABLE-PRINCIPAL	1,326,544.32	
20-217100	SOCIAL SECURITY PAYABLE	( .01)	
20-217200	FEDERAL W/H PAYABLE	.00	
20-217300	STATE TAX W/H PAYABLE	.00	
20-217400	MEDICARE WITHHOLDING	.01	
20-217500	SUTA PAYABLE	.00	
20-217600	WC PAYABLE	.00	
20-218100	HEALTH/DENTAL/VISION	.00	
20-219100	FLEX MEDICAL	.00	
20-219200	MEDICAL BENEFIT PAYABLE	.00	
20-220000	ICMA W/H PAYABLE	.00	
20-221000	ICMA LOAN PAYABLE	.00	
20-221001	ICMA/ROTH IRA	.00	
20-222000	DEFERRED REVENUE-PREPAID FEES	27,134.57	
20-223000	ACCRUED VACATION PAYABLE	29,691.66	
20-231000	DUE TO G.F. FROM WATER FUND	.00	
			1,386,735.20

TOTAL LIABILITIES

FUND EQUITY

20-275000	UNAPPROP. RETAINED EARNINGS	( 857,975.58)	
20-281000	CIP RESERVE	1,526,004.00	
20-287000	CONTRIBUTED CAPITAL EQUITY	2,215,142.08	

TOWN OF GRAND LAKE  
BALANCE SHEET  
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WATER FUND

UNAPPROPRIATED FUND BALANCE: REVENUE OVER EXPENDITURES - YTD	<u>44,893.91</u>	
BALANCE - CURRENT DATE		<u>44,893.91</u>
TOTAL FUND EQUITY		<u>2,928,064.41</u>
TOTAL LIABILITIES AND EQUITY		<u><u>4,314,799.61</u></u>

TOWN OF GRAND LAKE  
 REVENUES WITH COMPARISON TO BUDGET  
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<i>Section 10, Item B.</i>
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WATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>WATER REVENUES</u>					
20-344-100 WATER SALES	( 125.00)	163,177.15	675,000.00	511,822.85	24.2
20-344-105 HP NET METER REVENUE	.00	.00	.00	.00	.0
20-344-110 TAP FEES - CAPITAL	26,000.00	26,000.00	32,500.00	6,500.00	80.0
20-344-120 RESALE METERS INCOME	2,200.80	2,878.20	3,000.00	121.80	95.9
20-344-140 INTEREST REVENUE	6,763.98	18,990.53	10,000.00	( 8,990.53)	189.9
20-344-150 SALE/TRADE-IN OF ASSETS	.00	.00	.00	.00	.0
20-344-160 MISC. REVENUES	.00	.00	.00	.00	.0
20-344-190 BULK WATER PERMITS	.00	.00	500.00	500.00	.0
20-344-200 CAPITAL LEASE PROCEEDS	.00	.00	.00	.00	.0
20-344-260 REIMBURSEMENT INCOME	.00	.00	.00	.00	.0
TOTAL WATER REVENUES	34,839.78	211,045.88	721,000.00	509,954.12	29.3
TOTAL FUND REVENUE	34,839.78	211,045.88	721,000.00	509,954.12	29.3

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
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WATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>WATER OPERATIONS</u>					
20-430-100	GROSS WAGES - WATER	17,500.45	48,489.46	257,000.00	208,510.54 18.9
20-430-103	OT/COMP TIME BUYOUT	4.25	4.25	5,000.00	4,995.75 .1
20-430-105	BONUS	.00	.00	2,500.00	2,500.00 .0
20-430-110	GROSS WAGES-WATER PT/SEASONAL	.00	.00	.00	.00 .0
20-430-111	ON CALL PAY	1,800.00	4,650.00	13,000.00	8,350.00 35.8
20-430-119	YEAR END LEAVE EXPENSE	.00	.00	.00	.00 .0
20-430-130	GLC MEMBERSHIP BENEFIT	.00	.00	.00	.00 .0
20-430-132	ICMA TOWN PAID BENEFIT	767.44	1,995.34	20,960.00	18,964.66 9.5
20-430-133	HEALTH/DENTAL-EMPLOYEE	3,814.30	10,095.26	46,800.00	36,704.74 21.6
20-430-135	DEP HEALTH/DENTAL	449.96	1,799.84	5,400.00	3,600.16 33.3
20-430-136	MEDICAL BENEFIT ALLOWANCE	244.49	244.49	3,600.00	3,355.51 6.8
20-430-141	UNEMPLOYMENT INSURANCE	47.09	162.85	786.00	623.15 20.7
20-430-142	WORKERS' COMPENSATION	3,474.50	6,949.00	21,000.00	14,051.00 33.1
20-430-143	SOCIAL SECURITY MATCH	1,151.87	3,030.39	16,244.00	13,213.61 18.7
20-430-144	MEDICARE MATCH	269.38	708.70	3,799.00	3,090.30 18.7
20-430-145	FAMILI BENIFIT	.00	.00	.00	.00 .0
20-430-210	OFFICE SUPPLIES	.00	.00	1,500.00	1,500.00 .0
20-430-211	COMPUTER SUPPLIES	.00	.00	22,000.00	22,000.00 .0
20-430-215	COMPUTER SOFTWARE	.00	.00	7,000.00	7,000.00 .0
20-430-220	COMPUTER HARDWARE	.00	.00	2,500.00	2,500.00 .0
20-430-221	CHEMICALS	2,026.51	6,664.05	13,000.00	6,335.95 51.3
20-430-222	LAB SUPPLIES/EQUIPMENT	.00	6.99	1,500.00	1,493.01 .5
20-430-223	WELL/PLANT SUPPLIES	.00	6.87	600.00	593.13 1.2
20-430-225	METER PARTS	.00	.00	500.00	500.00 .0
20-430-227	SMALL EQUIPMENT/TOOLS	.00	.00	600.00	600.00 .0
20-430-228	SAFETY EQUIPMENT	.00	.00	1,000.00	1,000.00 .0
20-430-229	MISC OPERATING SUPPLIES	36.99	36.99	100.00	63.01 37.0
20-430-231	GAS/FUEL/FLUIDS	.00	818.94	2,500.00	1,681.06 32.8
20-430-232	VEHICLE MAINTENANCE	3,109.36	3,109.36	2,500.00	( 609.36) 124.4
20-430-233	EQUIPMENT MAINTENANCE	.00	95.80	5,000.00	4,904.20 1.9
20-430-234	WELL/PLANT MAINTENANCE	.00	26.48	3,000.00	2,973.52 .9
20-430-235	TIRES & CHAINS	.00	.00	1,200.00	1,200.00 .0
20-430-237	BUILDING MAINTENANCE	.00	.00	1,000.00	1,000.00 .0
20-430-238	DISTRIBUTION LINE MAINTENANCE	7.74	1,186.68	25,000.00	23,813.32 4.8
20-430-239	MISC. MAINTENANCE	.00	.00	150.00	150.00 .0
20-430-240	ROAD MATERIALS	.00	.00	3,000.00	3,000.00 .0
20-430-241	MOTORS & PUMPS	.00	1,470.00	2,500.00	1,030.00 58.8
20-430-251	RESALE PARTS	.00	.00	150.00	150.00 .0
20-430-252	RESALE METERS EXPENSE	90.00	8,028.38	.00	( 8,028.38) .0
20-430-253	COGS-METER	.00	.00	6,000.00	6,000.00 .0
20-430-310	MISC SERVICE FEES	.00	.00	.00	.00 .0
20-430-311	POSTAGE/FREIGHT	.00	.00	1,500.00	1,500.00 .0
20-430-314	LEGAL NOTICES/ADS	.00	.00	300.00	300.00 .0
20-430-316	MEMBERSHIPS	.00	300.00	500.00	200.00 60.0
20-430-317	UNIFORM ALLOWANCE	100.00	300.00	3,900.00	3,600.00 7.7
20-430-318	TESTING SERVICES	.00	.00	3,000.00	3,000.00 .0
20-430-319	MISCELLANEOUS SERVICES	.00	.00	100.00	100.00 .0
20-430-320	TELEMETRY MAINTENANCE	85.00	255.00	1,000.00	745.00 25.5
20-430-321	COMPUTER SYSTEM SUPPORT	1,337.96	4,550.82	12,000.00	7,449.18 37.9
20-430-330	BANK FEES	53.17	93.25	700.00	606.75 13.3
20-430-341	ELECTRIC UTILITY	3,221.76	6,426.45	23,000.00	16,573.55 27.9
20-430-344	TELEPHONE UTILITY	222.85	722.79	2,500.00	1,777.21 28.9

TOWN OF GRAND LAKE  
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WATER FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
20-430-345 NATURAL GAS UTILITY	1,066.82	2,430.68	7,000.00	4,569.32	34.7
20-430-347 INTERNET SERVICE	.00	.00	.00	.00	.0
20-430-351 LEGAL SERVICES	.00	.00	600.00	600.00	.0
20-430-352 AUDIT	.00	.00	3,000.00	3,000.00	.0
20-430-354 SYSTEM ANALYSIS/ENG & SURVEY	402.50	402.50	5,000.00	4,597.50	8.1
20-430-355 STATE FEES	.00	.00	.00	.00	.0
20-430-370 TRAINING/TRAVEL	.00	293.43	2,000.00	1,706.57	14.7
20-430-513 PROPERTY/CASUALTY INSURANCE	3,849.63	7,699.26	17,000.00	9,300.74	45.3
20-430-514 POSITION BONDS	.00	.00	100.00	100.00	.0
20-430-700 DEPRECIATION RESERVE	.00	.00	.00	.00	.0
20-430-870 CONTINGENCY-OPERATIONS	.00	.00	1,000.00	1,000.00	.0
TOTAL WATER OPERATIONS	45,134.02	123,054.30	582,589.00	459,534.70	21.1
<u>WATER DEBT SERVICE</u>					
20-830-640 DWRP LOAN - PRINCIPAL	.00	.00	69,977.00	69,977.00	.0
20-830-645 DWRP LOAN - INTEREST	.00	.00	24,811.00	24,811.00	.0
TOTAL WATER DEBT SERVICE	.00	.00	94,788.00	94,788.00	.0
<u>WATER CAPITAL</u>					
20-930-994 SYSTEM UPGRADES	.00	.00	.00	.00	.0
20-930-995 CAPITAL CONTINGENCY	.00	.00	.00	.00	.0
20-930-997 CAPITAL DIRECT PURCHASE	.00	43,097.67	48,000.00	4,902.33	89.8
20-930-999 CONTRA CAPITAL OUTLAY	.00	.00	.00	.00	.0
TOTAL WATER CAPITAL	.00	43,097.67	48,000.00	4,902.33	89.8
<u>DEPARTMENT 931</u>					
20-931-999 CONTRA DEBT SERVICE	.00	.00	.00	.00	.0
TOTAL DEPARTMENT 931	.00	.00	.00	.00	.0
TOTAL FUND EXPENDITURES	45,134.02	166,151.97	725,377.00	559,225.03	22.9
NET REVENUE OVER EXPENDITURES	( 10,294.24)	44,893.91	( 4,377.00)	( 49,270.91)	1025.7

TOWN OF GRAND LAKE  
 BALANCE SHEET  
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MARINA FUND

ASSETS

40-100000	CASH IN COMBINED CASH FUND	320,085.16	
40-109100	COLOTRUST	428,396.86	
40-116000	PETTY CASH	.00	
40-117000	ACCOUNTS RECEIVABLE	.00	
40-117500	ACCOUNTS RECIVABLE - AR	.00	
40-118000	ASSET - BOATS	480,239.43	
40-118500	ASSET - BOATS-IN PROGRESS	.00	
40-119000	ASSET - OTHER	7,480.69	
40-123000	DUE TO MARINA FROM GF	.00	
40-129000	ACCUM DEPRECIATION/ALL PROP	( 283,018.52)	
40-143100	PREPAID EXPENSES	.00	
	TOTAL ASSETS		953,183.62

LIABILITIES AND EQUITY

LIABILITIES

40-200000	ACCOUNTS PAYABLE GENERAL	.00	
40-217100	SOCIAL SECURITY PAYABLE	.00	
40-217200	FEDERAL W/H PAYABLE	.00	
40-217300	STATE TAX W/H PAYABLE	.00	
40-217400	MEDICARE WITHHOLDING	.00	
40-217500	SUTA PAYABLE	.00	
40-217600	WC PAYABLE	.00	
40-218100	HEALTH/DENTAL/VISION	( 278.45)	
40-219100	FLEX MEDICAL	.00	
40-219200	MEDICAL BENEFIT PAYABLE	.00	
40-220000	ICMA W/H PAYABLE	.00	
40-221000	ICMA LOAN PAYABLE	.00	
40-221001	ICMA/ROTH IRA	.00	
40-223000	ACCRUED VACATION PAYABLE	1,553.76	
40-231000	DUE TO GF FROM MARINA	.00	
40-232000	DUE TO WATER FROM MARINA	.00	
	TOTAL LIABILITIES		1,275.31

FUND EQUITY

40-275000	UNAPPROP. RETAINED EARNINGS	984,386.93	
	UNAPPROPRIATED FUND BALANCE:		
	REVENUE OVER EXPENDITURES - YTD	( 32,186.41)	
	BALANCE - CURRENT DATE	( 32,186.41)	
	TOTAL FUND EQUITY		952,200.52
	TOTAL LIABILITIES AND EQUITY		953,475.83

TOWN OF GRAND LAKE  
 REVENUES WITH COMPARISON TO BUDGET  
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MARINA FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>MARINA REVENUES</u>					
40-344-113 RENTALS (NON-TAXABLE)	.00	.00	300,000.00	300,000.00	.0
40-344-115 TOURS	.00	.00	55,000.00	55,000.00	.0
40-344-120 BUILDING SPACE RENTAL	.00	.00	3,584.00	3,584.00	.0
40-344-145 KAYAK SLIP RENTAL	.00	.00	3,600.00	3,600.00	.0
40-344-155 SUP SLIP RENTAL	.00	.00	900.00	900.00	.0
40-344-160 MISC REVENUE	.00	.00	.00	.00	.0
40-344-170 INTEREST EARNED	1,764.13	4,953.52	4,000.00	( 953.52)	123.8
40-344-180 BOAT DAMAGE	.00	.00	1,000.00	1,000.00	.0
40-344-200 SALE OF ASSETS	.00	.00	.00	.00	.0
40-344-220 CONTRIBUTED SERVICES	.00	.00	.00	.00	.0
TOTAL MARINA REVENUES	1,764.13	4,953.52	368,084.00	363,130.48	1.4
TOTAL FUND REVENUE	1,764.13	4,953.52	368,084.00	363,130.48	1.4

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
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MARINA FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>MARINA OPERATIONS</u>					
40-460-100 GROSS WAGES - MARINA	2,672.05	8,305.60	71,500.00	63,194.40	11.6
40-460-103 OT/COMP TIME BUYOUT	.00	.00	1,500.00	1,500.00	.0
40-460-105 BONUS	.00	.00	1,000.00	1,000.00	.0
40-460-110 GROSS WAGES-MARINA PT/SEASONAL	.00	.00	130,000.00	130,000.00	.0
40-460-119 ACCRUED LEAVE EXPENSE	.00	.00	.00	.00	.0
40-460-130 GLC MEMBERSHIP BENEFIT	.00	.00	.00	.00	.0
40-460-132 ICMA TOWN PAID BENEFIT	.00	.00	5,720.00	5,720.00	.0
40-460-133 HEALTH/DENTAL - EMPLOYEE	1,157.80	4,631.20	17,000.00	12,368.80	27.2
40-460-135 DEP HEALTH/DENTAL	.00	.00	.00	.00	.0
40-460-136 MEDICAL BENEFIT ALLOWANCE	.00	314.00	1,200.00	886.00	26.2
40-460-141 UNEMPLOYMENT INSURANCE	18.17	32.51	609.00	576.49	5.3
40-460-142 WORKERS' COMPENSATION	3,150.00	6,300.00	20,000.00	13,700.00	31.5
40-460-143 SOCIAL SECURITY MATCH	147.72	443.16	12,586.00	12,142.84	3.5
40-460-144 MEDICARE MATCH	34.54	103.62	2,944.00	2,840.38	3.5
40-460-211 GENERAL OFFICE SUPPLIES	.00	.00	600.00	600.00	.0
40-460-214 SMALL EQUIP/COMP HRDWARE	.00	.00	500.00	500.00	.0
40-460-222 SHOP SUPPLIES	.00	.00	2,500.00	2,500.00	.0
40-460-223 BOAT SUPPLIES	.00	.00	2,000.00	2,000.00	.0
40-460-227 TOOLS	.00	.00	500.00	500.00	.0
40-460-231 FUEL	.00	.00	10,000.00	10,000.00	.0
40-460-232 VEHICLE MAINTENANCE	.00	.00	500.00	500.00	.0
40-460-233 EQUIPMENT (BOAT) MAINTENANCE	.00	.00	15,000.00	15,000.00	.0
40-460-237 BUILDING/FACILITY MAINTENANCE	.00	.00	2,000.00	2,000.00	.0
40-460-301 CONTRIBUTIONS	.00	.00	.00	.00	.0
40-460-312 COMPUTER SERVICES	436.80	1,015.60	2,000.00	984.40	50.8
40-460-314 ADS AND LEGAL NOTICES	.00	.00	2,000.00	2,000.00	.0
40-460-316 DUES/MEMBERSHIPS	.00	.00	275.00	275.00	.0
40-460-317 UNIFORMS	.00	.00	1,000.00	1,000.00	.0
40-460-318 MISCELLANEOUS SERVICES	.00	.00	300.00	300.00	.0
40-460-320 MARKETING	402.50	682.50	500.00	( 182.50)	136.5
40-460-330 BANK/CREDIT CARD FEES	.00	129.00	7,500.00	7,371.00	1.7
40-460-341 ELECTRIC UTILITY	58.60	130.20	800.00	669.80	16.3
40-460-342 SEWER UTILITY	.00	123.00	575.00	452.00	21.4
40-460-343 WATER UTILITY	.00	147.00	588.00	441.00	25.0
40-460-344 TELEPHONE/INTERNET UTILITY	220.12	505.78	1,200.00	694.22	42.2
40-460-350 BOAT REGISTRATION	.00	.00	900.00	900.00	.0
40-460-351 LICENSES	.00	.00	100.00	100.00	.0
40-460-355 PURCHASED PROFESSIONAL SERV.	.00	.00	500.00	500.00	.0
40-460-360 SALES TAX	.00	.00	.00	.00	.0
40-460-361 MARINA OVER/SHORT	.00	.00	.00	.00	.0
40-460-370 TRAINING/TRAVEL	.00	.00	500.00	500.00	.0
40-460-510 LEGAL	.00	.00	.00	.00	.0
40-460-512 AUDIT	.00	.00	1,500.00	1,500.00	.0
40-460-513 PROPERTY/CASUALTY INSURANCE	888.38	1,776.76	4,500.00	2,723.24	39.5
40-460-514 POSITION BONDS	.00	.00	300.00	300.00	.0
40-460-515 ENGINEERING/SURVEY	.00	.00	.00	.00	.0
40-460-516 SITE LEASE	.00	.00	1.00	1.00	.0
40-460-700 DEPRECIATION RESERVE	.00	.00	.00	.00	.0
40-460-750 FIREWORKS	.00	12,500.00	45,000.00	32,500.00	27.8
40-460-870 CONTINGENCY	.00	.00	6,000.00	6,000.00	.0
<b>TOTAL MARINA OPERATIONS</b>	<b>9,186.68</b>	<b>37,139.93</b>	<b>373,698.00</b>	<b>336,558.07</b>	<b>9.9</b>

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

<i>Section 10, Item B.</i>
----------------------------

MARINA FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>MARINA CAPITAL</u>					
40-960-610 CAPITAL EQUIPMENT	.00	.00	.00	.00	.0
40-960-750 CAPITAL CONTRIBS (INTERFUND)	.00	.00	.00	.00	.0
40-960-995 FACILITIES IMPROVEMENTS	.00	.00	80,000.00	80,000.00	.0
40-960-999 CONTRA CAPITAL OUTLAY	.00	.00	.00	.00	.0
TOTAL MARINA CAPITAL	.00	.00	80,000.00	80,000.00	.0
TOTAL FUND EXPENDITURES	9,186.68	37,139.93	453,698.00	416,558.07	8.2
NET REVENUE OVER EXPENDITURES	( 7,422.55)	( 32,186.41)	( 85,614.00)	( 53,427.59)	( 37.6)

TOWN OF GRAND LAKE  
 BALANCE SHEET  
 MARCH 31, 2023

Section 10, Item B.

PAY-AS-YOU-THROW FUND

<u>ASSETS</u>			
50-100000	CASH IN COMBINED CASH FUND	186,240.84	
50-116000	PETTY CASH	50.00	
50-117000	ACCOUNTS RECEIVABLE	.00	
50-117500	ACCOUNTS RECIVABLE - AR	( 4,500.00)	
50-127000	ASSET - BAG INVENTORY	4,333.66	
50-143100	PREPAID EXPENSES	.00	
		<hr/>	
	TOTAL ASSETS		186,124.50
			<hr/> <hr/>
<u>LIABILITIES AND EQUITY</u>			
<u>LIABILITIES</u>			
50-200000	ACCOUNTS PAYABLE GENERAL	245.62	
50-223100	PREPAID ACCOUNTS	.00	
50-231000	DUE TO G.F. FROM PAYT	.00	
		<hr/>	
	TOTAL LIABILITIES		245.62
<u>FUND EQUITY</u>			
50-275000	UNAPPROP. RETAINED EARNINGS	195,470.15	
	UNAPPROPRIATED FUND BALANCE:		
	REVENUE OVER EXPENDITURES - YTD	( 9,591.27)	
		<hr/>	
	BALANCE - CURRENT DATE	( 9,591.27)	
		<hr/>	
	TOTAL FUND EQUITY		185,878.88
			<hr/> <hr/>
	TOTAL LIABILITIES AND EQUITY		186,124.50
			<hr/> <hr/>

TOWN OF GRAND LAKE  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

PAY-AS-YOU-THROW FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>PAYT REVENUES</u>					
50-344-110 BAGS: DIRECT SALES (T)	37.00	333.00	4,000.00	3,667.00	8.3
50-344-115 BAGS: VENDOR PURCHASE (NT)	2,400.00	4,800.00	75,000.00	70,200.00	6.4
50-344-140 INTEREST REVENUE	.00	.00	300.00	300.00	.0
TOTAL PAYT REVENUES	2,437.00	5,133.00	79,300.00	74,167.00	6.5
TOTAL FUND REVENUE	2,437.00	5,133.00	79,300.00	74,167.00	6.5

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.
---------------------

PAY-AS-YOU-THROW FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>PAYT OPERATIONS</u>					
50-470-200 BAGS FOR RESALE	.00	6,396.00	2,300.00	( 4,096.00)	278.1
50-470-250 COGS - BAGS	.00	.00	6,500.00	6,500.00	.0
50-470-300 DUMPSTER SERVICE	2,217.62	7,820.28	30,000.00	22,179.72	26.1
50-470-301 RECYCLING CONTRIBUTION	125.00	500.00	1,500.00	1,000.00	33.3
50-470-305 RECYCLING PROGRAM	.00	.00	5,000.00	5,000.00	.0
50-470-310 SITE LEASE	.00	.00	1.00	1.00	.0
50-470-312 COMPUTER SERVICES	.00	.00	450.00	450.00	.0
50-470-315 SITE MAINTENANCE	.00	7.99	25,000.00	24,992.01	.0
50-470-320 BUSINESS LICENSE	.00	.00	165.00	165.00	.0
50-470-350 SALES TAX	.00	.00	700.00	700.00	.0
50-470-512 AUDIT	.00	.00	450.00	450.00	.0
50-470-870 CONTINGENCY	.00	.00	.00	.00	.0
TOTAL PAYT OPERATIONS	2,342.62	14,724.27	72,066.00	57,341.73	20.4
 <u>PAYT CAPITAL</u>					
50-970-751 SITE IMPROVEMENTS	.00	.00	20,000.00	20,000.00	.0
TOTAL PAYT CAPITAL	.00	.00	20,000.00	20,000.00	.0
TOTAL FUND EXPENDITURES	2,342.62	14,724.27	92,066.00	77,341.73	16.0
NET REVENUE OVER EXPENDITURES	94.38	( 9,591.27)	( 12,766.00)	( 3,174.73)	( 75.1)

TOWN OF GRAND LAKE  
 BALANCE SHEET  
 MARCH 31, 2023

Section 10, Item B.

CAPITAL IMPROVEMENT FUND

<u>ASSETS</u>		
90-100000	CASH IN COMBINED CASH FUND	( 118,398.26)
90-109100	COLOTRUST	734,592.12
90-117000	ACCOUNTS RECEIVABLE	60,425.02
90-117500	ACCOUNTS RECIVABLE - AR	.00
		<hr/>
	TOTAL ASSETS	676,618.88
		<hr/> <hr/>
<u>LIABILITIES AND EQUITY</u>		
<u>LIABILITIES</u>		
90-200000	ACCOUNTS PAYABLE GENERAL	274,950.58
		<hr/>
	TOTAL LIABILITIES	274,950.58
<u>FUND EQUITY</u>		
90-270000	SURPLUS FUND	280,500.00
90-275000	RETAINED EARNINGS - PRIOR	85,112.36
	UNAPPROPRIATED FUND BALANCE: REVENUE OVER EXPENDITURES - YTD	36,055.94
		<hr/>
	BALANCE - CURRENT DATE	36,055.94
		<hr/>
	TOTAL FUND EQUITY	401,668.30
		<hr/>
	TOTAL LIABILITIES AND EQUITY	676,618.88
		<hr/> <hr/>

TOWN OF GRAND LAKE  
 REVENUES WITH COMPARISON TO BUDGET  
 FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.
---------------------

CAPITAL IMPROVEMENT FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	%
<u>CIF REVENUES</u>					
90-344-110 SALES & USE TAX 1%	27,561.91	27,561.91	584,250.00	556,688.09	4.7
90-344-140 INTEREST REVENUES	3,025.08	8,494.03	6,000.00	( 2,494.03)	141.6
90-344-160 MISC REVENUE	.00	.00	.00	.00	.0
90-344-310 CO TREE GRANT	.00	.00	.00	.00	.0
90-344-910 DOLA 2017 TIER II PHASE 1	.00	.00	.00	.00	.0
90-344-920 DOLA 2017 TIER II PHASE 2	.00	.00	.00	.00	.0
TOTAL CIF REVENUES	30,586.99	36,055.94	590,250.00	554,194.06	6.1
<u>CIF OTHER REVENUES</u>					
90-391-360 TXFR IN FROM WATER ENTERPRISE	.00	.00	.00	.00	.0
TOTAL CIF OTHER REVENUES	.00	.00	.00	.00	.0
TOTAL FUND REVENUE	30,586.99	36,055.94	590,250.00	554,194.06	6.1

TOWN OF GRAND LAKE  
EXPENDITURES WITH COMPARISON TO BUDGET  
FOR THE 3 MONTHS ENDING MARCH 31, 2023

Section 10, Item B.

CAPITAL IMPROVEMENT FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	%
<u>CAP IMP FUND OPERATIONS</u>					
90-431-870 CONTINGENCY	.00	.00	300.00	300.00	.0
90-431-999 TABOR REQ'D EMERGENCY RESERVE	.00	.00	.00	.00	.0
<b>TOTAL CAP IMP FUND OPERATIONS</b>	<b>.00</b>	<b>.00</b>	<b>300.00</b>	<b>300.00</b>	<b>.0</b>
<u>CIF EXPENSES</u>					
90-444-300 EV EXPENSES	.00	.00	.00	.00	.0
90-444-310 COLORADO TREE COALITION EXPENS	.00	.00	.00	.00	.0
<b>TOTAL CIF EXPENSES</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.0</b>
<u>CAP IMP FUND DEBT SERVICE</u>					
90-831-471 SALES TAX BONDS - PRINCIPAL	.00	.00	120,000.00	120,000.00	.0
90-831-472 SALES TAX BONDS - INTEREST	.00	.00	157,050.00	157,050.00	.0
<b>TOTAL CAP IMP FUND DEBT SERVICE</b>	<b>.00</b>	<b>.00</b>	<b>277,050.00</b>	<b>277,050.00</b>	<b>.0</b>
<u>CAP IMP FUND CAPITAL</u>					
90-931-200 CAPITAL PAVEMENT	.00	.00	263,000.00	263,000.00	.0
90-931-201 CAPITAL BOARDWALKS	.00	.00	50,000.00	50,000.00	.0
90-931-910 STREETScape	.00	.00	.00	.00	.0
90-931-912 STREETScape-MAINTENANCE	.00	.00	.00	.00	.0
90-931-915 STREETScape PLAN/PROJECT MAN	.00	.00	.00	.00	.0
90-931-916 STREETScape- BELOW GROUND	.00	.00	.00	.00	.0
90-931-917 STREETScape-ABOVE GROUND	.00	.00	.00	.00	.0
90-931-918 STREETScape- MISC.	.00	.00	.00	.00	.0
90-931-919 STREETScape-LANDSCAPING	.00	.00	.00	.00	.0
<b>TOTAL CAP IMP FUND CAPITAL</b>	<b>.00</b>	<b>.00</b>	<b>313,000.00</b>	<b>313,000.00</b>	<b>.0</b>
<b>TOTAL FUND EXPENDITURES</b>	<b>.00</b>	<b>.00</b>	<b>590,350.00</b>	<b>590,350.00</b>	<b>.0</b>
<b>NET REVENUE OVER EXPENDITURES</b>	<b>30,586.99</b>	<b>36,055.94</b>	<b>( 100.00)</b>	<b>( 36,155.94)</b>	<b>36055.</b>



**To: Town of Grand Lake Mayor and Trustees**  
**From: Heike Wilson, Town Treasurer**  
**Re: AN ORDINANCE AMENDING SECTION 4-3-33 OF THE GRAND LAKE MUNICIPAL CODE REGARDING BUILDING AND USE TAX**

**Date: 04/24/23**

**Background:** Currently per the Town code the collection of construction use tax is deferred until after ninety (90) days from the time the Town or its authorized representative has issued the Certificate of Occupancy or equivalent document signifying final inspection for the work done under the building permit. During our annual audit our auditor suggested that we amend the code to deposit the funds directly into our General Fund rather than deferring it. The attached resolution will amend our code to do this.

**Motion**

If the Board of Trustees desires to approve **AN ORDINANCE AMENDING SECTION 4-3-33 OF THE GRAND LAKE MUNICIPAL CODE REGARDING BUILDING AND USE TAX**, it may do so by approving the following motions:

I Move to approve Ordinance 05-2023 **AN ORDINANCE AMENDING SECTION 4-3-33 OF THE GRAND LAKE MUNICIPAL CODE REGARDING BUILDING AND USE TAX**

**TOWN OF GRAND LAKE, COLORADO  
ORDINANCE NO. 05- 2023**

**AN ORDINANCE AMENDING SECTION 4-3-33 OF THE GRAND LAKE  
MUNICIPAL CODE REGARDING BUILDING AND USE TAX**

**WHEREAS**, the Board of Trustees (the “Board”) of the Town of Grand Lake, Colorado, pursuant to Colorado Statute is vested with the authority of administering the affairs of the Town of Grand Lake, Colorado (the “Town”); and

**WHEREAS**, Section 4-3-33 of the Grand Lake Municipal Code (the “Code”) sets for payments required and refunding procedures for building and construction use tax (the “Taxes”); and amending

**WHEREAS**, the Code currently proscribes the holding of such Taxes outside the Town’s general fund until 90 days after the issuance of a Certificate of Occupancy or the closing of any building permit for failure to commence building; and

**WHEREAS**, the Town auditor has recommended such funds be transferred directly to the General Fund without such 90 day waiting period after the issuance of a Certificate of Occupancy or the termination of a building permit for failure to commence building; and

**WHEREAS**, Town staff believe it is a more efficient and expedient use of Town time and resources to directly transfer such amounts into the General Fund; and

**WHEREAS**, Town staff believe amending the Code to directly transfer the Taxes into the Town general fund will not negatively effect the Town’s procedures.

**NOW THEREFORE BE IT ORDAINED BY THE BOARD OF TRUSTEES OF  
THE TOWN OF GRAND LAKE, COLORADO AS FOLLOWS:**

1. Section 4-3-33 of the Grand Lake Municipal Code is hereby amended with by removing the ~~strikethrough language~~ to read in its entirety as follows:

**4-3-33 Payment Required and Refunding Procedures for Building and Construction Use  
Tax.**

(A) The use tax imposed by Section 4-3-32 of this Article shall be paid by estimate through payment to the Town of any amount equal to five percent (5%) of fifty percent (50%) of the total cost of the project in which the taxable personal property is used as indicated on the building permit application and shall be paid at the time of such building permit issuance.

1. Provided, however, the Town shall refund any overpayment of such tax without interest upon presentation of evidence of actual purchase made if the total cost of the

project was less than estimated as evidenced by a complete accounting of project costs. It is the duty of the payee to provide the necessary documentation demonstrating such error.

- 2. The Town may conduct an audit of the final project costs and impose additional use tax if it is determined that the original total cost estimate was incorrect.

(B) The Town will refund any overpayment of the construction use tax due to an overestimation of the total cost of the project. Any refunds requested due to erroneous payment of sales tax must follow the procedures as provided by the Colorado Department of Revenue and Colorado State Statute.

- 1. The applicant of the building permit will have ninety (90) days from the time the Town or its authorized representative has issued the Certificate of Occupancy or equivalent document signifying final inspection for the work done under the building permit in which to present to the Town the evidence of actual purchases made if a refund is requested due to the cost of the project being less than estimated.

~~2. At the end of said ninety (90) days, and without further notice to the applicant of the building permit, the Town shall cause any and all use tax monies not refunded to this applicant to be transferred to the General Fund of the Town.~~

(C) If the work for which the building permit has been issued does not start and the building permit is closed due to failure of the project starting within six (6) months of permit issuance, the Town shall refund the use tax paid by the applicant. No interest will be paid on the use tax which is being refunded.

- 1. Work is considered started when there is ground disturbance for foundation, footers, or posts, any physical change to the structure occurs, or any required inspection, except the pre-site inspection, by Town Staff or the Town's Building Department is conducted.

~~(D) Once a building permit is closed for any reason other than failure to start, all use tax monies not refunded to the applicant shall be transferred to the General Fund of the Town.~~

2. Severability: If any Article, Section, paragraph, sentence, clause, or phrase of this Ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this Ordinance. The Board of Trustees declares that it would have passed this Ordinance and each part or parts thereof irrespective of the fact that any one part or parts be declared unconstitutional or invalid.

3. Repeal: Existing Ordinances or parts of Ordinances covering the same matters as embraced in this Ordinance are hereby repealed and all Ordinances or parts of Ordinances inconsistent with the provisions of this Ordinance are hereby repealed, except that this repeal shall not affect or prevent the prosecution or punishment of any person for any act done or committed in violation of any Ordinance hereby repealed prior to the taking effect of this Ordinance.

**INTRODUCED, PASSED AND ADOPTED AT A REGULAR MEETING OF THE BOARD OF TRUSTEES OF THE TOWN OF GRAND LAKE THIS 24th DAY OF APRIL, 2023.**

Votes Approving: \_\_\_\_\_  
Votes Opposed: \_\_\_\_\_  
Absent: \_\_\_\_\_  
Abstained: \_\_\_\_\_

**ATTEST:**

**BOARD OF TRUSTEES OF THE  
TOWN OF GRAND LAKE, COLORADO**

\_\_\_\_\_  
Alayna Carrell  
Town Clerk

By: \_\_\_\_\_  
Steve Kudron  
Mayor



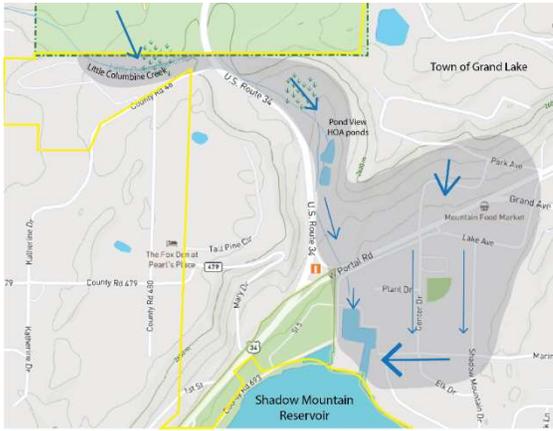
# Grand Lake Board of Trustees

## Consideration of Bids for Stormwater Analysis & Design Services

To: Mayor Kudron and Trustees  
From: Kimberly White, Community Development Director  
Date 04/24/2023  
Re: Consideration of Bids for Stormwater Analysis & Design Services

**Purpose:**  
To review staff recommendations for choosing a Stormwater Analysis & Design Services Consultant to produce the Stormwater Management Plan in response to the posted request for proposal (RFP) on March 1<sup>st</sup>, 2023.

**Background:**  
Staff worked in conjunction with Three Lakes Watershed Association to submit an application to the Grand Foundation for the Windy Gap Environmental Fund. The funding will be used to hire a consultant to provide the best approach for improving the stormwater from the western side of Town that reaches Shadow Mountain Reservoir and subsequently Grand Lake. This part of the watershed will be evaluated to determine which design interventions could be possible and most beneficial to decrease sedimentation from the roadways, snowmelt and runoff, and increase infiltration to improve water quality in the Lakes.



**Analysis:**  
Staff received and reviewed five bids from environmental consulting and civil engineering firms (all bids attached in board packet). A bid tabulation spreadsheet was created, with the parameters of the posted RFP, against which each of the firms were scored. All five firms have qualifications to produce Stormwater Management Plan (SWMP) in general, however none of the firms met all of the criteria requested in the RFP and within the Town budget for this project. IMEG, RG and Assoc were the two highest bidders. Smith and WaterVation covered all parts of the project, however Smith's bid was out of budget but included Construction documents, while Watervation did not. Watervation did not focus much on the the Flats, whereas Smith broke the project site into three subwatersheds to separately analyze and treat. AE2S came in with the lowest bid, but did not include all the testing parameters, locations, soil boring, construction documents. Staff believes that the three lowest bidders are most inline with the Town's needs. However since none of the firms met the criteria exactly, staff would like to interview each of the three lowest bidders to address the deficiencies and request updates to be submitted prior to moving forward with a recommendation to the Board.

**Proposed Motion:**  
The Board of Trustees motions to move forward with interviews with the top three firms for the Grand Lake Stormwater Management Plan.

or

The Board of Trustees motions to edit and re-publish the RFP with changes.

## Project Purpose and General Background

### Purpose

The Town of Grand Lake “Town” is accepting proposals for a Stormwater Management Plan for the west side of Town, the purpose of which is to improve the quality of water reaching our adjacent lakes. Stormwater solutions that involve natural resource management interventions are preferred. Soil boring, percolation tests, topography, water quality, and data collection of existing runoff conditions for full comprehension of stormwater interventions to be required throughout the site.

### General Information

The area of interest for this project is shown in figure 1 and is further described here. The water from the Little Columbine Creek flows from north of Town, across wetlands, through private ponds, along highway 34, through culverts into the north side of the Grand Lake Estates HOA marina. This water has been impacted by the East Troublesome fire and along with other factors, is contributing to the sediment deposits in Shadow Mountain Reservoir. Additionally, runoff from the Woodpecker Hill area flows steeply down the face of the hill, and along Park Avenue, through a very flat area of Town via roadside ditches and culverts, which eventually drain into the east side of Grand Lake Estates HOA marina, which is Shadow Mountain Reservoir.

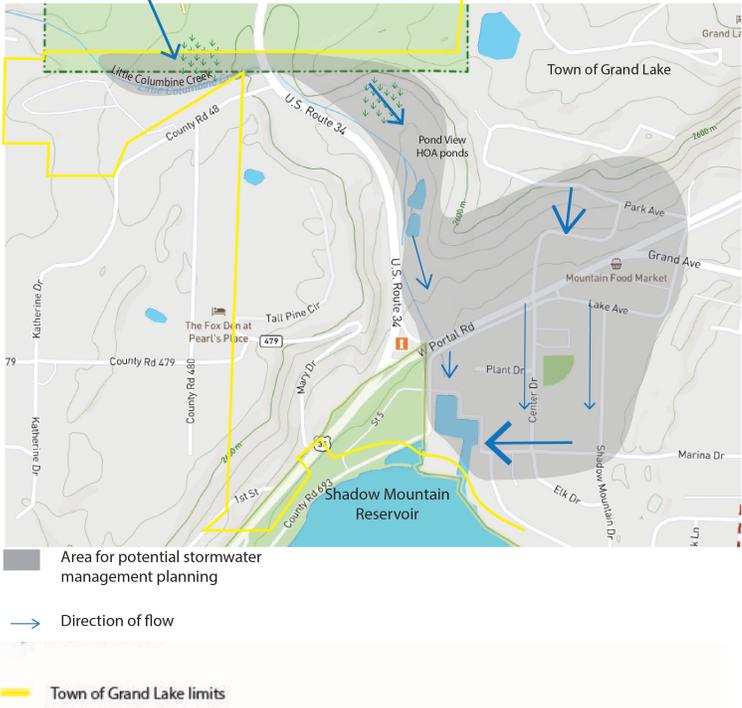


Figure 1- Geographic Area

Successful proposals will balance the following design principles with cost-effective stormwater management solutions that meet required stormwater standards:

- Emphasize low impact development (LID) techniques that seek to mimic the natural hydrologic processes of the site and are context sensitive. Try to maximize treatment of stormwater on-site.
- Promote stormwater management practices that maintain predevelopment hydrology through site design, site development, building design and landscape design techniques that infiltrate, filter, store, evaporate and detain stormwater close to its source.
- Promote public safety from: contaminants in the reservoir; reduce public expenditures in removing sediment from stormwater drainage systems and natural resource areas.

### Scope of Work

The selected consultant will be expected to provide a full range of planning and engineering services in order to meet the goals of the Town listed above. This scope of services will include, but not be limited to the following:

- **Communication** – The chosen consultant shall meet and engage with all necessary Town and Three Lakes Watershed Association staff (collectively known as “the Team”) in order to fully understand existing infrastructure and determine areas of concern within the Town of Grand Lake.
- **Public engagement** – While much of this planning process will be directed by the knowledge and experience of the Team, planning should never occur without the input of the community. Therefore, some level of public engagement should be considered in this planning process. That input may be garnered from community meetings, community surveys, or other means deemed appropriate by the planning team. The consultant shall address how they intend to engage the public in their proposal. This proposed public involvement plan will be reviewed and approved during the negotiation of a final contract.
- **Mapping** – The Town of Grand Lake has very limited mapping resources. The chosen consultant shall provide adequate mapping and GIS data sets for hydrologic analysis of existing drainage ways, including topography of the area. Additional on the ground analysis may be necessary to fully map and analyze all current infrastructure and drainage ways, including facilities on private property.
- **Data Collection** – It is vital that there is baseline water quality data collected prior to implementing any stormwater solutions. This data will be used to quantify the effects of these strategies on the local watershed. Some of the required parameters to be collected will be total suspended solids, bacteria count/identification, dissolved oxygen, pH, temperature, and clarity. Other parameters can be suggested by the consultant. The Team will require soil bore collection and analysis, topography, and other parameters necessary to make decisions on the feasibility of low impact development solutions and other best management practices.
- **Monitoring** – The chosen consultant shall recommend locations and quantities of monitoring equipment necessary to provide ongoing water quality data upstream and downstream of proposed stormwater solutions. The data collected shall be analyzed and compiled in a final report illustrating any effects of the stormwater interventions on water quality, such as nutrient loading or reductions.
- **Design solutions** – The chosen consultant will be able to use the data collected from the soil boring and topography to recommend solutions to improve stormwater quality before reaching the Shadow Mountain Reservoir. The consultant will look at the feasibility of low impact development solutions before settling on more engineered solutions. They will be able to evaluate water quality and develop a preliminary Stormwater Management Plan.
- **Reporting** – The consultant team should provide a 50% review copy to Town staff and a 75% draft plan for public comment. The final report shall fully address all items listed in this SOW as well as feedback received from both Town staff and public comment.
- **Inventory and Analysis of Existing Infrastructure** – The consultant will create a comprehensive evaluation of the existing facilities related to stormwater runoff.
- **Sustainability** – The Town’s goals are to implement low impact design solutions and integrated management practices that serve the stormwater needs of the Town while improving quality of life, and lowering the impacts on Town resources and the surrounding environment. The chosen consultant will be able to work within these goals as the hydrogeomorphology allows.
- **Maintenance** – The consultant shall provide a summary of maintenance items to be frequently addressed in order to maintain the functionality of the recommended design solutions.
- **Funding Options**– The consultant shall provide a summary of the available grants and loan options from various agencies for recommended design solutions and associated BMPs.

**Tasks**

Task 1 Inventory:

- Baseline data collection of site and project area
- Meeting with Team

Task 1 Deliverables:

- Pre-Construction Water Quality Report
- Topographic map -GIS
- Soils report
- Monthly invoices and supporting written progress reports
- Progress meeting minutes
- Schedule updates

Task 2 Analysis:

- Analyze existing stormwater system
- Evaluate water quality needs
- Evaluate monitoring locations and needs
- Develop proposed stormwater solutions
- Develop public outreach plan

Task 2 Deliverables:

- Graphics/maps illustrating existing conditions
- Water quality needs report
- Propose Monitoring locations and needs
- Report and map of proposed stormwater solutions and locations
- Public outreach plan

Task 3 Stormwater Management Plan Preliminary Design

The work performed under this task will be to develop a Stormwater Management Plan for the project area:

- Develop preliminary Stormwater Management Plan
- Develop preliminary Stormwater Management Construction Documents including plans, details, specifications, quantities, and costs.
- Develop preliminary Stormwater Management Plan Report
- Create proposed plan presentation

Task 3 Deliverables:

- Preliminary Stormwater Management Plan
- Preliminary Stormwater Management Report
- Preliminary Construction Documents
- Present proposed plan for a public meeting

Task 4 Stormwater Management Plan Final Design

The work performed under this task will be to finalize stormwater management plans for the project area:

- Address preliminary design comments from Team and public

- Finalize Stormwater Management Plan
- Finalize Stormwater Management Construction Documents including plans, details, specifications, quantities, and costs.
- Finalize Stormwater Management Report
- Develop Operations and Maintenance plan

Task 3 Deliverables:

- Final Stormwater Management Plans
- Final Stormwater Management Report
- Final Construction Documents
- Final Operations and Maintenance Manual
- Available Funding Options

**Codes and Code Compliance**

The awardee is required to comply with the Town of Grand Lake approved codes. Code review and compliance is subject to

# Town of Grand Lake Stormwater Management Plan

03/30/2023



**Prepared by: WaterVation**

130 West Sackett Avenue, Unit A  
Salida, CO 81201



**Prepared for: Town of Grand Lake**

1026 Park Avenue  
Grand Lake, CO 80447

# Cover Letter

March 30th, 2023

## RE: Grand Lake Stormwater Management Plan

Dear Members of the Selection Committee,

We are excited to share our qualifications, understanding, and approach for the Grand Lake Stormwater Management Plan solicitation for the Town of Grand Lake. WaterVation is a Colorado owned water resources engineering firm with a small business designation headquartered in Salida, CO. We have reviewed Request for Proposal (RFP) and are qualified to execute the required tasks.

At WaterVation we are experienced in working within a variety of environments and with agencies and communities with varying resources. Because of this we recognize the challenges that come with different projects as well as the need to get high value for the investments they make in engineering services. We are excited to team with you and provide:

**Superior Customer Service** – We understand that when you hire a consultant you are not only hiring us to provide technical services, but you are also hiring us to serve as an extension of your staff. To us this means providing timely communication, thorough documentation, and establishing an organized project file structure that can be easily shared and accessed by all team members. We encourage you to contact our existing and past clients, who can vouch for our commitment to superior customer service.

**Technical Expertise** – All projects and experience listed in this proposal are directly attributed to individuals employed at WaterVation. Because of this, the Town can take comfort in knowing that the WaterVation staff has direct experience and can immediately provide support or guidance without needing support from a broader range of company expertise.

**Guaranteed Availability** – We have carefully reviewed our backlog and are committed to providing The Town of Grand Lake with full access to our resources during the contract period. WaterVation has a high standard of care when it comes to estimating our availability. We are a small engineering firm, and we pride ourselves in doing high-quality work. One of the ways we accomplish this is by maintaining a reasonable workload and not overbooking ourselves. Our philosophy is to do an excellent job on a few projects than a mediocre job on several.

**Stream Restoration Expertise** - WaterVation is regionally recognized stream restoration firm that strives to restore both the natural look and function of impaired stream systems. Our philosophy towards restoring and stabilizing impaired stream systems is to restore the natural characteristics of the stream system using the fundamental principles of natural channel design that incorporates expertise from our team of engineers, biologists, ecologists, and geomorphologists. We believe this experience will be extremely beneficial to the Little Columbine Creek component of the Project.

Sincerely,



**Lucas Babbitt, PE, CFM**

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# Project Understanding & Approach

Watersheds to the north of The Town of Grand Lake (Town) have experienced different forms of hydromodification since its founding in 1879. More recently, continued development and climate change has led to further hydromodification. The East Troublesome Fire (2020) burnt land that was previously vegetated and reduced the ability of native soils to infiltrate runoff by creating hydrophobic soil conditions. The combination of these two impacts has resulted in an increased amount of stormwater runoff and sediment being contributed to Little Columbine Creek, and ultimately Shadow Mountain Reservoir. Water quality within the Shadow Mountain Reservoir has been adversely impacted by the excess sediment being delivered from this watershed along with the other contaminants that adsorb to sediment particles.

The Woodpecker Hill area represents a more common form of hydromodification: urban development. Through Development Woodpecker Hill is comprised of impervious surfaces such as roads, houses, driveways, and parking lots. When impervious surfaces are constructed on previously undeveloped land peak flows are increased since the native landscape is no longer able to slow and infiltrate rainfall. This can lead to flooding, increased erosion, and transport of urban contaminants that adsorb to sediment particles (such as hydrocarbons). This can be viewed in Figure 1 from 1990 in comparison to the recent aerial imagery in 2019 (Figure 2).

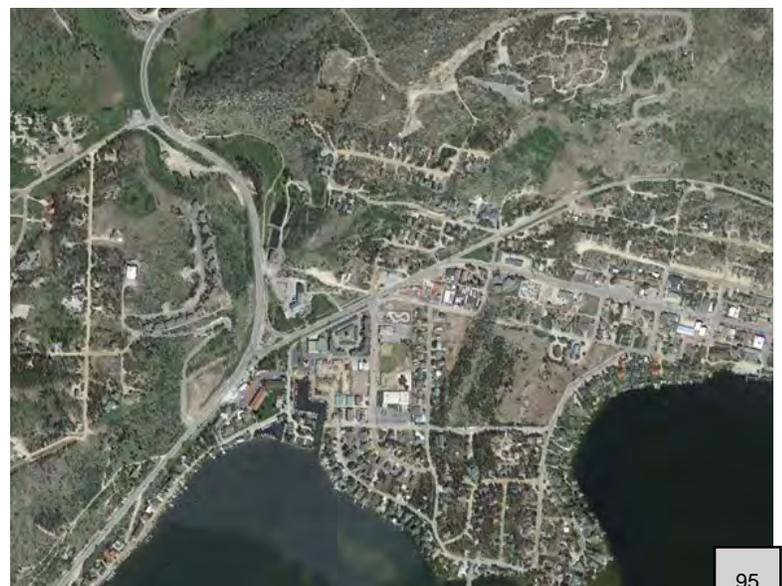
We understand that The Town of Grand Lake, the Three Lakes Watershed Association, and others have worked to improve the quality of water in Shadow Mountain Reservoir, Granby Reservoir, and Grand Lake - with a focus on water quality, especially clarity issues. Improvements to the quality of stormwater runoff entering the Shadow Mountain Reservoir will be addressed through this Project and will work in tandem with these broader efforts.

The primary goal of this Project is to develop cost-effective stormwater management solutions that integrate natural resource management. It is our understanding that this goal can be achieved by:

- 1 Designing Low Impact Development (LID) stormwater management techniques that are focused on restoring natural hydrologic processes of the site, and that are incorporated in a contextually-sensitive way within existing conditions.
- 2 Developing stormwater management practices that establish requirements for maintaining predevelopment hydrology through site, building, and landscape design techniques focused infiltrating, filtering, storing, evaporating, and detaining stormwater close to its source.
- 3 Enhancing public safety by reducing the quantity of contaminants entering the reservoir through proper implementation of LID and stormwater management practices.
- 4 Reducing public expenditures by reducing the quantity of sediment and pollutants that are conveyed within stormwater drainage systems and natural resource areas through proper implementation of LID and stormwater management practices.

**Figure 1: Grand Lake 1990**

**Figure 2: Grand Lake 2019**



# Project Approach

## Little Columbine Creek

Increased sediment loading within Little Columbine Creek due to the effects from the East Troublesome Fire could persist for the next few years based on typical watershed responses to fire impacts. Once the sediments deposit into Shadow Mountain Reservoir they become costly and difficult to remove due to costs associated with dredging of materials and costs and efforts to locate the subsurface sediment depositions. Addressing the post-wildfire sedimentation issues at the source or in designated and pre-defined areas is typically the most effective and cost-effective solution for mitigation.

We understand that the Town has a limited footprint to work within to achieve the desired outcome in the Little Columbine Creek corridor. Our approach for improving the water quality within Little Columbine Creek is mainly centered around sediment storage and capture. We have studied the Project area and have identified two potential solutions for capturing excess sediments prior to them entering Shadow Mountain Reservoir:

<b>Option 1:</b> <b>Constructed Sediment Basins within Town Boundary (Figure 3).</b>	<b>Option 2:</b> <b>Low-Tech Process-Based Techniques within Wetland Complex (Figure 4).</b>
Descriptive Details: Capture and store sediments from the fire impacted watershed to prevent impacts to receiving waterbodies.	Descriptive Details: Purpose is to engage multiple flow paths, slow water, encourage infiltration and sediment deposition
<b>Benefits</b> <ul style="list-style-type: none"> <li>• Stockpiling and maintenance can be conveniently located</li> <li>• Capture sediment before it interacts with the natural environment</li> </ul>	<b>Benefits</b> <ul style="list-style-type: none"> <li>• Wetlands naturally filter pollutants and store sediment</li> <li>• Low maintenance, natural solution</li> </ul>
<b>Challenges</b> <ul style="list-style-type: none"> <li>• Ongoing maintenance will be required</li> <li>• Spatial constraints</li> </ul>	<b>Challenges</b> <ul style="list-style-type: none"> <li>• Working within wetlands (permitting)</li> <li>• Risk of sediment over filling wetlands and requiring maintenance</li> </ul>

We recognize that addressing the impacts of the fire closer to the source for Little Columbine Creek is also an effective way of mitigating the post-wildfire sediment impacts. It is our understanding that broader efforts are being completed within the watershed by Northern Water, USFS, and others and that these mitigation strategies are outside the scope of this project. However, WaterVation is capable of identifying and designing solutions in this manner, if desired.

These solutions would mitigate impacts to the Shadow Mountain Reservoir caused by fire-generated sediments and improve water quality through natural infiltration. The ideal solution will be a result of the inventory and analysis of the stormwater management plan in collaboration with the Team, as identified in the RFP, and public engagement.

Figure 3 (Right):  
Constructed  
Sediment  
Basins within  
Town Boundary



Figure 4 (Left):  
Low-Tech  
Process-Based  
Techniques  
within Wetland  
Complex.

# Woodpecker Hill

It is our understanding that the Woodpecker Hill area represents a more traditional urban pollutant water quality problem where household and roadside pollutants interact with stormwater runoff and fine sediments and are transported into the receiving waterbodies, affecting water quality downstream.

In these more urban settings techniques generally fall under two approaches: infiltration or treatment. Given the goals of the Project, we will focus our efforts on the natural infiltration methods. Soil and percolation tests will be required to determine the feasibility of infiltration as a technique.

Within the infiltration options they typically fall into two categories:

- Dispersion of flow across an infiltration surface
- Storage and capture of runoff for infiltration

Our plan would be to look at both of these options, and place them within the appropriate landscape location within the study area. A few options for site specific LID approaches are presented below. How these options may work within the study area are conceptually shown in Figure 8.

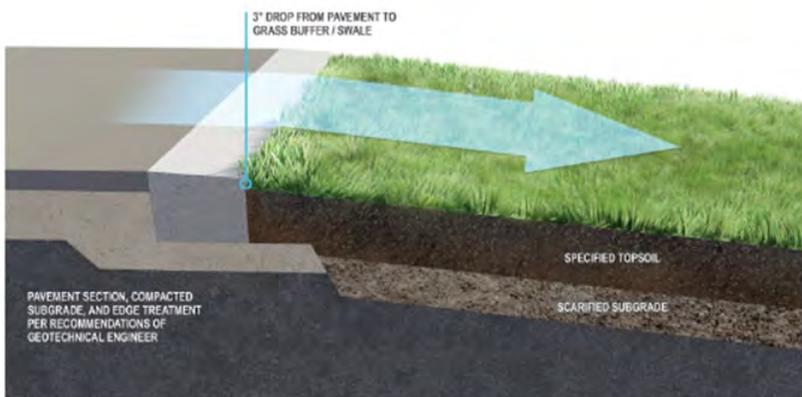
These options represent a few LID solutions for improving water quality within the Woodpecker Hill area. We expect that these methods and options will be further refined following the inventory and collaboration with The Town of Grand Lake.

## Grass Swales

are useful infiltration techniques where ditches may be located, or where ditches should be located. These can slow and infiltrate runoff, improving water quality to the receiving water body.



Figure 5: Colorado Springs Green Infrastructure Manual



## Vegetated Buffers

should be placed in locations where the natural landscape map slope away from paved areas, or even at the base of steep hillside in the case of this study area. These are flat areas that disperse flow and don't form concentrated flow paths. While overland flow passes through these areas the runoff is slowed and infiltrated.

## Bioretention

is very useful in site specific locations. Runoff is directed to

these low-lying storage areas where runoff ponds and then infiltrates. These should be placed in areas where pavement can drain to a low spot, such as a parking lot or a larger developed area. These features can range in size and can be flexibly adapted to landscape context.

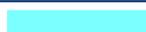
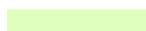


Figure 7: Mile High Flood District Criteria Manual



Figure 8 (Above):  
Site specific LID approaches within the study area.

### Legend

	VEGETATED BUFFER
	GRASS SWALE
	BIORETENTION

# Approach to Scope of Services

## Our approach to all tasks is founded on solid communication

Communication and collaboration are the foundation for any successful design. The Kickoff Meeting provides an opportunity to discuss critical project elements including definition of goals and objectives, regular project meetings, scheduling, public outreach, etc.

We will also facilitate a discussion with all involved to develop answers to the following question: what defines a successful project? We feel this is an important question to ask and develop responses to prior to beginning a project. This is because public projects typically involve many different stakeholders, with different expertise, interests, and backgrounds. Therefore, one person’s definition of success could be significantly different than another’s.

Internally, WaterVation schedules progress meetings amongst its team members at intervals established in the work plan. These meetings include an update on progress, review of the schedule and fee, and discussion of any obstacles that may affect the product, schedule, or fee. Designers and engineers are required to immediately discuss any design issues with the Project Manager supervising the work. Notes are taken at the meetings and sent to all attendees via email.

Since we are a small company we routinely and constantly communicate

as a team. We have found with a small team that communication lapses are rare, and that schedules and priorities are easily understood by all team members.

Our subconsultants will be required to provide the same level of detail as WaterVation for task scoping, man-hour estimates, and progress reports throughout the contract. WaterVation has extensive experience leading large teams on federal contracts where detailed reporting is required, such as our Fountain Creek Channel Stabilization at Riverside project.

Project coordination meetings will occur at the time and frequency discussed in the Kickoff Meeting. The purpose of these meetings is to provide The Town of Grand Lake with:

- An overview of recent project progress.
- An update on scope, schedule, and budget.
- Information related to design issues, changes, unforeseen circumstances, etc.
- A summary of next steps and action items.
- Some projects could require that Our Team proactively engage stakeholders to understand specific concerns, goals, and ideas for moving forward. This input is needed from a range of stakeholders, including federal, state, and local agency partners, and property owners. The overall goal of the engagement process is to develop broadly supported decisions that are reflected in the project.

## Task 1: Inventory

The first task will involve the baseline data collection of the study area to support the plan. We plan on collecting all data during that timeframe as well as meeting with The Town of Grand Lake and Stakeholders to discuss the objectives and goals of the project and important communication items.

Data collection will include:

- Topography
- Stormwater Infrastructure (pipes, ponds, other features)
- Soil Analysis
- Water Quality Data
- Drainageways
- Geomorphic Assessment

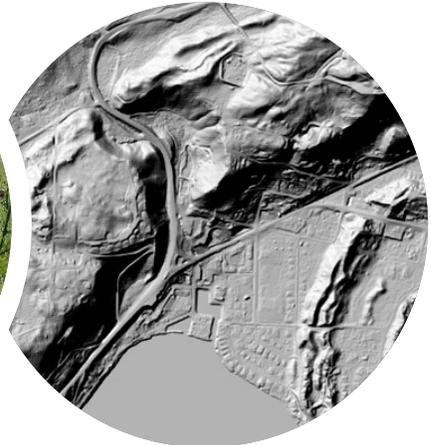
Following completion of the inventory we will provide the required deliverables in addition to the ongoing Project Management deliverables. Scope items associated with this task are elaborated upon on the following pages.



WaterVation Survey Equipment



Field Survey



Grand Lake LiDAR

We perform all topographic survey work in-house for cost and scheduling efficiency. WaterVation owns and operates Trimble R8s/R12 RTK GNSS Survey Equipment that we use for topographic and geomorphic surveys. We have been trained in tying into established control points along with setting our own control points. The benefit of performing our own survey work is the elimination of schedule delays due to surveyor scheduling or the need to re-send a surveyor to the site to capture additional points. As designers and modelers, we know the exact data needs for a given project and stream system.

We also own and operate a DJI Mavic 2 Pro Drone. This allows us to capture recent aerial imagery and photogrammetry for project sites.

The Town of Grand Lake is covered under the 2020 Northwest Colorado LiDAR. This data is relatively recent and accurate and can serve as the baseline mapping. This data will be supplemented by in house survey data to capture items like storm drain inverts that require additional accuracy.

## Data Collection

Baseline water quality data will be collected at key locations so that the effectiveness of the stormwater management strategies can be documented. We agree with the baseline parameters the Town has suggested:

- Total Suspended Solids (TSS)
- Bacteria Count
- Dissolved Oxygen
- PH
- Temperature
- Clarity



Samples will be analyzed by a laboratory and provided to The Town of Grand Lake with all information related to time of collection, location, and any other observations.

WaterVation's subconsultant Cesare, Inc who WaterVation partnered with on the City of Salida Stormwater Master Plan will perform soil boring and analysis (soil type, horizons, percolations) to determine feasibility of LID solutions within the Woodpecker Hill area. We anticipate no more than five soil borings will be needed to gain an understanding of soil conditions.

# Task 2: Analysis

During the analysis phase of the Project we will assess the existing storm system using the data collected in Task 1. This will include an evaluation of water quality and monitoring plan requirements. We will develop proposed stormwater solutions following the goals and objectives of the plan as presented in the RFP. We will also work with The Town of Grand Lake to develop a public outreach plan.

The deliverables requested in the RFP will be provided as part of this task. Scope items associated with this task are elaborated on below.

## Inventory and Analysis of Existing Infrastructure

We will create a comprehensive inventory of all stormwater infrastructure within the study area. A database of all stormwater infrastructure will be collected in a GIS database for ease of sharing and use. We will be able to analyze the existing system for the Woodpecker Hill area using the EPA Storm Water Management Model (SWMM). WaterVation has completed this analysis previously for the City of Salida Stormwater Master Plan and for the City of Colorado Springs within the Pine Creek Watershed.

The SWMM model will include Little Columbine Creek to understand the routing of flows, impacts of storage, and culvert infrastructure. In addition, we believe that a geomorphic assessment of Little Columbine Creek would be beneficial for baselining conditions within the system and understanding the impacts from sediments to water quality. From the EPA:

*Disturbances such as floods or forest fires are natural, episodic events that cause a stream to become unbalanced. After such disturbances, the stream will “seek” equilibrium conditions through adjustment of the other components until the stream is once again in a form that allows it to efficiently perform its functions of water and sediment discharge.*

*These periodic disturbances, of natural intensity and frequency, can increase aquatic biodiversity by creating opportunities for some species and scaling back the prevalence of others. When disturbances are of extreme intensity or frequency, as many human disturbances are, a stream channel will undergo adjustment to a new form. This can result in habitat degradation and threats to public safety and infrastructure.*

We will gain a better understanding of how Little Columbine Creek may adjust to the fire impacted watershed conditions and how that will affect water quality and potential risks to infrastructure. The assessment will make sure that any proposed designs would be in-line with Little Columbine Creek’s geomorphic trajectory.

## Design Solutions / Sustainability

We understand that the Town wishes to implement low cost, natural LID solutions that help decrease the resource allocation of the Town. We will prioritize low maintenance stormwater solutions that work within the natural landscape while providing effective stormwater quality treatment.

Sustainability of the solutions will be important when considering how it will perform over time. Choosing native drought-tolerant plants and seed mixes helps minimize irrigation requirements. Considering the watershed and potential future development and how fine sediment can potentially clog infiltration features is another important aspect to consider when assessing the long-term suitability of a feature.

The design solutions will be documented in the stormwater management plan.

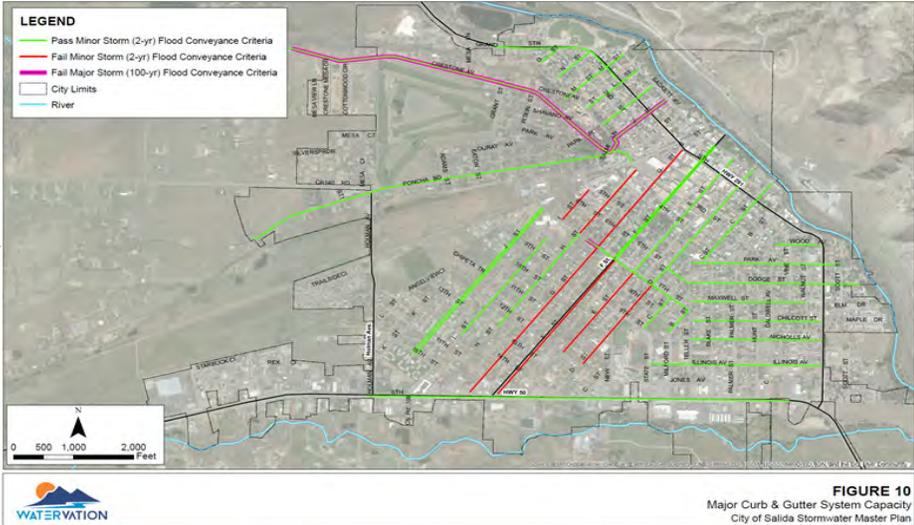


FIGURE 10 Major Curb & Gutter System Capacity City of Salida Stormwater Master Plan

## Monitoring

As part of the stormwater management plan, we will provide monitoring recommendations that document all requirements to maintain a successful monitoring program.

Performance of infiltration features as it relates to reduction of stormwater pollutant loading, runoff volume, and peak flows into receiving waters could diminish over time. That is why monitoring plan will be important to long-term success of the solution measures. Monitoring at the receiving waters will be important as well as specific site solutions to understand long-term performance towards achieving the ultimate goal of improving water quality.

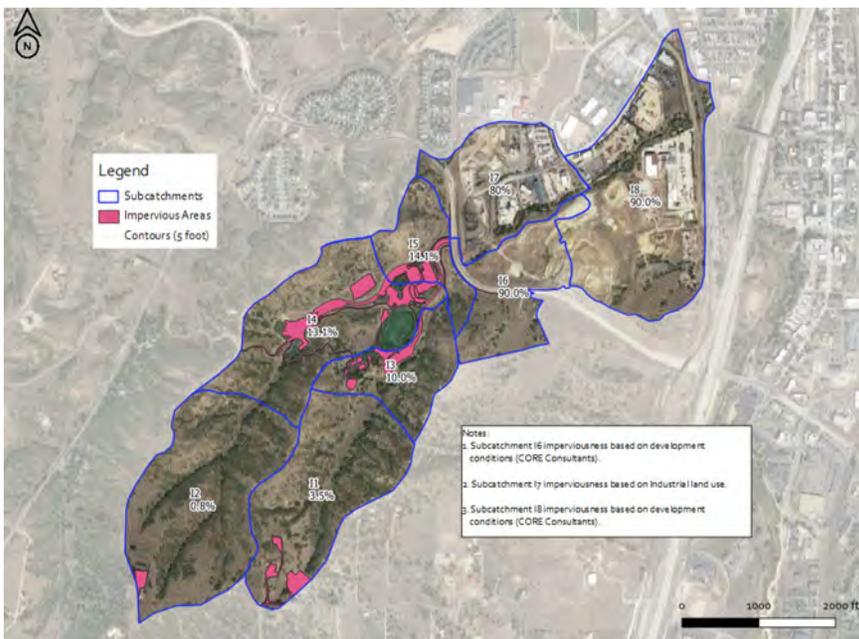
## Public Engagement



Our Team's proven performance in managing public involvement processes will ensure that the following expectations will be met. Our Team commits to the following; providing accurate, understandable

and accessible information to the public. Respond to questions in an effective manner, providing multiple ways of participating in the project process that are accessible to different stakeholders and constituencies, including vulnerable, underserved and displaced community members, adapting the public involvement approach as needed to be responsive to stakeholders' needs within the scope of the project and resource or time constraints.

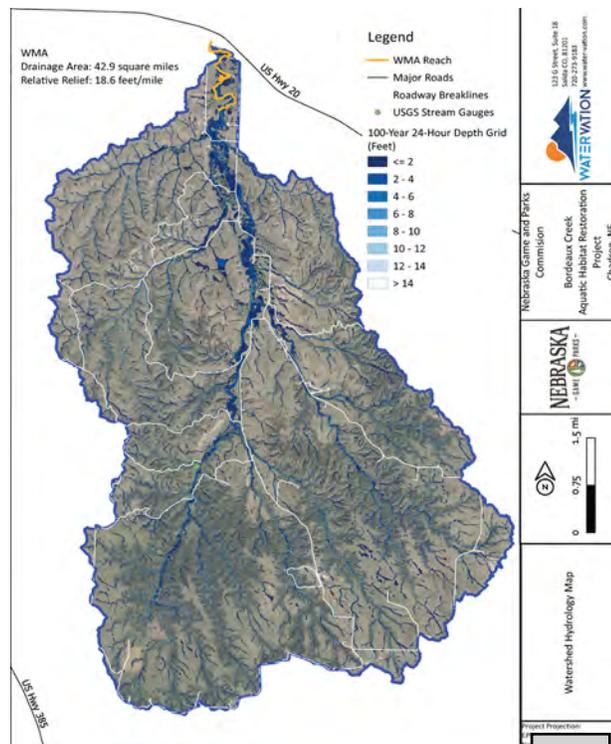
## Task 3: Stormwater Management Plan Preliminary Design



This task involves development of the preliminary stormwater management plan. This will include construction documents for proposed solutions and development of preliminary plans and reporting. We will prepare a presentation for a public meeting to communicate the plan to the public and additional stakeholders.

## Reporting

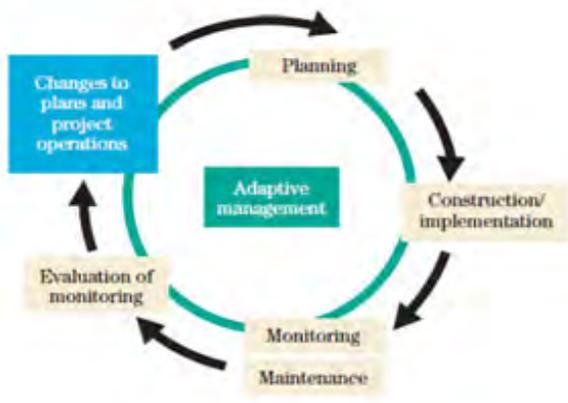
WaterVation will develop a stormwater management plan that documents all investigations, project findings, methodology, and project approach. This plan will support all design decisions towards development of the concept plan and will provided rigorous supporting evidence and rationale for the decision processes.



Following input from the public meeting and from The Town of Grand Lake, we will finalize the plan from Task 3. This task also includes the development of an operations and maintenance plan as well as a discussion of available funding sources that may be used to implement the plan.

## Maintenance

We will provide a framework for the maintenance plan for the site. We have developed these for a number of our projects. For the maintenance plan we recommend an adaptive management approach. Natural stormwater facilities are part of dynamic systems, and over time the project outcomes will likely change (increase or decline) as project life increases. Revision of project operations, monitoring, and maintenance procedures are identified through adaptive management evaluation. Adaptive management is an approach to natural resource management that incorporates monitoring of project outcomes and uses the monitoring results to make revisions and refinements to ongoing management and operations actions (NRCS NEH Part 654, Chapter 16).



Graphic Courtesy: NRCS NEH Part 654, Chapter 16

## Funding Options

Our Team has worked on numerous projects with a variety of funding sources, including grant-funded projects. We understand the accounting protocols required for the responsible use of many funding sources and are familiar with project-related eligibility requirements (i.e. material type, schedule, restoration goals, etc.) for these sources. We will help identify all potential construction funding sources and associated requirements, including considerations that need to be made in the design phase.

WaterVation has a breadth of experience helping our clients obtain construction funding from various sources. Matthew Johnson recently wrote a FEMA PDM grant for the City of Colorado Springs, which was awarded in the amount \$4M and Lucas Babbitt recently helped prepare a grant for the Fourmile Watershed Coalition that was awarded in the amount of \$150k. We just finalized preparation of a FEMA HMGP and BRIC Grant for the City of Creede and are awaiting potential selection.

## Ability to Perform all aspects of the Project

WaterVation is able to perform all aspects of the Project. We have provided a project experience chart on the following page highlighting where key project elements have been completed by WaterVation’s staff on a number of previous projects.

Key technical tasks will be completed or led by Lucas Babbitt, PE, CFM and/or Matthew Johnson, PE, CFM. Combined, Lucas and Matthew have over 30-years of collective experience performing numerous and varied water resource engineering services to clients. Since WaterVation is a small company, both Lucas and Matthew have a large skill set and direct experiences performing all tasks required for the project

Table 1.  
Project  
Experience  
Chart

Section 11, Item B.

	City of Salida Stormwater Master Plan	Pine Creek Channel Restoration	Turkey Creek Watershed Assessment	North Creede Willow Creek Restoration	Flat Creek FEMA Peak Discharge Revisions	Industrial Tributary Channel Design	Bordeaux Creek Aquatic Habitat Restoration	Mesa View Townhomes Drainage	Sunnyside Subdivision Drainage
Watershed Study	X	X	X	X	X	X	X	X	X
Stormwater Quality	X	X		X					
Sediment Management		X	X	X		X	X		
LID Design	X	X					X	X	
Inventory/Assessment	X	X	X	X		X	X	X	X
Public Engagement	X	X		X			X	X	

## Ability to meet schedules within budget

We develop our budgets by getting input and agreement from all team members that will be involved with a project. This ensures that all team members understand the scope of work and associated effort for the tasks that will be performed. We have found that this process typically results in a project getting completed at or under budget and promotes a more thorough understanding of the goals and objectives amongst all team members.

Project budgets are reviewed on a monthly basis, and we provide monthly invoicing to The Town of Grand Lake that identifies the percentage of the budget that has been used and the amount remaining for each task.

Our approach to managing costs is founded on sound project management and past experience and can be verified by any of the client references provided in this proposal. Managing requires expertise with communication, budgeting, scheduling, and quality control.

Effective project scheduling is critical to cost containment, efficient project completion and mitigating impacts on your operations. This requires a solid process to manage multiple staff and subconsultant resources. Lucas will be directly responsible for ensuring that appropriate staff is committed so that WaterVation consistently meets project schedules.

Project schedules are developed based on input received from the team and then divided into major tasks. Major tasks are then scheduled with key project milestones and man-hour estimates required for the completion of each task. We will monitor actual progress against planned progress through time sheet submittals, internal progress reports, and communication with sub consultants.

WaterVation will promptly report, in writing, situations that impact the project schedule. WaterVation will provide the notifications, including explanation and justification of the situation, immediately after a variance is identified. After discussions regarding the variance and receiving approval to make changes, we can then adjust the schedule as necessary and communicate the new information to the team.

Our process uses the resource planning and monitoring features available in the BigTime software program. We also have scheduling features available in Microsoft Excel to communicate high-level scheduling elements.



# Similar Experience

# Project References

## City of Salida Stormwater Master Plan & Criteria Development Salida, CO



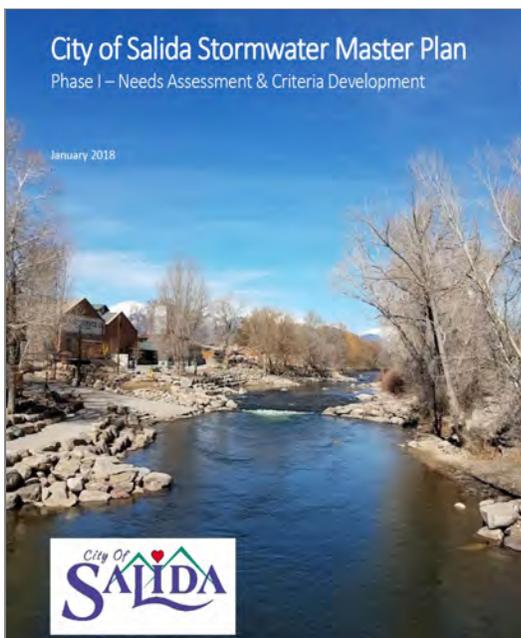
### Relevance

- Stormwater Master Planning
  - Inventory Assessment
  - Stormwater Quality
    - LID Design
- Geotechnical Soil Borings & Analysis



### Reference

David Lady  
 City of Salida Public Works Director  
 719-239-0048  
 david.lady@cityofsalida.com



WaterVation was hired by the City of Salida to develop a stormwater master plan and stormwater design criteria. The purpose of the stormwater master plan was to develop a list of recommendations to reduce flooding and improve stormwater quality within the City. The purpose of the stormwater design criteria task was to establish governing criteria to be used for stormwater infrastructure design within the City.

WaterVation performed an inventory analysis of all existing drainage infrastructure within the City to document existing condition, size, and location. Stormwater quality issues were identified by meeting with City and County officials to discuss areas where observed issues such as sedimentation and hydrocarbon buildup was noticed. A watershed model was then developed using EPA SWMM to model hydrologic conditions and evaluation hydraulic function of the existing stormwater infrastructure. Information and data gathered during the inventory

analysis, modeling, and stakeholder interviews was used to develop a list of recommended infrastructure improvements to reduce flooding and improve stormwater quality discharge into the Arkansas River.

Until completion of this project, stormwater design criteria did not exist for the City. WaterVation developed the governing stormwater design criteria by referencing national, State, and relevant municipal criteria. Pertinent criteria were modified for use within the City by making programmatic modifications to support local regulatory needs and technical modifications to make the referenced criteria locally-applicable. As an example, WaterVation collected geotechnical soil borings at 4 locations to evaluate percolation rates throughout the City. This data was used to help inform the development of hydrologic modeling criteria, detention pond design criteria, and Low Impact Development (LID) design criteria.

This project provided the City with stormwater design criteria for land use planning; floodplain management; drainage law; MS4 permit compliance; hydrology; hydraulics; infrastructure design of open channels, closed conduits, culverts, detention ponds, and Low Impact Development (LID) techniques; construction; and stormwater Best Management Practices (BMPs).

# Turkey Creek Watershed Assessment

Harlan, NE



## Relevance

- Watershed Planning
- Sediment Sampling
- Inventory Assessment
- Stormwater Quality
- Sediment Management



## Reference

Brett Roberg  
 Nebraska Game & Park Commission  
 308-865-5329  
 Brett.roberg@nebraska.gov



WaterVation was hired by the Nebraska Game & Park Commission (NGPC) to prepare a Watershed Plan for the Turkey Creek watershed located in Harlan County, Nebraska. The purpose of the project was to evaluate the impacts that a proposed trans-basin diversion would have on the stream morphology, sediment delivery, water quality, and infrastructure.

WaterVation completed a watershed-wide assessment for the 68 square-mile watershed that encompasses 45 miles of Turkey Creek. Assessment tasks consisted of identifying sediment sources and channel stability problems linked to land and river management activities; taking GIS-based inventory of existing infrastructure; geomorphic stream assessments (survey and sediment sampling); and identifying locations within the watershed that are at high risk if sediment loading increases.

WaterVation then developed hydraulic and sediment transport models for existing watershed conditions using data collected in the assessment task and hydrologic data from local stream gages. These models were developed for 45 miles of Turkey Creek and were used to validate the issues and conditions observed during the field assessment task and to quantify existing (baseline) watershed conditions of stream morphology, riparian function, and aquatic habitat. Both models were then modified to include the additional flow proposed by the trans-basin diversion. The results of these

models were compared to those for existing conditions to identify areas at risk for flooding, erosion, or sedimentation if the proposed trans-basin diversion becomes active.

Using the assessment and modeling data, planning-level recommendations were developed to help offset the adverse impacts caused by the trans-basin diversion if it becomes active. Recommendations generally consisted of stream and watershed restoration practices focused on reducing flooding, managing sediment loading, and preserving riparian and aquatic habitat.

# Pine Creek Channel Restoration

## Colorado Springs, CO



### Relevance

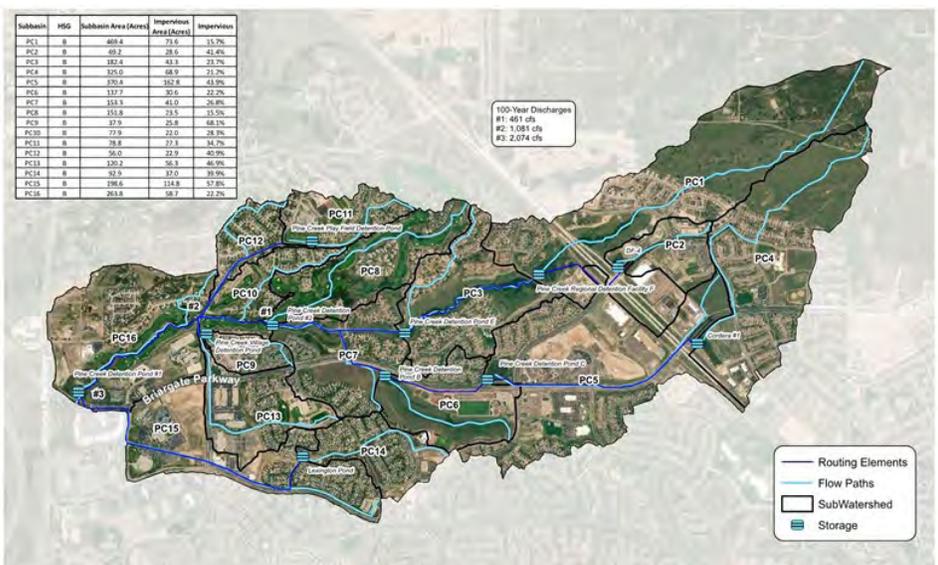
- Watershed Planning
- Sediment Sampling
- Geotechnical Soil Borings & Analysis
- Inventory Assessment
- Stormwater Quality
  - LID Design
- Construction Documents



### Reference

Adam Copper  
 City of Colorado Springs  
 719-385-5436  
 Adam.Copper@coloradosprings.gov

Subbasin	MSB	Subbasin Area (Acres)	Impervious Area (Acres)	Impervious %
PC1	#	469.4	73.9	15.7%
PC2	#	69.2	28.6	41.4%
PC3	#	182.4	43.3	23.7%
PC4	#	329.0	68.9	21.0%
PC5	#	370.4	162.4	43.8%
PC6	#	117.7	36.6	31.2%
PC7	#	153.3	41.0	26.8%
PC8	#	151.8	73.5	48.4%
PC9	#	27.9	25.8	92.5%
PC10	#	77.9	22.0	28.3%
PC11	#	79.8	27.3	34.2%
PC12	#	56.0	22.9	40.9%
PC13	#	120.2	56.3	46.8%
PC14	#	52.0	17.0	32.9%
PC15	#	198.6	114.8	57.8%
PC16	#	263.8	68.7	26.2%



WaterVation was hired by the City of Colorado Springs to study the Pine Creek Watershed for the purposes of identifying opportunities to reduce peak flows to pre-developed conditions and identifying improvements required for repairing damage caused by watershed hydromodification.

The Pine Creek watershed is located in northern Colorado Springs and experienced rapid development, and corresponding hydromodification, beginning in the late 1990's. During this time period adequate stormwater infrastructure was not constructed in conjunction with the

massive amount of urban development. As a result, peak flows that drastically exceeded pre-developed conditions were dumped into Pine Creek and caused severe stream incision and erosion. This process destroyed critical habitat for the Preble's Meadow Jumping Mouse (PMJM), eliminated the riparian corridor, and dumped massive amounts of contaminated sediments that eventually entered Fountain Creek.

WaterVation developed a hydrologic model for the Pine Creek watershed using EPA SWMM to evaluate peak flows being generated by this highly developed watershed. This involved rainfall analysis; inventory and survey of stormwater detention facilities; and preparation of historical, existing, and future hydrological modeling scenarios to assist with problem identification and design decisions. Stream surveys, geomorphic assessments, and ecologic assessments were then performed for approximately two miles of Pine Creek to locate, and characterize, different impairments within the stream corridor.

Using the results generated from the watershed model and data collected during assessment, WaterVation identified an ideal location for a new detention pond within the watershed that would reduce peak flow rates to pre-developed conditions within the area of Pine Creek that had been damaged the most. WaterVation then prepared final design plans for this new detention pond and stream restoration plans for over 7,500 feet of Pine Creek.

The goal of the stream restoration design was to employ a hybrid channel design comprised of a natural channel restoration approach that worked with the natural tendencies of the stream system and preserved existing vegetation while providing adequate stabilization to protect against catastrophic flood events and to limit the excessive sediment contributions to Fountain Creek from this tributary.

# Mesa View Townhomes Drainage Analysis & Design

## Poncha Springs, CO



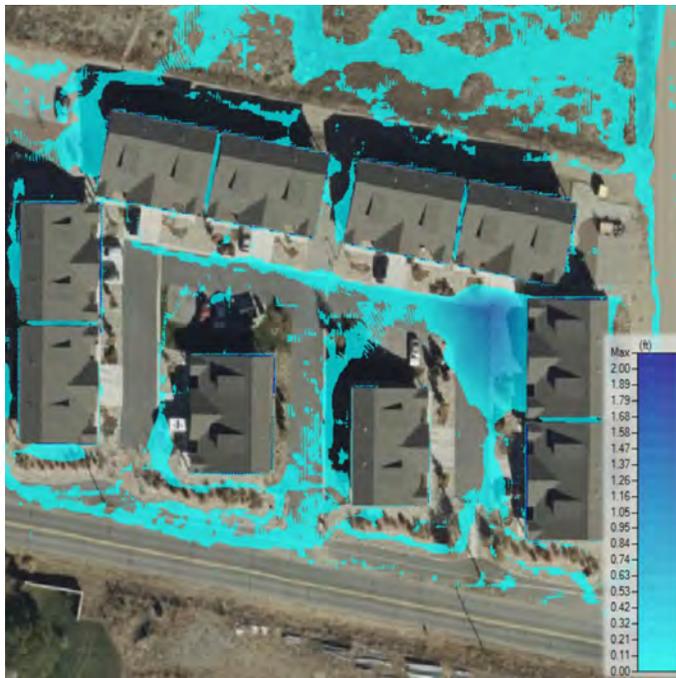
### Relevance

- Master Planning
- Inventory Assessment
- Stormwater Quality
- Sediment Management



### Reference

Jeff Cloutier  
Mesa View Town Homes President  
303-263-1117  
jeff\_cloutier@msn.com



The Mesa View Townhomes (MVTH) Homeowners Association (HOA) hired WaterVation to investigate the cause of substantial flooding that occurred on August 4th, 2022, and develop retrofit design solutions to mitigate future flooding.

WaterVation performed an inventory assessment and survey of existing stormwater infrastructure to evaluate the conveyance capacity of the existing system. A rain-on-grid model was then developed using USACE HEC-RAS to evaluate the rainfall and runoff characteristics for several storm events to identify areas at risk of flooding within the development. The results of this analysis were used to prepare retrofit design plans for the existing

stormwater system. Additionally, WaterVation designed two bio retention features to help attenuate peak flows, and 2,000 of grass swale to provide infiltration and pollutant filtration prior excess flow being discharged offsite.

WaterVation is located in Salida, Colorado, which is a small rural community with a population of 5,800 people. As such, we understand the “nuances” of working with smaller communities with limited resources. We recognize their need to get high-value for the investments they make in engineering services. Working with smaller communities with limited staff requires all parties to be flexible, wear multiple hats, and constantly communicate. Some of our experience addressing these “nuances” in smaller communities includes:

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## City of Salida

Working with small communities that don't have established stormwater design criteria, but need state-of-the-practice stormwater quality and LID design criteria to fulfill water quality needs.

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## City of Creede & Headwaters Alliance

Developing practical, constructable, and affordable sediment management design solutions for the local town engineer (who also drives the snowplow and might also build the sediment basin).

---

## Town of Crestone

Being hired to develop a hydraulic model and prepare flood inundation mapping, but then being asked to write a grant because the only other city staff member resigned.



# Qualifications

# Qualifications

WaterVation is a small business that was founded in, and is located in, Salida, Colorado. We have been providing water resources consulting services to public and private clients for the past six years. At WaterVation we focus on providing innovative solutions to water resources problems for our service areas of river restoration, watershed planning, hydrologic & hydraulic engineering, stormsystem design, groundwater engineering, water rights, environmental permitting, and surveying.



We are intentionally small with an experienced, flexible, and technical staff. Because of this, the Town can comfort in knowing that the WaterVation staff can immediately provide support or guidance for any challenges the Project may face. Our clients are our partners, and we believe that great collaboration is part of successful project delivery. We care deeply about the unique systems that we work in, and mold our designs towards each individual project's goals. We are constantly striving for excellence in everything we do.

## Our Team Members

LB



### Principal Water Resources Engineer

Lucas Babbitt will lead our Project team. Lucas has experience in Water Resources Engineering, as well as project management.

**18+**  
Years of experience

MJ



### Water Resources Project Manager

Matthew Johnson has experience in hydrologic and hydraulic planning, analysis, and design primarily focused in stream systems.

**11+**  
Years of experience

KB



### Water Resources Technician

Kristin Barnett has completed courses for permitting as well as obtaining her FAA Remote Pilot Certificat under part 107.

**1**  
Year of experience

# Company Resources

We have found that owning our own equipment eliminates scheduling uncertainties by not having to reserve equipment or trying to use poorly maintained equipment. A list of our survey and assessment equipment is outlined below:

## Survey & Imaging

Trimble R8s RTK GNSS Survey System (base, rover, and TSC3 data collector)

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Trimble R12 RTK GNSS Survey System (base, rover, and TSC7 data collector)

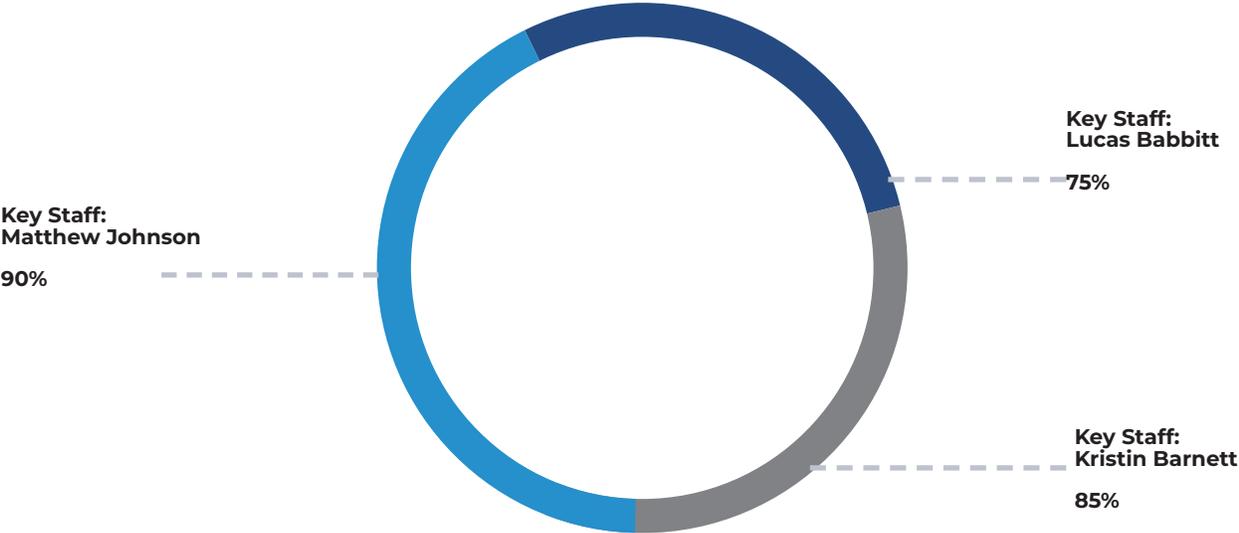
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Hyside Outfitter 13-foot Raft & Frame

Hyside 10-foot Inflatable Kayak

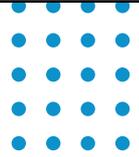
**Ability to Mount  
with Sonar Mite  
Echo Sounder**

Our primary resource is our staff and their expertise. As stated in our cover letter we have guaranteed availability to complete this Project for The Town of Grand Lake. For our overall capacity we have allocated our staff towards your Project as shown below.





# Key Project Staff Resumes



# LUCAS BABBITT, PE, CFM

## PRINCIPAL WATER RESOURCES ENGINEER

Mr. Babbitt has over 18 years of experience in river and watershed restoration with responsibilities in team management, personnel management, project management, engineering analysis/design, and construction management. He has successfully directed and designed multiple projects including large-scale master plans, dam removal, flood mitigation, and river restoration projects. He has been responsible for managing construction fees up to \$7 million dollars and has a proven track record with resource, time, and budget management. He has recently co-authored natural channel design criteria for the Fountain Creek Watershed Flood Control & Greenway District that is being used to implement over \$70M in restoration work and is also working as a volunteer with the City of Colorado Springs to develop their stormwater criteria manual.



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## EDUCATION

### Masters

Water Resources Engineering  
Colorado State University

### Bachelors

Civil Engineering  
Colorado State University

## LICENSES

### Professional Engineer

Colorado, #42636  
Wyoming, #16339  
Nebraska, #E-18331

### Certified Floodplain Manager

Colorado, #2704

## PROJECT EXPERIENCE

### PINE CREEK STREAM RESTORATION

City of Colorado Springs Public Works | Colorado Springs, CO  
Project Manager responsible for designing channel restoration improvements for over 7,500 feet of Pine Creek to repair channel erosion and mitigate flooding concerns. Responsibilities included performing stream assessment to quantify existing and reference conditions; hydrologic, hydraulic, and sediment transport modeling; designing 7,500 feet of stream following principles of Natural Channel Design; designing five six-foot tall, grouted boulder drop structures; obtaining Section 404 and floodplain permits; and providing construction oversight.

### PINE CREEK DETENTION POND & DROP STRUCTURE

City of Colorado Springs Public Works | Colorado Springs, CO  
Project Manager responsible for designing a nine-acre-foot detention pond and a 12-foot tall, grouted boulder drop structure to repair flood damage and prevent future flooding. Responsibilities included hydrologic, hydraulic, and sediment transport modeling; designing a nine-acre-foot detention pond; designing a reinforced concrete box culvert; designing a 12-foot tall, grouted boulder drop structure; obtaining Section 404 and floodplain permits; and providing construction oversight.

### TURKEY CREEK WATERSHED WARSSS PLANNING STUDY

Nebraska Game & Park Commission | Kearney, NE  
Project Manager for responsible for developing a watershed plan to quantify existing and future hydraulic and sedimentation problems associated with a proposed trans-basin diversion. Work included field assessments to document existing conditions; hydrologic and hydraulic modeling to evaluate changes in hydraulic conditions; sediment transport modeling to evaluate changes in river morphology associated with the diversion; and preparing a summary of recommendations.

### FOUNTAIN CREEK CHANNEL STABILIZATION AT RIVERSIDE

El Paso County Department of Public Works | El Paso County, CO  
Project Manager responsible for developing stream restoration plans to realign 3,000 feet of Fountain Creek within the City of Fountain to protect adjacent development from being threatened by a 30-foot high, actively eroding, escarpment. Responsibilities included performing stream assessment to quantify existing and reference conditions; hydrologic, hydraulic, and sediment transport modeling; designing 3,000 feet of stream following principles of Natural Channel Design; designing 10 engineered log jam structures; designing aquatic habitat features for the endangered Arkansas darter; obtaining Section 404 and floodplain permits; and providing construction oversight.

# LUCAS BABBITT



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130 Sackett Avenue, Unit A  
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## PROJECT EXPERIENCE

### GROUNDWATER MODEL & CHEMICAL TRANSPORT

Section 11, Item B.

*Jackson Hole Airport | Jackson Hole, WY*

Project Manager responsible for studying groundwater hydrology for the Snake River Alluvial Aquifer and evaluating chemical transport characteristics for various runway pavement deicing products at the Jackson Hole Airport to determine if site-specific water quality treatment features were necessary. Responsibilities included preparing a groundwater model using USGS MODFLOW USG to establish groundwater elevations; preparing a transient-flow groundwater model to evaluate groundwater flow characteristics for several different snow storage and melting scenarios; developing snow storage and maintenance recommendations to minimize chemical contamination.

### CITY OF SALIDA STORMWATER MASTER PLAN

*City of Salida | Salida, CO*

Project Manager responsible for preparing a stormwater master plan and stormwater design criteria for the City of Salida. Prior to this project, the City of Salida did not have a guiding stormwater master plan or stormwater design criteria in place. The purpose of this project was to develop a comprehensive, and current, stormwater master plan along with stormwater design criteria for use with future design, planning, and construction projects.

A detailed hydrologic model was developed using EPA SWMM to evaluate all of the City's stormwater infrastructure which ranged from large-diameter storm system, inlets, and gutter conveyance and identify areas prone to flooding. This information was used to provide recommendations for further design and evaluation to mitigate flooding issues.

This master plan is currently being used by City of Salida and other stakeholders to implement stormwater improvements, stormwater best management practices, inter-agency coordination, floodplain management, and other land use management practices to reduce stormwater-related impacts to the community.

### NORTH CREEDE STREAM STABILITY & FLOOD MITIGATION

*Headwaters Alliance | Creede, CO*

Project Manager responsible for developing stream restoration and flood mitigation designs for approximately 3,500 feet of Willow Creek in North Creede to repair stream damage caused by flooding and mining activities. Responsibilities included performing a watershed-wide assessment to determine primary sources of sedimentation and flooding; performing stream assessment to quantify existing and reference conditions; hydrologic, hydraulic, and sediment transport modeling; preparing stream restoration designs following the principles of Natural Channel Design; designing embankment protection for the adjacent Bachelor Loop road and hockey rinks; preparing dam removal plans for a historic 10-foot tall dam; designing two sediment basins to reduce downstream sediment delivery; and preparing bridge scour analyses and revetment design at two locations.

### MESA VIEW TOWNHOMES DRAINAGE DESIGN

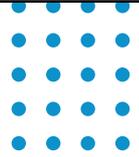
*Mesa View HOA | Poncha Springs, CO*

Project Manager responsible for preparing a drainage study and design to mitigate flooding within this newly constructed subdivision. Responsibilities included preparing a 2-dimensional hydraulic model to evaluate flood characteristics; designing two bio retention facilities; designing a storm system; designing 1,000 feet of bioswale.



Section 11, Item B.

# MATTHEW JOHNSON, PE, CFM



PE, CFM | WATER RESOURCES PROJECT MANAGER

*Mr. Johnson has over 11 years of experience in hydrologic and hydraulic planning, analysis, and design primarily focused in stream systems. He has managed stream restoration projects and served as design lead / assistant project manager on stream restoration projects up to 7 miles in length with construction budgets of \$3M. This experience includes construction oversight and implementation of stream restoration/stabilization designs.*

*Mr. Johnson is experienced in hydrologic modeling, 1D & 2D hydraulic modeling, sediment transport modeling, stream stabilization and restoration design, scour analysis, and erosion countermeasure design. This includes major drainage analysis including FEMA floodplain modeling, mapping, and permitting. His modeling experience includes GIS, HEC-2, HEC-RAS, HEC-HMS, SRH-2D, HY-8, EPASWMM, and XPSWMM.*

*Mr. Johnson has prepared and lead trainings for SRH-2D and HEC-RAS 2D as well as other hydraulic topics. He has presented his work at ASFPM, EWRI, NHEC, CASFM, and the Rocky Mountain Stream Restoration Conferences.*



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130 West Sackett Avenue,  
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## EDUCATION

### Bachelors

*Civil Engineering  
South Dakota School of  
Mines & Technology*

## LICENSES

### Professional Engineer

Colorado, #52356  
South Dakota, #14500  
Washington, #22008488

### Certified Floodplain Manager

Colorado, #US-14-07984

### Fish Passage and Stream Restoration Design Certification

Washington, #FPT20-49777

## PROJECT EXPERIENCE

### PINE CREEK STREAM RESTORATION

*City of Colorado Springs Public Works | Colorado Springs, CO*

Lead stream restoration engineer (Reach 1) and responsible for designing channel restoration improvements for over 7,500 feet of Pine Creek. Responsibilities included performing stream assessment to quantify existing and reference conditions; hydrologic, hydraulic, and sediment transport modeling; designing 7,500 feet of stream following principles of Natural Channel Design; designing boulder drop structures; obtaining Section 404 and floodplain permits; and providing construction oversight.

### TURKEY CREEK WATERSHED WARSSS PLANNING STUDY

*Nebraska Game & Park Commission | Kearney, NE*

Project Engineer for the WARSSS study. The overall goal of the study is to determine impacts on the entire watershed to future hydromodification activities. Work includes field assessments, BANCS mapping, geomorphic assessment used to quantify existing baseline watershed conditions. Areas of high risk to were identified. This included a full Predictive Level Assessment of the Oxford WMA, roughly 4,000 feet of full geomorphic channel survey to determine existing impairments and to baseline conditions for future monitoring ahead of potential hydromodification activities.

### INDUSTRIAL TRIBUTARY

*CORE Consultants | Castle Rock, CO*

Matthew Johnson is the WaterVation project manager for this project. His tasks include management of budget and schedule for final design of stream rehabilitation for Industrial Tributary in Castle Rock, Colorado. This project consists of 2,800 feet of channel realignment and design, design of 8 drop structures, and design of 400 LF of boulder wall channel bank protection. This project also required revisions to the Town of Castle Rock FHAD for hydrology and a floodplain modification study. As part of the hydrology revisions the stream stabilization design is streamlined and optimized for cost savings while following stringent Castle Rock criteria. Challenges successfully navigated on this project include shifting priorities due to development changes and rapid changes to project schedule. Permits required for this project include USACE Section 404, Stormwater Management Plan, and Town of Castle Rock floodplain modification study.

# MATTHEW JOHNSON



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## PROJECT EXPERIENCE

### BORDEAUX CREEK AQUATIC HABITAT REHABILITATION PROJECT

Section 11, Item B.

*Nebraska Game & Park Commission | Chadron, NE*

Project Engineer responsible for developing stream restoration designs for approximately 7 miles of Bordeaux Creek in sand hills of Chadron, Nebraska to address streambed incision and a loss of floodplain connection. Responsibilities included performing stream surveys and assessments to quantify impaired and healthy conditions; performing hydrologic, hydraulic, and sediment transport modeling; designing seven miles of stream and aquatic habitat restoration following design philosophies outlined in Process-based Principles for Restoring River Ecosystems (Beechie et al. 2010); designing aquatic habitat improvement features; obtaining Section 404 and floodplain permits; and providing construction oversight.

### GUNNISON RIVER RESTORATION

*City of Gunnison | Gunnison, CO*

Project Manager responsible for developing stream restoration plans for the Gunnison River at Tomichi Park and at the City of Gunnison Park Trail Site. Approximately 1,000 feet of channel geomorphic survey was performed by boat and sonar to characterize the existing conditions, understand stream impairments, and cross-sectional flow conditions. This data was used to bank restoration design and aquatic habitat improvement design. Hydraulic modeling was performed to support the design. Section 404, floodplain permitting, and construction oversight was performed for this Project.

### POUDRE LEARNING CENTER RIPARIAN RESTORATION

*Poudre Learning Center | Weld County, CO*

Project Manager responsible for developing stream restoration plans for 3,200 feet of the Poudre River. For this project WaterVation is the lead stream restoration engineer focused on riverine function and habitat. Work included drone aerial imagery, pond bathymetric survey, and geomorphic survey to characterize the existing stream using the Colorado Stream Quantification Tool. This included a full reference reach geomorphic survey as well. A number of hydrologic, hydraulic, aquatic, and geomorphic parameters were captured and assessed to determine existing impairments and to score potential uplift based on the proposed 60% designs.

### FLAT CREEK FEMA PEAK DISCHARGE REVISIONS

*Wyoming Game & Fish | Park County, WY*

Matthew Johnson is leading a hydrologic study for peak discharge revisions in the Lower Flat Creek Watershed that encompasses all of Jackson, Wyoming. The purpose of this study is to develop a Conditional Letter of Map Revision (CLOMR) based on updated and realistic hydrologic data. This study is also used to support a broader stream restoration project scheduled for construction this fall. Due to construction and grant requirements the study had to be completed in March 2020 to maintain design and construction schedules. Matthew navigated the complex FEMA procedures and tight deadline to deliver the study on time and on budget. The study was accepted by the local floodplain administrator without comment.

### CP2 FLOOD MODELING

*Kiewit Engineering Group | Santa Clara, CA*

WaterVation was hired by Kiewit Engineering Group to support their staff by developing a rain-on-grid two-dimensional hydrologic and hydraulic model to assess flooding conditions at a Project location. Matthew served as the WaterVation Project Manager and completed the modeling for this task. The modeling assesses existing and proposed conditions and determined impacts to flooding patterns and depths at and near the Project site.

### CREEDE HAZARD MITIGATION PROGRAM GRANT APPLICATION

*City of Creede | Creede, CO*

Project Manager responsible for the development of a FEMA HMPG Grant Application for the City of Creede. Three separate projects with multiple stakeholders were combined into a single grant application of around \$7 million. This involved data collection, development of all grant materials, and completing a benefit cost analysis (BCA) to support the grant application. Both the HMGP and BRIC Programs were used to submit the grant application.

### ORPHAN BOY MINE RESTORATION

*Trout Unlimited | Alma, CO*

Project Engineer responsible for developing stream and mine restoration plans for the Orphan Boy Mine outside of Alma, CO. This involved topographic data collection to inform the design to provide a natural stream system to convey fresh water flows away from mine tailings into the receiving stream system. Additional ditches, grading, and revegetation plans were developed to preserve water from mine tailings and to restore the Mine



# KRISTIN BARNETT

## WATER RESOURCES TECHNICIAN / UNMANNED AIRCRAFT PILOT

*Kristin has been with WaterVation since May of 2022. She has successfully completed Richard Chinn's Wetland Permitting Training and Wetland Delineation Training. Through this course she is familiar with permitting within the Omaha, Albuquerque, and Sacramento USACE districts. Through that course she is also familiar with the USACE Wetland delineation manual in the Great Plains Region and Western Mountains, Valleys, and Coast Region. She has also successfully completed the Pilot Institute's Part 107 training to obtain her Remote Pilot Certificate from the FAA.*

*Prior to WaterVation, Kristin spent 13 years as a Certified Athletic Trainer. In addition to being an Athletic Trainer, Kristin was also Metropolitan State University of Denver's Assistant Athletic Director for Sports Medicine, Senior Woman Administrator, and NCAA Health Care Administrator. From that experience she is familiar with managing staff and events, detailed record keeping, maintaining professional standards including OSHA compliance, and timely and effective communication.*

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## EDUCATION

### Masters

Exercise Science  
Eastern Washington University

### Bachelors

Education  
University of Kansas

## COURSES & CERTIFICATES

### Courses

- Richard Chinn's Wetland Permitting Training
- Richard Chinn's Wetland Delineation Training
- Pilot Institute Part 107

### Certificates

FAA Remote Pilot Certificate-  
Part 107

## PROJECT EXPERIENCE

### CREEDE HAZARD MITIGATION PROGRAM GRANT APPLICATION

City of Creede | Creede, CO

Assisted the Project Manager with the development of a FEMA HMPG Grant Application for the City of Creede. Three separate projects with multiple stakeholders were combined into a single grant application of around \$7 million. This involved data collection, development of all grant materials, and completing a benefit cost analysis (BCA) to support the grant application. Both the HMGP and BRIC Programs were used to submit the grant application.

### ABERNATHY RESIDENCE POND RESTORATION

Robert Abernathy | Buena Vista, CO

Water Resources Technician responsible for communicating with USACE to determine correct NWP appropriate for the Project. Completed PCN for permitting purposes and collected data for Wetland Delineation forms.

### LION CREEK RESTORATION

Trout Unlimited | Empire, CO

Assisted with survey data collection field work and created an inventory of project area vegetation.

### NORTH CREEDE STREAM STABILITY & FLOOD MITIGATION

Headwaters Alliance | Creede, CO

Water Resources Technician responsible for assisting with stream surveys and assessments for 3,500 feet of Willow Creek in North Creede, Colorado. Responsibilities included performing a watershed-wide assessment following the protocols outlined in Watershed Assessment of River Stability & Sediment Supply (WARSSS) to determine primary sources of sedimentation; performing ecologic assessments; and completing a drone-based aerial and topographic survey for the project corridor.

### BORDEAUX CREEK AQUATIC HABITAT REHABILITATION PROJECT

Nebraska Game & Park Commission | Chadron, NE

Water Resources Technician responsible for assisting with stream surveys and assessments for 7 miles of Bordeaux Creek located in Chadron, NE. Responsibilities included performing stream surveys, ecologic assessments, and drone-based aerial and topographic survey for the project corridor.



**SMITH ENVIRONMENTAL AND ENGINEERING**  
Delivering Smart Solutions for Planning, Permitting, & Design

# **Technical Proposal to Provide Stormwater Management Plan Services to the Town of Grand Lake**

*Prepared for the  
Town of Grand Lake  
by Smith Environmental and Engineering*

*March 30, 2023*



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**SMITH ENVIRONMENTAL AND ENGINEERING**  
*Delivering Sustainable Environmental Solutions*

**1.0 COVER LETTER AND SIGNATURE PAGE**

March 30, 2023

Kim White  
Planner to the Town of Grand Lake  
1026 Park Avenue  
Grand Lake, CO 80447

**RE: Town of Grand Lake Stormwater Management Plan**

Dear Ms. White,

Please find enclosed Smith Environmental and Engineering's (SMITH) proposal to provide Stormwater Management Plan (SWMP) services for the Town of Grand Lake (the Town). SMITH is a full-service environmental consulting and construction firm that has completed nearly 2,400 contracts performing environmental consulting, planning, design, and permitting, and construction of our designs for various municipalities, state and federal agencies, and private sector clients in Colorado since our inception in June of 2000. This includes preparing many (more than 100) municipal and industrial stormwater management plans (SWMP) to improve the water quality of Colorado's streams, rivers, and lakes.

SMITH brings unique capabilities, experience, and core competencies to its partnerships, which can support the Town in its efforts to improve the quality of water reaching the Town's adjacent lakes. For example:

- ❖ **SMITH is a local Colorado business with experience developing comprehensive SWMP and improving Colorado's water quality.**
- ❖ **In-house multidisciplinary staff.** SMITH's 35-member staff includes water quality specialists, soil scientists, water resource engineers, certified ecologists, wildlife biologists, and support staff with a broad range of expertise.
- ❖ **This team has core competencies in creating sustainable SWMPs, obtaining the funding to create and build them, and engaging the community through the entire process.**

I hereby certify that the information contained in the attached proposal is true to the best of my knowledge. If you have any questions regarding our proposal, please call me at (303) 551-7972, by email at [petersmith@smithdelivers.com](mailto:petersmith@smithdelivers.com), or at the Dacono address listed above.

Respectfully submitted,  
Smith Environmental & Engineering

Peter L. Smith, CPSS/SC, SPWS, CPESC  
Vice President

## 2.0 PROJECT UNDERSTANDING AND APPROACH

### 2.1 SITE CHARACTERISTICS AFFECTING STORMWATER MANAGEMENT

There are three watersheds (A, B, C) within the Project Area (PA). Watershed A is the westernmost covering 45% of the PA, and Watershed C is the easternmost covering 45% of the PA. All three watersheds extend outside the PA; however, Watershed B extends only slightly outside the PA. Watershed B comprises about 10% of the PA and sits between Watershed A and Watershed C.

The higher the percentage of impervious area in a watershed the greater the likelihood for flash flooding and the greater the need for stormwater detention and other water quality improvement measures. Watershed B has the



highest percentage of impervious area, therefore the highest runoff per unit area, because it has the highest concentrations of roads, driveways, roofs, parking, lots, and commercial buildings. However, because of the steep slopes (see above) in the northern part of Watershed C and many roads, buildings, and parking lots in the southern two-thirds, runoff per unit area is also high in this watershed. There is some impervious area within Watershed A but considerably less than in Watersheds B and C.

There are three dominant physiographic features in the PA: 1) the Little Columbine Creek (LCC) corridor, 2) the terminal moraine (shown above) in the northern portions of the main area of the PA, and 3) the relatively flat (3% slope or less) alluvial fan in the southern part of the PA, which is relatively densely covered with houses and commercial buildings. Most of the runoff from the terminal moraine flows into Watershed A (LCC Watershed) to the west and Watershed C in the eastern part of the PA.

#### 2.1.1 Watershed A

Runoff in the LCC Watershed collects entirely into the LCC channel. It goes temporarily into pipes beneath four roads, and about 50 ft upstream of the waters in the north end of marina, it flows back into a pipe and then into that end of the marina waters. The discharge into the marina carries enough warm flow to prevent the eastern upper half of the marina waters from freezing. The LCC riparian area has: 1) a floodplain of wetlands, 2) slightly higher terraces adjacent to the channel with wetland vegetation, and non-wetland riparian vegetation, and 3) uplands having upland grasses, shrubs, and trees. Web Soil Survey maps Cumulic Cryaquolls in the lower elevations of this watershed. Rocky Mountain National Park soil survey information shows Histic Cryaquolls bordering the north end of this watershed in the PA. Histic Cryaquolls may be fen wetlands, which will warrant special consideration because of their regulatory protection by the US Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) under Section 404 of the Clean Water Act (CWA).

### 2.1.2 Watershed C

The steep hillside in the northeaster portion of the PA is a terminal moraine and is mapped by Web Soil Survey as Gateway loam, 15-50% slopes. There are some seeps and springs at the base of the terminal moraine, which contribute to the stormwater runoff. Most of the runoff from the terminal moraine flows into Watershed C, which collects into a pipe north of Grand Avenue (south of West Portal Road) and east of Haskell Street. This pipe crosses beneath Grand Avenue and Ravenwood Circle and supposedly daylights into an open channel just south of Ravenwood Circle. However, SMITH understands the Town was not able to find where this water or pipe daylights. Where does the pipe and water go? The answer to this question may be the nature of the soil in this area.

The southern three-quarters of Watershed C, the 3% or less sloping area, is mapped by Web Soil Survey as Tine gravelly sandy loam. Tine soils are typically less than 20 inches to sand and gravel. This shallow sand and gravel may be where the flow from the pipe “disappears” because of the very highly permeable nature of sand and gravel. This stormwater infiltration concept has great merit and will be given serious consideration when developing runoff control and water quality improvement measures for the SWMP, because it is a sustainable, low impact development (LID). One problem that will have to be resolved, if this method is considered, is making sure the stormwater is conveyed deep enough into the substratum so that it doesn't freeze and form an ice block, which would short circuit the stormwater drainage system.

Downgradient from Ravenwood Circle, SMITH understands surface flow collects into a stormwater pipe beneath Marina Drive. The pipe beneath Marina Drive outlets at the east side of the southern leg of the marina. In the flatter area of Watershed C there is a go-cart track. Poorer water quality is suspected in the flow from this facility because of the gasoline, lubricants, and oils used at this facility.

### 2.1.3 Watershed B

Watershed B may have the most degraded water quality because some of the flow in the south end of the watershed comes from the Grand Lake maintenance yard, about 150 ft north of the marina. This yard consists of a dirt surface with several pieces of machinery – road graders, front end loaders, pickup trucks, and backhoes – and a fueling area. There may be drippings of oil and other petroleum chemicals that may degrade runoff water quality. Magnesium chloride is stored at the maintenance yard but is in drums inside one of the buildings. A slight swale collects runoff from most of the maintenance yard and carries flow to the south. Also in the southern part of this watershed is a car wash. It is not clear where the runoff from the car wash flows – into a sanitary sewer pipe or just into the roadside ditch.

In the north end of this watershed (the steep terminal moraine area), there are steep cut slopes along the dirt roads having higher total suspended solids (TSS) runoff. Fortunately, West Portal Avenue acts as a detention basin berm collecting runoff from this northern half of the watershed and collecting much of the sediment from that flow. There are some seeps and springs at the base of the terminal moraine, which may lessen water quality degradation through dilution in the upper part of this watershed.

In summary, the ponding, water quality, and erosion problems in the PA can be solved by utilizing borrow/roadside ditches, replacing nonfunctioning (buried, undersized) culverts, creating infiltration swales in the underlying sand and gravel, creating biotreatment (vegetation buffer) strips, and utilizing conventional erosion control measures (erosion control blanket, straw wattles, etc.), all of which are sustainable LID measures. Other problems in Watersheds B and C may require more extensive engineering and design, such as surface drainage requiring curb and gutter and subsurface drainage through a storm drain system. Public input on these stormwater best management practices (BMP) will be important as they may adversely affect some businesses more than others. These ideas will be explored by SMITH and explained to Town staff and the Town Trustees. Whatever BMP measures are selected and placed will need to have a positive effect on water quality – groundwater and surface water.

**2.2 APPROACH TO PUBLIC OUTREACH**

While the contents of the SWMP will be technical, the nature of the planning effort should engage and incorporate feedback from the community of Grand Lake – residents, businesses, recreationalists, and Town staff. SMITH proposes that two public meetings be held, with the distribution of an electronic survey occurring shortly after the first public outreach meeting early in the project.

The first public meeting will be conducted right after field investigations and the concept design is finished. It will serve to introduce the project to interested individuals and solicit feedback on the types and locations of the BMPs. The format of this meeting is open to discussion with the Town to determine what the community is most accustomed to and responsive to. SMITH suggests a brief presentation in the evening followed by an informal meet-and-greet and Q&A with the project team. SMITH has had good success in the past by utilizing PowerPoint presentations and informational boards. If there is another Town project occurring concurrently, combined meetings can attract a larger crowd and avoid duplication of engagement efforts.

At the meeting, a survey link will be promoted as a formal means to obtain and analyze feedback from interested parties. This survey will be open for several weeks following the meeting to ensure that adequate time is given to allow incorporation of public feedback into the final design.

The last public outreach meeting will be conducted after final (100%) construction drawings are completed. SMITH envisions an open house for this session, as it will likely attract only those individuals who have been following the planning process.

Feedback from the meetings and survey will be added to the materials prepared by SMITH, which will then be reviewed with the Town to, 1) finalize the identification of water quality problem areas and 2) decide what stormwater BMPs should be utilized and presented in the SWMP. SMITH will summarize the public engagement information and process in an appendix to the final planning document.

**2.3 APPROACH TO PREPARING THE SWMP, SWMP REPORT, CONSTRUCTION DOCUMENTS, AND OPERATIONS AND MAINTENANCE MANUAL**

The overall approach to preparing the SWMP will be consistent with SWMP guidelines and regulations of the county and state. Its purpose will be to incorporate BMPs that are appropriate to specific areas where water quality is degraded and stormwater management is impaired. By necessity they must be compatible with the Town’s goals and priorities. There will be a strong emphasis placed on sustainable, LID BMPs with long lifespans to minimize long-term maintenance costs.

### 2.3.1 Field Investigations

Prior to the preparation of the SWMP, SMITH will complete several field investigations: 1) water quality investigation, 2) topographic survey, 3) soils survey/investigation, 4) existing stormwater infrastructure and condition assessment, and 5) identification of water quality monitoring locations. SMITH will need the Town to provide all as-built information for the existing stormwater system. The soils investigation will include soil borings and bank cut examinations and will be conducted by a Certified Professional Soil Classifier according to the standards of the National Cooperative Soil Survey. It will identify specific soil map units, soil characteristics, soil hydrologic group, Revised Universal Soil Loss Equation (RUSLE) erosion rates, and erosion hazard of each soil map unit. This soil mapping will also include hard impervious surfaces such as roads, buildings, and parking lots.

The topographic survey investigation will be conducted by a Professional Land Surveyor. The result of this investigation will be an AutoCAD file with one-foot contour information on the less than 9% slope areas and 5 to 10 ft contour information on the steeper sloping areas. The stormwater infrastructure and condition assessment will be a field investigation to identify all stormwater features such as culverts, inlets, and storm sewer pipelines, and stormwater problem areas such as sediment build up and flooded areas. Any stormwater infrastructure as-builts held by the Town will be reviewed.

A water quality needs assessment will also be completed to identify areas of suspected stormwater quality degradation and the causes of such degradation. As part of this field investigation, two water quality samples from Watersheds A and C and one water quality sample from Watershed B will be collected each quarter, for three quarters starting in early June 2023. The water quality needs assessment will result in a report and recommendations for monitoring locations and parameters. It will include the identification of problem water quality areas such as: 1) degraded water quality areas, 2) source areas contributing to degraded water quality and an explanation of why the water quality degradation is occurring, 3) areas of sediment deposition, 4) areas of known excessive hill slope erosion, and 5) areas where existing stormwater infrastructure contributes to degraded water quality.

As a result of these field investigations SMITH will prepare a map showing proposed BMP types and location. This set of maps will be utilized in the public meetings and as the starting point for the SWMP and SWMP report. SMITH provides in-house GIS services to support the development and planning of a diverse spectrum of natural resource projects. SMITH holds licenses for ESRI ArcGIS Desktop, version 10.8.1, and ArcGIS Pro. Our GIS capabilities are led by Environmental Scientist III and Project Manager, Rebecca Hannon, who has over a decade of experience in data collection and cartography using the ESRI product line. Field mapping collected for these investigations will be downloaded into ArcGIS Desktop to create maps for the reports and a project ArcGIS database.

For these field investigations, SMITH will first compile relevant GIS data from several sources, including the Town, Grand County, State of Colorado, public utilities, Natural Resource Conservation Service, US Geological Survey, US Forest Service, National Parks Service, US Fish and Wildlife Service, and other entities as applicable. Data that are unavailable will be summarized and discussed among the project team to determine if they are integral to the planning effort. SMITH will package the accumulated layers in shapefiles or a geodatabase for delivery to the Town and integration into their own GIS system. Care will be taken to ensure consistency and compatibility with diverse datasets so that significant analysis and interpretation can be conducted.

### 2.3.2 SWMP, SWMP Report, Construction Documents, and O&M Manual Preparation

Information from the: 1) soils investigation and report, 2) 1986 Drainage Study, 3) topographic information from our team surveyor, 4) water quality needs assessment, 4) stormwater infrastructure assessment, 5) LID BMP types and locations map; and 6) public outreach will be reviewed before starting the preparation of the SWMP.

The SWMP will be prepared consistent with guidelines and recommendations of the Town, County, and State. First, the preliminary SWMP (60% level) will be developed. It will include maps showing the types and locations of BMPs. SMITH believes the preliminary stormwater management construction documents are an unnecessary expense and should be dropped to save costs during the design phase. The SWMP will be accompanied by the SWMP report, which will include quantities and an opinion of probable cost. SMITH will meet with the Town after the preliminary SWMP and SWMP Report are submitted to obtain their comments, which will serve as a basis for making revisions and creating the 100% (Final) SWMP and SWMP Report.

Once the Final SWMP and SWMP report are approved, the Final (100%) Construction Documents including plans, details, specifications, and quantities will be prepared. The Operations and Maintenance (O&M) plan will be prepared concurrently with the Final Construction Documents.

SMITH anticipates it will also be conducting one progress meeting per month throughout the 18-month course of the project. Most of these meetings will be virtual. SMITH will provide the following deliverables to the Town under this contract:

- Water quality assessment and needs report and water quality monitoring data
- Topographic survey – as an AutoCAD file
- Stormwater infrastructure condition assessment
- Soils report with data interpretations and maps (as an ArcGIS file)
- Report and map of proposed stormwater BMP solutions and locations
- Public Outreach Plan, public outreach meetings (2), and one public survey
- Preliminary (60%) SWMP and SWMP Report including opinion of probable cost
- Final (100%) SWMP and SWMP report including opinion of probable cost
- Final (100%) Construction Documents and Final O&M manual
- List of funding options and a description of each
- Monthly invoices and supporting written progress reports
- Progress meeting minutes and schedule updates

### **2.4 APPROACH TO SECURING FUNDING FOR THE PROJECT**

EPA Region 8 has grants available for water quality improvements – planning, reports, construction documents, and construction – for municipalities in Colorado. They are aggressively providing information on current and upcoming funding opportunities that will help entities like the Town access unprecedented funds from the Bipartisan Infrastructure Law and Inflation Reduction Act. These grants can be quite large – \$1-2 million – enough to cover planning, design, and construction fees. The SMITH team will help the Town identify these EPA grants, set up a SAM.gov account (if the Town does not have one), help the Town understand eligibility requirements, and prepare grant applications.

Similarly, the state of Colorado Water Quality Improvement Fund (WQIF) is a state-funded grant program that supports public water systems interested in committing to excellence but who lack the financial resources to do so. Grants can be awarded up to \$25,000, with a total of \$150,000 annually. Projects must be completed within the calendar year awarded. These grants are typically given to smaller municipalities or water and sanitation districts. Projects eligible for funding must fall within these categories:

1. Stormwater management and best management practices training.
2. Projects to improve water quality where there has been a civil penalty imposed for a water quality violation.
3. Planning, design, construction, or repair of stormwater projects or domestic wastewater treatment facilities currently on the State Revolving Fund Intended Use Plan.
4. Nonfederal match funding for nonpoint source projects.

Our grant funding team member, INTERA, has considerable experience successfully obtaining grants from the EPA and other agencies for water quality needs such as those of the Town.

**2.5 SMITH’S ABILITY TO PERFORM ALL ASPECTS OF THE PROJECT**

The SMITH team is prepared to complete every task described in the Town’s RFP; the tasks described are among the core services that SMITH has delivered for the past 22 years. SMITH has professional engineers, stormwater management specialists, soil scientists, water quality specialists, and hydrologists that collectively have over 100 years of professional experience preparing SWMPs, SWMP reports, SWMP Construction Documents, and O&M Manuals. Specifically for this project, the SMITH team consists of senior-level Professional Engineers, a Certified Professional Soil Scientist/Soil Classifier, water quality specialists, and public outreach specialists, who routinely work together. The Professional Land Surveyor (PLS) and INTERA will be working as subcontractors to SMITH. We have worked together successfully on other projects of similar size and scope.

The following are the services outlined in the RFP’s Scope of Services that this SMITH team has the experience, availability, and qualifications to perform:

- **Communication**
  - Meeting and engaging with the Town, County, and Grantors
  
- **Public Engagement**
  - Creation of public outreach plans
  - Creation of presentations and plans for public meetings
  - Leading community meetings with stakeholders
  - Community surveys
  
- **Mapping**
  - GIS mapping, report generation, and GIS data sets
  - Database development and management services
  - Creation of field maps

- **Data Collection**
  - Collection of water quality samples to assess suspect degraded water quality
  - Soil surveys and interpretations – soil maps, slope and erosion hazard by soil type, RUSLE rates by soil type, soil hydrologic group by soil type, identification of impervious surfaces
- **Monitoring**
  - Collection of water quality data downstream of the proposed stormwater solutions
- **Design Solutions**
  - Assessing the effects of proposed stormwater solution strategies on water quality
  - Assess feasibility of low impact development (LID) and sustainable BMPs
  - Recommending sustainable, LID stormwater quality solutions based on collected data
  - Developing SWMPs and report
  - Preliminary and final SWMP sets
  - Environmental studies and permitting as needed
  - Economic feasibility studies
- **Reporting**
  - Integrating feedback from municipalities and public into plans and final reports
- **Inventory and Analysis of Existing Infrastructure**
  - Comprehensive evaluations of facilities (Grand Lake maintenance yard, car wash, go cart facility, stormwater pipelines) related to stormwater runoff
- **Sustainability**
  - Implementing LID solutions and BMPs to serve the needs of municipalities, the public, and other stakeholders
- **Maintenance**
  - Communicating ways to maintain functionality of design solutions
  - Development of operations and maintenance plans and manuals
- **Funding Options**
  - SMITH has teamed with a subconsultant with the experience and proven ability to locate and obtain available state and federal grants and loans to fund design solutions.

SMITH has qualifications to perform additional as-needed environmental tasks, such as:

- Ecological assessments
- Threatened and endangered species surveys and habitat assessments
- Biological assessments (Section 7)

- NEPA documents, including Environmental Assessments
- Wetland and Waters of the US delineations
- Section 404 permitting
- Vegetation investigations and mapping
- Cultural site surveys and Section 106 clearances
- Risk assessment and site characterizations
- Assistance with effective strategies to assess potential environmental impairments
- Remediation system design, installation, operation, and implementation
- Phase I/II Environmental Site Assessments (ESA)
- Asbestos, lead-based paint (LBP), and mold inspections
- Design and oversight of abatement projects
- Spill Prevention, Control, and Countermeasure (SPCC) plans
- Underground storage tank (UST) removal and site closures
- Asbestos testing and mitigation plan development and associated oversight
- Fuel storage tank leak detection, mitigation, and removal plans and permitting
- Other consultations, permitting, and compliance with federal and state agencies

The SMITH team has provided the services outlined in the Town’s RFP in Colorado and across the Front Range on numerous projects. SMITH is different than most environmental firms of a similar or even significantly larger size; our multidisciplinary team conducts studies and field investigations, prepares designs and management plans, prepares risk assessments and project management plans, and obtains environmental permits for our clients.

**2.6 SMITH’S ABILITY TO MEET SCHEDULES WITHIN BUDGET**

Based on extensive experience providing services to public and private sector clients, SMITH has established the following framework to meet schedules within budget.

**2.6.1 Project Management**

SMITH will follow its Project Management Plan to ensure all required tasks are completed.

SMITH will ensure that all required services under the proposed contract are provided by following a carefully prepared Project Management Plan (PMP). The PMP will be developed after notice to proceed is received by SMITH on the contract. This plan will outline a system of processes, controls, and checks to ensure each task is completed successfully. To ensure that project responsibilities are accurately defined and carried out, SMITH will utilize a management structure consisting of a Principal in Charge (Peter Smith), Project Manager (PM), and key project team members.

Jonathan Diller will be the PM and Ridwan Naife will be the Assistant PM for this contract. They will oversee all aspects of the project from start to completion. Mr. Diller will be responsible for coordinating the day-to-day activities; mapping project tasks to meet team capabilities and availability; assigning the adequate staff; monitoring budgets, schedules, and deliverable work products; and maintaining routine client communication.

For each task, Mr. Diller or Mr. Naife will work with the key project team members to prepare milestones, deliverables, compliance, and permitting issues. He will also coordinate the day-to-day activities, manage schedules and budget, Quality Assurance/Quality Control (QA/QC) procedures, and develop specific communication protocols to ensure the client and our staff have a clear picture of each task’s deliverables and timeline.

The overall technical direction of each task will be established and coordinated by Mr. Diller. He will obtain weekly updates from each team member regarding their respective task deliverables. Based on these updates, Mr. Diller will identify how new information will affect the other project components and inform the project team of any necessary adjustments. Any findings or new information that would significantly affect the overall schedule or costs will be immediately communicated to the Town.

SMITH recognizes the importance of selecting the right software to manage a project, track budget and timelines, and produce the reports and deliverables. In addition to the Microsoft Office suite, our team regularly uses the following software for the duration of any project:

1. Zoom and MS Teams for video calls whenever on-site meetings or planning is not possible.
2. Microsoft Project set up the project baseline schedule, milestones, and project progress reporting.
3. QuickBooks (QB) for project accounting and invoicing.
4. QB Time – an electronic time keeping system fully integrated with QB that tracks project hours and expenses by task.

**2.6.2 Budget and Scope Tracking System**

SMITH is responsible for both cost and schedule control under the contract. SMITH has developed and implemented many successful project management systems to achieve both budget and schedule control. The SMITH PM tracks the progress by monitoring tasks completed and billable costs – hours and other direct costs (ODC) charged to the task and tracked in QB and QB Time – against the project’s budget and Microsoft Project schedule developed. The status of the project will be reported regularly to the client. Should there be any changes to the project cost or budget, SMITH will discuss the issues with the Town and present alternative cost-efficient solutions to keep a project on budget and schedule.

At the beginning of every project, tasks, budgets, personnel assignments, and deliverables are defined. Project cost control is achieved through the following steps:

- Routine project cost status reviews of personnel hours and ODC reports generated in QB
- Monthly cost and narrative progress reports to the client with each invoice
- Early detection of potential cost overruns and the implementation of cost control measures

The SMITH PM tracks the weekly progress by monitoring subtasks completed and billable costs against the task order budget and the MS Project schedule.

**2.6.3 Schedule Process and Monitoring**

Schedule monitoring and control is obtained by measuring actual completed against dates shown on the MS Project schedule. The tools and actions used for making such measurements include:

- A precise understanding of project objectives, tasks, milestones, and the Town’s completion requirements
- A detailed analysis of elements and sub-elements to identify “critical path” items, and key performance/milestone points that must be monitored to ensure schedule control and/or provide advance warning of potential slippage (for large complex tasks, SMITH will create Gantt charts to identify the critical path)
- A regular work status review by the PM
- Updating the schedule data at key points during the project



Schedule control is obtained by measuring actual completion dates against assigned work completion dates.

**2.6.4 Team Communication Process**

Regular and effective communication is foundational to successful projects. While the communication format may vary depending on the complexity of the project and the number of involved parties, at a minimum, all SMITH projects use the following paths to discuss project progress:

1. Kickoff meeting: Key SMITH team members and the Town will discuss and/or confirm the goals, deliverables, timeline, and budget.
2. Weekly check-in: The SMITH PM interacts weekly with the Town via phone and email, preparing an overview of what has been completed to date.
3. Daily team check in: The SMITH PM maintains involvement with the key project team members by conducting a daily review.
4. Monthly report: The SMITH PM prepares a monthly project progress report and shares it with the Town to track status of work completed against the project timeline.

### 3.0 SIMILAR EXPERIENCE AND CLIENT REFERENCES

SMITH has a proven track record of getting the job done for its municipal clients over the past 22 years. The following representative projects demonstrate the diverse capabilities of the SMITH team to meet this contract’s requirements and scope of work efficiently and cost-effectively for the Town.

#### 3.1 PLASTER RESERVOIR MANAGEMENT PLAN

*Location – Broomfield, CO*

*Client – City and County of Broomfield*

*Reference – Kelly Behling, City and County of Broomfield*

*Contact Information – Phone: (303) 438-6349, Email: kbehling@broomfield.org*

In 2020, Broomfield selected SMITH in a competitive proposal and interview process to develop a management plan for Plaster Reservoir. The SMITH team incorporated the engineering expertise that was essential to assessing flood storage capacity and was led by a Certified Ecologist – a team structure that the selection committee appreciated. SMITH developed a project approach that consisted of three phases: Data Gathering, Public Engagement, and Development of Recommendations.

During the Data Gathering phase, SMITH conducted a bathymetric survey of the reservoir to assess sediment deposition and dead storage capacity. A Lidar analysis was conducted to assess live storage capacity, and an ecological site investigation was performed to assess the condition of local vegetation and wildlife. Additionally, SMITH analyzed several years of water quality monitoring data collected and provided by the Broomfield lab.



SMITH participated in a public engagement process that included an “open house” at Plaster Reservoir in the fall of 2020. SMITH prepared a “walking tour” and Google survey that would facilitate community feedback while abiding by Covid-19 restrictions. Afterwards, at the Broomfield Open Space and Trails Advisory Committee meeting, SMITH presented a progress report and solicited feedback from that citizen oversight group.

SMITH developed a draft management plan that consisted of 14 recommendations that were subsequently organized into target phases for implementation. SMITH coordinated with City staff to address comments and questions and made a second presentation to OSTAC. A final draft was produced in February 2021, and OSTAC unanimously approved the document. In 2022, the City and County of Broomfield began to implement recommendations from the management plan.

**Similarities to the proposed Grand Lake SWMP project:** Public meetings and involvement, water management plan, 30% design level drawings prepared in Civil 3D, field investigations and water quality data collection.

### 3.2 LOWER CAPITOL BASIN/PUMPHOUSE PARK STORMWATER TREATMENT WETLANDS

Location – Cheyenne, WY

Client – City of Cheyenne

Reference – Brad Brooks, City of Cheyenne

Contact Information – Phone: (307) 637-6460, Email: [bbrooks@cheyennebopu.org](mailto:bbrooks@cheyennebopu.org)

The City of Cheyenne’s (City) stormwater failed to meet Clean Water Act stream water quality standards as it enters Crow Creek, a perennial stream on the west end of town. Specifically, it failed to meet bacteriological and sediment standards. The City received Brownfields and 319 EPA grants in 2011 to revitalize the downtown with a park that incorporates surface stormwater treatment features.

A stormwater treatment wetland in a park setting was envisioned (see drawing on bottom left of page). The Pumphouse Park stormwater treatment wetland was designed and built as a five-acre park that would remove sediment and E. coli from stormwater flow from the City’s 753-acre watershed using treatment wetlands on City-owned land. The treatment wetlands would provide excellent wildlife habitat, especially for songbirds, waterfowl, and small raptors. The goal of the design was to create a bioengineered forebay, treatment wetland, parking lot, bridge and trail system in a park setting, having native wetland and upland native plant communities. The project site was a vacant lot except for the abandoned Pumphouse building.

The system now removes most of the TSS, Total P, and E. coli in stormwater coming from Cheyenne’s downtown area. The final design was stamped by SMITH’s Wyoming P.E. and SMITH’s Professional Wetland Scientist (PWS). SMITH provided construction inspection services during construction.

The project design elements included a sediment removal forebay, a constructed wetland, and a micro pool. The flow was regulated by a diversion structure that brings the two-year design storm into the stormwater treatment system but would maintain the higher flows in the existing storm sewer. The design target for the system was more than 50% sediment removal and a measurable reduction in the E. coli levels. The system’s hydrology created intermittent surface flooding and an elevated water table by diverting a small amount of runoff from a very large urban watershed into a small wetlands system. As a part of this portion of the project, SMITH updated the City’s EPA SWMM model in order to integrate the new hydraulics created by this project into the model.



Before finalizing design, SMITH conducted a subsurface investigation in which soil samples were collected and analyzed for RCRA metals, volatile organic compounds (VOC, and polynuclear aromatic hydrocarbon (PAH). All three parameters were found to be above ecological assessment risk-based screening levels (RBSL). SMITH prepared a Materials Management Plan that required screening of the soils for RCRA metals, VOC, and PAH as they were excavated to ensure that pockets of contaminated soil

were excavated and disposed of according to Wyoming Department of Environmental Quality (WDEQ) regulations.

SMITH’s plan required that soils below ecological assessment RBSL were to be used in the wetland planting areas. Soils that had contaminant concentrations above ecological assessment RBSL and below industrial soil RBSL were placed on site in non-wetland areas and capped with clay or asphalt (parking lot). Soils that were found to contain contaminants more than industrial soil RBSL were segregated and hauled off-site to a hazardous materials landfill for disposal.

In 2016-2017, SMITH completed the following project milestones to fulfill project objectives:

1. Site Investigation and meeting with the WDEQ to review site contamination data and develop a Materials Management Plan
2. Hydrologic and hydraulic data gathering and analyses
3. Update the Lower Capitol Basin EPA SWMM Model to accurately reflect the sediment trap/treatment wetland
4. Design of a forebay inlet, treatment wetlands, outlet pool, outlet stormwater pipe
5. Integration of trail and formal design features with the forebay inlet, treatment wetlands, outlet pool, and outlet stormwater pipe that are consistent with the vision of the downtown area
6. Provide construction inspection services during construction
7. Make design and construction task scheduling decisions based on the schedule due dates

At one of the Open House meetings to solicit input from the public (see picture below), Brandon Cammarata, AICP, Director of Planning for the City said, **“Thanks for coming up for the open house. I thought it went very well. The presentation boards looked great.”**



The project was built in the spring/early summer of 2017, where SMITH provided construction inspection services. These services included inspection of site features such as the forebay, treatment wetland, stormwater diversion structure, and park trails to confirm compliance with project specifications. SMITH provided extensive guidance to the construction firm installing the treatment wetland to ensure that site hydrology conditions were conducive to wetland planting

establishment. The results of the first round (2018) of water quality sampling demonstrated the resounding success of the project, with over 90 % removal of TSS, Total P, and fecal coliform.

**Similarities to the proposed Grand Lake SWMP project:** Public meetings and involvement; SWMP; identification of appropriate BMPs and their location; 30%, 60%, 90% and 100% design level drawings prepared in Civil 3D, and construction documents; soil borings, land surveying, and field water quality investigations; and water quality data collection. Photos of the project can be found on the pages that follow.

Below: trails, treatment wetland and bridge looking N From the south-central part of the project area – before and after construction, and in 2020.



Below: diversion structure, forebay, and bridge from the SE corner of the site, looking north – before and after construction, and in 2020.



Below: Treatment wetland from the central portion of the project area, looking west toward the Pumphouse – before and after construction, and in 2020.



**3.3 COAL CREEK CANYON-REACH 12 DESIGN AND BUILD**

*Location – Jefferson County, CO*  
*Client – Coal Creek Canyon Watershed Partnership*  
*Reference – Jackie Daoust, former Watershed Coordinator*  
*Contact Information – Phone: (908) 303-4339, Email: jackiedaoust@gmail.com*

The Coal Creek Canyon Reach 12 (CCCR12) stream restoration project (in Beaver Creek) was sponsored by the Coal Creek Canyon Watershed Partnership (CCCWP) and funded by a HUD Community Development Block Grant for Disaster Recovery (CDBG-DR) administered by the Colorado Division of Homeland Security and Emergency Management (DHSEM). This project added flood conveyance and protection and restored riparian habitat for homes and properties along Beaver Creek, a tributary to Coal Creek beginning at State Hwy 72 and extending upstream for approximately 3,550 feet to the confluence of Beaver and South Beaver creeks. Seventeen properties received direct benefit from stream improvements in this area, which will help to manage flow adjacent to Twin Spruce Road where emergency access is needed.

For this project, the SMITH team completed 35% and 65% plan and profile design and the team built the project to: 1) add resiliency to the stream and improve water quality, 2) increase the level of safety for the residents by removing remaining flood debris, 3) improve stream capacity, and 4) add culvert capacity beneath Joanie and Burland Roads.

The SMITH design included: 1) laid back near vertical channel banks to reduce bank erosion, 2) established a native/riparian wetland mitigation area (shown below), 3) sized the channel and culverts to withstand an increased level of stormwater flows, 4) established a riparian plant community along the stream to improve water quality, and 5) created



additional terraces to handle increased flows. Additionally, it created a more natural channel bottom with log vanes and bank side vegetation to improve fisheries habitat. This design provides increased channel stability during storm events, reduces erosion potential, and increases sediment control through the stream thereby improving overall water quality.

Immediately after contract execution, the team met with stakeholders, focusing on building support from the direct landowners involved. This included affected property owners, Jefferson County, CDOT, and other community members impacted by the project. In concert with the CCCWP, the team engaged in a combination of short presentations and many one-on-

one meetings to landowners to present the larger vision of the restoration planning goals, combining individual requirements for each property.

A general concept plan was prepared before these meetings by the design team to show options and gain support prior to moving forward with the 35% level design. Gaining buy-in from the landowners was one of the highest priorities for the project. The SMITH design team updated current information published by the Watershed Master Plan, CWCB, and Jefferson County regarding project hydrology and ongoing floodplain updates conducted by the CWCB. This information along with updated project base mapping was utilized to evaluate existing flood hazards in the stream corridor. HEC-RAS analysis was used for hydraulic modeling purposes. A significant value in the early interaction between the designer and landowner was the selection (or elimination) of viable alternatives. Alternatives that would require a CLOMR or LOMR were avoided because the County did not want a rise at any of the properties. For the concept plans, we considered a full spectrum of engineering solutions, streamside enhancements, and resiliency features for Beaver Creek. The solutions were compared not only on their ability to reduce flood hazard but also to control project costs, improve stream ecology, maintain, or

improve water quality, add resiliency to the stream, be acceptable to Jefferson County, and accommodate other multi-objective goals associated with the community's needs.

During construction, SMITH was responsible for all aspects of revegetation and erosion control management on this project, including erosion control inspection, updating of the EC notebook, and installation of 2,000 LF of sediment control log and 1,800 SY of erosion control blanket.



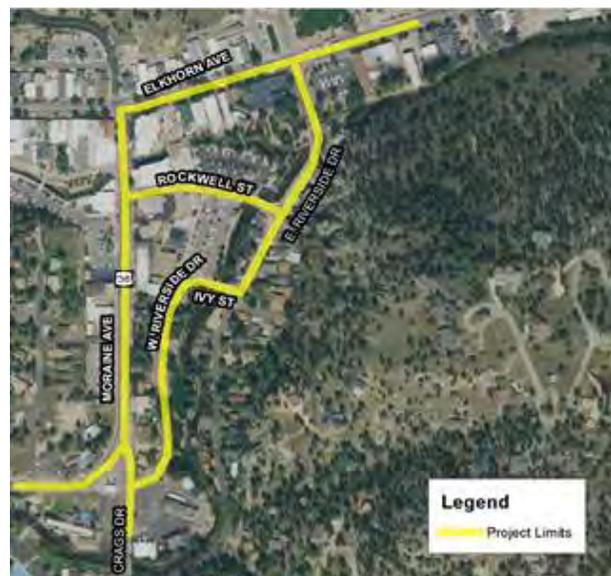
For the revegetation effort, SMITH was responsible for seeding about 1.5 ac of wetland and riparian areas, installing about 2,600 wetland plant plugs and willow cuttings, planting about 300 shrubs and trees, and field engineering last minute landowner requests. SMITH also provided construction inspection of earthmoving activities. Post construction, SMITH provided supplemental watering of upland plants, weed control services, and maintenance and/or replacement of dead trees or shrubs during the one-year warranty period, and completed the monitoring and maintenance report.

**Similarities to the proposed Grand Lake SWMP project:** Public meetings and involvement; identification of appropriate BMP's and their location; SWMP; 30% and 60% design level drawings prepared in Civil 3D and construction documents; soil borings, land surveying, and field water quality investigations; and water quality data collection.

### 3.4 ESTES PARK LOOP ROAD

*Location – Estes Park, CO*  
*Client – Flatiron Constructors, Inc.*  
*Reference – Justin DuMond*  
*Contact Information – Phone: (303) 994-1161,*  
*Email: JDumond@flatironcorp.com*

The Downtown Estes Park Loop Road Project consisted of the reconstruction and rehabilitation of 2.3 miles of urban streets in downtown Estes Park. The project also included construction of new storm sewers throughout the project area and bridge construction. SMITH was contracted by Flatirons Constructors, Inc. to develop a Stormwater Pollution Prevention Plan (SWPPP) – commonly known as a SWMP in Colorado – for the project.



The SMITH team designed a plan to suit the unique geography, erosion characteristics, existing stormwater infrastructure, and water quality issues of Estes Park. The SMITH engineering team carefully selected the proper BMPs to protect the nearby park, Big Thompson River, and developed areas from erosion and sedimentation during construction activities. The SWMP was stamped by Jonathan Diller, PE, CFM, the approved SWPPP/SWMP Developer. The SWPPP designed by SMITH was approved by the Federal Highway Administration on the first submission, without revisions.

**Similarities to the proposed Grand Lake SWMP project:** SWMP planning and design in a high elevation, high snowfall area. The project was federally funded but required a design appropriate for a town at high elevation. The design for this project took careful consideration of the Big Thompson River running through the project area.

**3.5 REGIONAL GROUNDWATER MODEL OF THREE AQUIFER STORAGE & RECOVERY (ASR) SYSTEMS**

*Location – Colorado*  
*Client – South Metro Water Supply Authority*  
*Reference – Erik Jorgensen, P.E.*  
*Contact Information – Phone: 720.934.7391*  
*Email: erikjorgensen@southmetrowater.org*

INTERA has supported South Metro Water Authority to secure funding for development of a regional groundwater model of ASR for three water providers: Centennial Water & Sanitation District, Town of Castle Rock and East Cherry Creek Valley Water & Sanitation District. The project cost for Phase I of this project is \$199,000 which entails (1) data collection and identification of data gaps, (2) development of a conceptual groundwater model for three ASR systems, and (3) documentation.

The funding sources were Metro Basin Roundtable Water Supply & Reserve Fund and the Statewide Water Supply & Reserve Fund. INTERA researched funding sources, wrote grant applications, coordinated with CWCB and Metro basin roundtable, wrote the grant application, represented the client at meetings and interview, secured the funding and managed the work as required by CWCB guidelines.

The South Metro Conceptual Model will include the compilation of a broad spectrum of technical data including groundwater levels; aquifer properties such as transmissivity, hydraulic conductivity, well yields; location of wells and neighboring wells; operational capacity; and delivery limitations. These data will form the technical platform necessary to develop and calibrate a numerical model (to be developed in Phase 2). The numerical model will be constructed to simulate ASR operations in the three designated Hubs. Modeling scenarios will be developed to further understand the opportunities and limitations of a multi-hub integrated ASR system in the South Metro area.

**Similarities to the proposed Grand Lake SWMP project:** Identification of funding opportunities for municipal entities and assistance in securing necessary funding.

## 4.0 TEAM MEMBER QUALIFICATIONS

The following pages of the proposal explain why the SMITH team is highly qualified to provide the services required under this contract.

### 4.1 FIRM BIO

Established in June of 2000, SMITH is a woman-owned, full-service environmental consulting and construction firm providing a wide range of environmental consulting, engineering, design, permitting, and construction services. The SMITH team consists of water resources engineers, environmental scientists, industrial hygienists, field technicians, and support staff, all who carry the necessary licenses and certifications to perform the services required under this contract. Some of the reasons that the SMITH team is the best choice to be the Town's consultant:

- We are ready to start working with the Town on this contract immediately.
- The SMITH team delivers a problem-solving approach to its projects and mobilizes quickly to perform tasks, delivering results and meeting project requirements on time and on budget.
- Our subconsultant has the proven ability to locate and obtain state and federal funding for projects of a similar size and scope, and our teams have a history successfully working together on municipal projects.
- SMITH has an experienced in-house staff, including:

Professional Engineers (PE), Certified Floodplain Manager (CFM), Certified Professional in Erosion and Sediment Control (CPESC), Professional Wetland Scientists (PWS), Certified Professional Soil Scientist/Soil Classifier (CPSS/SC), Certified Ecologists (CE), Certified Asbestos Building Inspectors (CABI), Certified Hazardous Materials Manager (CHMM), Air Monitoring Specialist (AMS), Colorado Department of Public Health and Environment (CDPHE) certified Project Designers (PD), certified Transportation Erosion Control Supervisors (TECS), AutoCAD and Land Desktop design specialists, and revegetation specialists.

The multidisciplinary SMITH team has the capabilities and skills to complete every task outlined in the Town's RFP. This team can address a broad range of environmental issues and there's a strong rapport across discipline lines allowing for effective coordination amongst the entire team. These capabilities translate into direct benefits for the Town; we share experiences and connect internal expertise to create responsible, sustainable, and cost-effective solutions. By relying on this in-house knowledge and by teaming with a subconsultant we've successfully completed projects with in the past, this team is able to respond quickly and consistently to tasks, which in turn will help us to efficiently and effectively meet the Town's objectives.

Many of our competitors claim to be full-service but don't offer the breadth of services that we do. From the simple—such as water sample collection and analysis—to the complex—such as preparation of a remediation design and implementing it, preparation and implementation of SWMPs, MS4 compliance, NEPA document preparation, public outreach and meetings, water quality assessments and reports, and Biological Assessments—we do it all!

## **4.2 COMPANY TECHNICAL RESOURCES**

As illustrated by the following list of SMITH's available equipment and software, this team has the necessary technical resources to perform the tasks required under this contract in a timely manner and while meeting budget constraints.

### **4.2.1 Ecological Services Equipment**

- GPS units
- Bird calling devices
- Walkie talkies
- Binoculars and a stereo dissecting scope
- Balances and weighing devices
- Weed whackers
- Soil grinder to prepare soil samples for the laboratory
- Air compressor and tank

### **4.2.2 Professional Services Equipment**

- Land surveying equipment - survey transit, level, and height rods
- Self-contained breathing apparatus
- Many respirators and respirator cartridges
- Several digital cameras
- Specific conductance and temperature meters
- Geiger Counter
- Air quality meters
- Photoionization detector
- Air monitoring pumps
- Guelph Permeameters
- Radon detectors
- pH meters

### **4.2.3 Construction Equipment**

- 11 pickup trucks - one ton through half ton, some with flat beds
- Two skid steers with post hole auger, straw blower, jack hammer, and trencher attachments
- Mini excavator
- John Deere tractor with seed drill, harrow, and disc attachments.
- Straw blower cannon
- FINN T120 Hydro Seeder
- Two trenching machines
- ATV with weed spraying booms and attachments
- Welding machine
- Standard workbench areas with vices and grinders

- Four chainsaws
- John boat and motor
- 4- to 6-man rubber rafts
- Dewatering pumps and hoses
- Generators
- Backpack weed sprayers
- 1,600-gallon water trailer and pump
- Rock sock making device
- Several water tanks ranging from 300-gallon to 1,600-gallon capacity
- Four cargo trailers
- Two long gooseneck trailers
- Long bumper hitch trailer
- Dump trailer
- Silt fence installer
- Plate and jumping jack compactors

#### 4.2.4 Software

- Adobe Acrobat
- Adobe Creative Cloud – includes Photoshop, InDesign, Illustrator, Acrobat, Lightroom, Bridge
- ArcGIS Desktop
- AutoCAD Civil 3D
- Bluebeam
- Microsoft Office 365
- Microsoft Project
- QuickBooks Premier (accounting)
- QuickBooks Time

### **4.3 COMPANY FINANCIAL RESOURCES**

As an indication of SMITH's financial strength and capacity, the firm currently has approximately \$3.8 million in business under contract for the next 15 months. We maintain a sufficient line of credit to ensure materials can be bought when needed on construction projects. We own over \$2 million in equipment and trucks used on construction projects. Subcontractors are paid within 7-10 days after SMITH is paid by the client.

### **4.4 KEY PROJECT PERSONNEL**

SMITH offers the Town an outstanding, highly qualified team with comprehensive, multidisciplinary capabilities to address all tasks under this contract. Led by Peter Smith, Principal and Senior Environmental Scientist with over 44 years of experience on nearly 2,400 projects in Colorado and the western United States, SMITH is comprised of a 35-member team that is highly experienced working with municipalities and has extensive experience providing similar services to those required under this contract, as illustrated by this team's project experience in the previous section of this proposal.

**4.4.1 Key SMITH Staff**

The following individuals are the key SMITH personnel that will be involved in the resulting contract:

- Peter L. Smith, CPSS/SC, SPWS, CPESC, and PIC
- Jonathan Diller, PE, CFM, and PM
- Ridwan Naife, PE and Assistant PM
- Rebecca Hannon, CE, Environmental Scientist III and GIS Specialist
- Cecilia Eargle, Environmental Engineer II and AutoCAD Specialist
- Jacob Kriska, EIT, Environmental Engineer I and AutoCAD Specialist
- Dejan Smaic, PG, Hydrogeologist and Environmental Scientist III

The proposed team for this contract has more than 160 years of combined experience and has worked on more than 200 projects together in the last seven years. This synergy—combined with SMITH’s 22-year history and experience creating SWMPs—makes SMITH an excellent choice for the Town’s consultant under this contract.

Jonathan Diller will serve as SMITH’s PM and the Town’s principal point of contact under this contract. He has 45 years of experience as a Water Resources Engineer and Certified Floodplain Manager. Mr. Diller has completed many stormwater management plans and has extensive experience managing municipal contracts. He can be reached via phone at (815) 530-6243 (mobile) and via email at jonathandiller@smithdelivers.com.

**4.4.2 Subconsultants**

For this contract, SMITH will partner with our trusted subcontractor, INTERA. We have worked with them on past projects and hold them in high esteem for their expertise locating available sources of state and federal grants and loans. A brief introduction to INTERA is below.



**INTERA** is an employee-owned geosciences and engineering consulting firm founded in 1974 that provides solutions to funding, permitting, and environmental issues. INTERA’s staff consists of 225 personnel specializing in environmental engineering, permitting, compliance, and assisting clients in locating and obtaining state and federal funding sources.

Address: 1434 Spruce Street  
 Boulder, CO 80302  
 Phone: (303) 261-8538

**4.4.3 Team Resumes**

Resumes for key project personnel can be found on the pages that follow. The organization of the entire SMITH team is shown in the Organizational Chart in Section 4.4.4.



# Peter Smith, CPSS/SC, PWS, CPESC

## Principal/Senior Watershed Scientist/Erosion Control Specialist/Soil Scientist



As a SWMP Specialist, Mr. Smith's qualifications as an Watershed Scientist, Erosion Control Specialist, and Soil Scientist includes more than 40 years' experience on 2,500 projects – design only (DO), Design/Build (DB), Design-Bid-Build (DBB), CM/GC, and Build only (BO) – where he evaluated erosion conditions and developed or co-developed the SWMP. On these projects he was Principal-in-Charge (PIC), Project Manager (PM), or lead investigative scientist/designer for SWMPs. Other related studies and designs include Environmental Compliance Plans (ECP); NEPA documents (EAs and CatEx); Phase I/II ESA, remedial investigations; Soil Surveys; Biological Assessments (BA); wetland permitting and mitigation; stream restoration; and erosion modelling using RUSLE. He has authored/co-authored over 3,000 reports and plan sets. He has been PM and/or PIC for 40 years.

### EDUCATION

B.S., Watershed Science (Hydrology), Colorado State University (CSU), 1976  
Graduate coursework (10 credits), Soil and Range Sciences, CSU, 1978-79  
MBA coursework (20 semester credits), University of Denver, 1991-1992

### EMPLOYMENT HISTORY

Smith Environmental & Engineering  
Stoneman-Landers, Inc.  
Camp Dresser and McKee  
Woodward-Clyde Consultants  
Soil Conservation Service, USDA

### PROFESSIONAL CERTIFICATION AND REGISTRATION

- ✓ Certified Professional Soil Scientist/Soil Classifier (CPSS/SC), Soil Science Society of America, No. 1785
- ✓ Certified Professional Erosion and Sediment Control Specialist (CPESC), Soil and Water Conservation Society of America, No. 512
- ✓ Senior Professional Wetland Scientist (SPWS), Society of Wetland Scientist, No. 1273

### Experience Summary

Mr. Smith has managed numerous environmental teams on SWMP projects. He has worked with local municipalities and CDOT extensively and is experienced in obtaining stormwater discharge construction permits. Some of his SWMP related experience is described below.

- ✓ **Mesa County Stormwater, Mesa County, CO** – For this County-wide Stormwater Compliance Notebook, Mr. Smith assisted in the preparation of Minimum Control Measures by developing best management practices (BMP's) for pollution prevention and good housekeeping at county facilities and county maintenance facilities and construction projects.
- ✓ **Cooper Slough, Fort Collins, CO** - Evaluating the effects of adding runoff from the watershed to the north on waterfowl in the slough. Completed a report summarizing literature reviewed; anticipated water quality changes in the slough; potential detrimental effect to waterfowl; and water quality treatment measures to minimize water quality change if waterfowl would be adversely affected by the diversion.
- ✓ **Argo Mine, Boulder County, CO** – on this DB project, he oversaw studies, design, permitting, and construction at the Argo Mine site near Jamestown to 1) reduce leaching and erosion of mine wastes and sediment into Little James Creek, 2) improve water quality in Little James Creek, and 3) decrease the interaction of mine wastes with precipitation and surface run-off. He co-authored the SWMP and SWMP report.
- ✓ **Jessie Mine and Mill Site Water Quality Improvement, Summit County, CO** – On this DB project, he was the PIC responsible for design and construction cleanup measures in accordance with a VCUP permit. He oversaw the design of a new 1,000-ft long, fish-compatible channel; a permanent dewatering/diversion trench; a new berm to divert runoff from the old mill site away from the old channel; construction of wetlands and a riparian ecosystem along the new channel to improve water quality in Gold Run Gulch, a tributary to the Swan River. He co-authored the SWMP and SWMP report.
- ✓ **Pikes Peak Highway Erosion Control and Revegetation, Pikes Peak, CO** - PIC responsible for developing the erosion control plan, the revegetation plan, and overseeing erosion control BMP installation as the construction inspector on this DBB project.
- ✓ **IXL/Royal Tiger Mine and Mill Site Water Quality Improvement, Summit County, CO** - Designed WQ improvement measures in accordance with a Voluntary Cleanup Plan permit. He oversaw the design and construction of buck and rail fencing; topsoil salvaging and stockpiling; a new acid mine drainage water conveyance channel; a check dam downstream of the new channel alignment; revegetation of new channel banks, small open water areas, cut-and-fill slopes; design of runoff treatment wetlands, and an adit run-off diversion ditch to treatment wetlands to improve water quality in the Swan River.
- ✓ **General Storm - Gray's Peak SWMP, Denver, CO** – As PIC he oversaw the preparation and design of a SWMP and SWMP report and obtained the Stormwater Discharge Construction Permit prior to the start of this BO project. Then he oversaw the BMP installations, weekly BMP inspections, weekly discharge sampling, and monthly reporting to maintain SWMP compliance to improve water quality in the S. Platte River.

# Jonathan Diller, P.E., CFM

## Water Resources Engineer



Mr. Diller has over 30 years of experience as a water resources engineer. This includes over 15 years of experience in the preparation of Erosion and Sediment Control Plans (ESCP) and Stormwater Management Plans (SWMP), as well as site inspections to ensure proper implementation of those plans. Mr. Diller also has over 10 years of experience in the preparation of NPDES MS4 programs and permit applications. He brings with him extensive understanding of grant-funded projects specifically, having spent over 8 years as a consultant directly to municipalities and an additional 4 years of grant-funded flood recovery work for nonprofits. Mr. Diller has successfully worked with municipalities to develop engineering solutions that bring together natural habitat, water quality control, and flood control in a manner that provides sustainable and maintainable long-term solutions.

### EDUCATION

M.S. Soil and Water Science, University of Florida, 2018 (Emphasis on Water and Wetlands)  
 B.S. Chemical Engineering, Rose-Hulman Institute of Technology, 1982

### EMPLOYMENT HISTORY

Smith Environmental & Engineering  
 Jonathan M. Diller, P.E.  
 Flood Rebuild Advocate – Lyons Emergency Assistance Fund  
 Floyd Browne Group  
 BA Engineers, Inc.  
 Hanson Professional Service Inc.  
 Robinson Engineering, Ltd.  
 Ruettiger, Tonelli & Associates  
 Paragon Professional Services  
 Resource International, Ltd.  
 Berkley, Howell & Associates  
 Springstead Engineering  
 Rose-Hulman Institute of Technology

### PROFESSIONAL CERTIFICATION AND REGISTRATION

Registered Professional Engineer, CO and WY  
 Certified Floodplain Manager (CFM)  
 Member ASFPM and CAFSM  
 Will County Stormwater Management Committee (Member 1999-2004, Secretary 2005-2007)  
 Editorial Committee Member for Storms and Floods (IAFSM) (2005-2007)  
 Past Chairman National Membership Committee American Institute of Chemical Engineers

### SELECTED PUBLICATIONS

Stormwater Discharge Permitting for Complex Industrial Facilities, presented to the American Institute of Chemical Engineers Summer National Meeting August 20, 1991 (Later published in *Environmental Progress*)

USEPA Office of Water NPDES Stormwater Phase II Rule presented to the Illinois Association for Floodplain and Stormwater Management Annual Meeting March 2001, revised and represented for the March 2002 Annual Meeting

### Experience Summary

- ✓ **Consultant to the Town of Lyons, Lyons, CO** – Tasks included review of internal and external floodplain develop permits, including HEC-RAS models, and review of land development projects in coordination with the Town Engineer.
- ✓ **Flood Rebuild Advocate, Lyons Emergency Assistance Fund, Lyons, CO** – Mr. Diller provided assistance to homeowners in obtaining floodplain development permits, coordinated design issues with insurance companies, including NFIP and private underwriters, and met with homeowners on-site to discuss specific issues with proposed rebuild and/or flood protection activities. This work was performed under a local services grant on behalf of the people of Lyons.
- ✓ **Colorado Springs Utilities, Colorado Springs, CO** – Prepared design drawings and specifications for a constructed wetlands mitigation project for a major utility. Project involved the creation of a wetlands system in the floodplain, which included the design of the ESCP.
- ✓ **The City of Cheyenne, Cheyenne, WY** – Project Manager for the design of a stormwater treatment wetland in an urban area of Cheyenne, Wyoming. The project involved the design of a series of stormwater treatment elements, diversion structure, forebay, constructed wetlands, and micropool for the purpose of reducing sediment load and *E. coli* discharged into the receiving waters. This project was primarily funded by an EPA matching grant, and grant funding coordination was a part of his services.
- ✓ **Various Municipalities in Illinois** – For a span of seven years, Mr. Diller served 20 municipalities in Illinois as their stormwater administrator, providing the review and approval of all design submittals related to stormwater management and the handling of all stormwater permitting issues for the municipalities. This included: the preparation of NPDES MS4 permit applications for the municipalities and compliance programs; the performance and supervision of E&S BMP inspections; the review and approval of SPPP and ESCP for all developments within those communities; and the performance and supervision for the inspection of the BMPs in those plans.
- ✓ **Frankfort Prairie Park, Frankfort, IL** – Project manager for the civil and hydraulic design of the award-winning Frankfort Prairie Park stormwater detention and wetlands/prairie restoration project in Frankfort, IL. This project was entirely grant funded and Mr. Diller became the project manager when a different consultant was having difficulty meeting the grant funding limits. The project was completed on time and on budget.
- ✓ **Tinley Park, Illinois** – Designed a regional stormwater detention system that removed hundreds of acres from the floodplain and prevented the recurrence of flood for over 50 homes. The project created an open water amenity and allowed for the development of prime commercial land along a major highway that had previously been undevelopable because it was in the floodplain and subject to frequent flooding.

# Ridwan Naife, P.E.

## Senior Engineer and Assistant Project Manager



Mr. Naife has over 25 years of experience as a Construction Engineer, Municipal Engineer, and Transportation Engineer with capabilities and experience in the areas of civil and roadway design, including engineering administration and stormwater management. He is experienced in design and construction of a wide variety of projects, including land development (residential, commercial), local roads, bridges, box culverts, and Wastewater Treatment Plants (WWTP). He has the capacity to evaluate and complete financial consideration requirements in a timely manner. Mr. Naife is qualified to provide senior-level knowledge over engineering design and construction in paving, drainage, water, erosion and sediment control, flood control, paving, bridge, sidewalk, water, utilities, wastewater mains, and any other infrastructure improvement projects. He is an expert listed in the International Federation of Consulting Engineers (FIDIC) contract book and in the design and construction of WWTPs.

### EDUCATION

M.S. Civil Engineering, University of Texas at Arlington (In Process)  
 B.S. Civil Engineering, Building and Construction, University of Technology, Baghdad, Iraq

### EMPLOYMENT HISTORY

Smith Environmental & Engineering  
 Texas Department of Transportation  
 RAF Engineering & Construction, LLC  
 City of Dallas Department of Public Works  
 New Mexico Department of Transportation

### PROFESSIONAL CERTIFICATION AND REGISTRATION

Registered Professional Engineer, TX and NM

### SKILLS

AutoCAD  
 CIVIL 3D  
 3D STODIO MAX  
 ADINA  
 MATHCAD  
 ETAB  
 REVIT

### Experience Summary

- ✓ **TxDOT Manuals and Project Guides, Fort Worth, TX** – Mr. Naife coordinated and managed in-house roadway design and review, and reviewed and approved road access requests. He was the Project Coordinator and Project Manager for Local Government Projects (LGP), Local On-System Agreements (LOSA), and Green Ribbon Program.
- ✓ **Roadway Design and Review, Fort Worth, TX** – Worked with TxDOT manuals – the LGPs, LGPs Guide, Roadway Design, ASHTO Green Book, MUTCD, Roadside Design, and Access Management.
- ✓ **Structural Design and Specifications, Plano, TX** – Prepared design and specifications for the building’s structural members, including, but not limited to, cast-in-situ reinforced concrete members, pre-cast members, steel members, and masonry members.
- ✓ **Capital Improvement Projects, Dallas, TX** – Project Manager for City of Dallas Public Works design and construction contracts for paving, streetscape, alley, drainage, flood control, bridge, sidewalk, erosion control, and other infrastructure improvement projects. Engaged and collaborated with other departments within the City. Communicated with citizens, council members, developers, and other City departments regarding project status.
- ✓ **City of Dallas Public Works SWMPs, Dallas, TX** – Mr. Naife developed, designed, and reviewed engineering plans for drainage, erosion control, and Stormwater Pollution Prevention Plans (SWMPs). Ensured that the proposed infrastructure improvements were following city, state, and federal standards.
- ✓ **Asphalt Overlay and Bridge Replacement, Deming and El Paso, NM** – Conceptualized and designed 20-mile asphalt overlay project on I-40 in Deming, NM, and the replacement of a bridge in El Paso, NM, for the New Mexico Department of Transportation (NMDOT). He used AutoCAD and Civil 3D to prepare design plan sets projects.
- ✓ **Fiber Optic Cable Installation, Santa Fe, NM** – Prepared the design plan set for a fiber optic cable project near Santa Fe for the NMDOT ITS group.
- ✓ **Design Plan-Set for BNSF Bridge Replacement and Concrete Box Culvert Replacement, Belen and Gallup, NM** – Using Civil 3D he produced the complete plan-set for a bridge replacement – bridge over the BNSF railroad tracks in Belen, NM. He also completed the design of a concrete box culvert for downtown Gallup, NM.

# Rebecca L. Hannon, CE

## Environmental Scientist III and GIS Specialist



Ms. Hannon has 12 years of experience as an environmental scientist and project manager specializing in environmental compliance and permitting. She is proficient with ArcGIS spatial software, including in the use of GPS equipment to capture the location of natural resources and in the spatial analysis of natural resource layers. Her experience includes NEPA documentation, wetland delineations, habitat suitability assessments for threatened and endangered species, small mammal trapping, bird surveys, and noxious weed surveys and removal. She has participated in municipal scale planning projects, serving as a technical expert while also engaging the public. As a project manager, she is responsible for the preparation of cost proposals, client communication, task scheduling, and quality control/quality assurance.

### EDUCATION

*B.S. Natural Resources Management  
Minored in Spanish and Conservation  
Biology, Colorado State University,  
2009*

*Master of Natural Resource  
Stewardship,  
Colorado State University, currently  
enrolled*

### EMPLOYMENT HISTORY

*Smith Environmental & Engineering  
Missouri River Communities Network  
Colorado State University Office of  
Admissions  
Johnson County Parks and Recreation  
District*

### PROFESSIONAL CERTIFICATIONS

*Certified Ecologist (CE), 2020  
Certified Operator, Forest, Aquatic,  
Industrial and Right-of-Way, and Public  
Health, Colorado Department of  
Agriculture, #26278, 2020  
Adult, Child, Infant CPR/AED, 2018  
Standard First Aid, 2018  
OSHA – 40-Hour HAZWOPER, 2012  
OSHA – 10-Hour Training for the  
Construction Industry, 2011*

### TRAININGS

*Functional Assessment of Colorado  
Wetlands (FACWet), 2015  
Colorado Native Plant Master, 2014  
City of Columbia TreeKeepers  
Program, 2010  
City of Columbia Aquatic Restoration  
Program, 2010  
Missouri Stream Team Program,  
2009-2010*

### Experience Summary

- ✓ **Plaster Reservoir Management Plan, Broomfield, CO** – Fulfilled dual role of Project Manager and Lead Ecologist for the development of a management plan for Plaster Reservoir and its associated open space. Participated in a public open house and in three presentations to the Broomfield Open Space and Trails Advisory Committee.
- ✓ **DEN Peña Seep, Denver, CO** - Served as lead GIS technician. Coordinated with DEN staff to identify and acquire relevant data layers for use by the engineering and modeling team.
- ✓ **Central Park Boulevard, Denver, CO** - Developed an innovative GIS approach to address prairie dog relocation requirements for CDOT, using parcel data to identify suitable properties and identify landowners.
- ✓ **Frederick Groundwater Investigation, Frederick, CO** – Served as lead GIS technician. Coordinated with project engineers, hydrologists, and Town staff to identify and acquire relevant data layers.
- ✓ **US40 (Colfax) Resurfacing, Denver, CO** - Developed an innovative GIS approach to identify landowners adjacent to a road improvement project. Generated a list of over 4,000 addresses requiring public notification in under an hour, a task that had previously taken days.
- ✓ **Monument Creek Master Plan, El Paso County, CO** - Provided GIS consultation services for the development of the Monument Creek Watershed Restoration Master Plan. Described the ecological and regulatory significance of selected GIS layers and assessed impacts to environmental resources at proposed project areas.
- ✓ **Longmont Wildlife Management Plan, Longmont, CO** – Developed an update to the current Wildlife Management Plan for the City of Longmont as the original document was adopted in 2006. Attended public planning meetings during preparation of the document to ensure the update was responsive to community concerns. Coordinated with a technical advisory team of representatives from the City, County, and CPW.
- ✓ **CCOB Raptor Management Plan, Broomfield, CO** – Serves as assistant project manager for this unique management plan effort. Rebecca developed content and mechanisms for engaging the public in the development of the management plan and will be authoring several sections of the final plan document, notably sections regarding existing regulations and proposed actions for raptor protection at various public and private levels. Rebecca has participated in formal before the Open Space and Trails Advisory Committee.
- ✓ **Georgetown Loop Railroad, Clear Creek County, CO** – Prepared GIS mapping of fire management zones along the Georgetown Loop Railroad. Assisted History Colorado and Historic Rail Adventures in the bidding process and served as a contact for the forestry consultant that was selected to implement the management plan. Marked significant cultural resources in the management areas to prevent damage. Completed monitoring transects following mitigation activities to ensure that management criteria were met.



# Dejan Smaic

## Senior Hydrogeologist/Geochemist, Environmental Scientist III



Mr. Smaic has more than 30 years of experience as a Hydrogeologist/Geochemist working for industry and as a consultant. His comprehensive understanding of groundwater-geologic conditions relationships, subsurface drilling methods, geochemical behavior of contaminants in the environment, and construction experience provides the basis for him to conduct subsurface investigations at contaminated sites and develop and implement remediation strategies to fulfill cleanup and reclamation goals for a wide range of contaminants including chlorinated solvents, PFOs/PFAs, petroleum, hydrogen sulfide (H<sub>2</sub>S), and gasoline. He has prepared a wide range of technical reports including Phase I and Phase II ESAs, Sampling and Analysis Plans, Quality Assurance Plans, Corrective Action Plans, and Risk Assessments for private and public clients: mining and oil and gas companies, USACE, DOD, COGCC, CDPHE, OPS, school districts, and municipalities throughout CO and WY. He has managed professional investigation and remediation crews. He is also a highly skilled professional photographer.

### EDUCATION

B.S. Geology, State University of New York (SUNY) at Buffalo, 1990  
 Graduate Coursework, Hydrogeology/Clay Mineralogy, 8 credits, SUNY at Buffalo, 1991

### EMPLOYMENT HISTORY

Smith Environmental & Engineering  
 Bureau Veritas of North America  
 Tanaq Environmental, LLC  
 Halliburton - Baroid  
 Baker Hughes, Inc.  
 Walsh Environmental Scientists & Engineers, LLC  
 Handex of Colorado

### PROFESSIONAL CERTIFICATION AND REGISTRATION

- ✓ OSHA 29 CFR 1910.120 Certified
- ✓ Safe Land Training
- ✓ H<sub>2</sub>S Awareness Training
- ✓ State of Tennessee Professional Geologist, Registration #5383 (currently expired)
- ✓ State of Colorado Registered Environmental Scientist, #5622
- ✓ 30 Hour OSHA Construction Supervisor

### MILITARY

Operation of military equipment- armored personnel carriers and other military vehicles.

### CONSTRUCTION EQUIPMENT EXPERIENCE

Forklift  
 Bobcat

### Experience Summary

Mr. Smaic has provided services as Hydrogeologist and Geochemist on hundreds of consulting and industry projects. A description of some of his projects are presented below.

- ✓ **1661 E 77<sup>th</sup> Ave, Denver, CO** – Mr. Smaic provided field activity oversight and report preparation and overview for the Phase I and Phase II ESAs on this 10-acre property.
- ✓ **58<sup>th</sup> Ave Improvements (Wash to York), Denver, CO** – Provided technical support for this Phase II ESA in Adams County and Denver. Assisted in preparation of reports, HASP, and MMP.
- ✓ **Lead Based Paint Removal Monitoring, Various Locations, WY** – Coordinated and monitored LBP-removal contractors to ensure no environmental or health hazards were created. Performed waste characterization sampling of the debris and coordinated disposal. Prepared analytical reports for WYDOT.
- ✓ **Fort Lupton Mining Properties, Fort Lupton, CO** – Part of the SMITH team that performed a Phase I ESA of this 430-acre property which identified several RECs. Currently performing Phase II ESA on select properties, which includes up to 165 soil borings to collect soil and groundwater samples for testing and analysis.
- ✓ **Several Phase I ESA Sites Near Longmont, CO** – Project Manager who conducted and managed Phase I ESAs. His responsibilities included site visits and report writing using Querie.
- ✓ **PFAS Groundwater Treatment System Decommissioning, Homestead Air Force Base, ID** – Oversight of the decommissioning of a PFAS groundwater treatment system. The remediation system was an activated carbon filtration system treating a potable water well system serving the Air Force Base.
- ✓ **Groundwater Systems Upgrade, Peterson Air Force Base, CO** – Oversight of the upgrade of a activated carbon unit treating PFAS contaminated groundwater at the Peterson Air Force Base golf course facility.
- ✓ **Groundwater Sampling, Norfolk Naval Base, VA** – Groundwater sampling for various contaminants in groundwater associated with the development, testing, and storage of naval munitions.
- ✓ **Ruby Pipeline Surface Groundwater Testing and Sampling – Various Sites in Nevada, Oregon, and Wyoming** – Mr. Smaic provided environmental monitoring and compliance. Performed surface groundwater testing and sampling.



# Cecilia Eargle

## Environmental Engineer II and AutoCAD Specialist



Ms. Eargle is a determined engineering professional with over four years of experience aiding clients with various due diligence reports in the civil and environmental fields and performing environmental consulting and environmental engineering. She is highly adaptable and dedicated to providing thorough, error-free data and quality service.

She has provided over 150 Phase I and II ESAs, asbestos inspections, noise modeling reports, Stormwater Pollution Prevention Plans (SPPPs), and has performed Construction Materials Testing (CMT) for asphalt and concrete. She has also completed endangered species reports and is proficient in GIS, AutoCAD, and Civil 3D. She maintains best practices in city, state, and federal regulations/laws. Ms. Eargle currently works with both

the Industrial Hygiene and Engineering groups at SMITH, where she has completed park designs, residential plot designs, and SWMPs.

### EDUCATION

Clemson University – Bachelor of Science  
in Biosystems Engineering  
Emphasis in Ecological Engineering  
Minor in Sustainability

### EMPLOYMENT HISTORY

Smith Environmental & Engineering  
July 2022 – Present

EAS Professionals  
May 2018 – May 2022

### PROFESSIONAL CERTIFICATION AND REGISTRATION

- ✓ Certified Mold Professional
- ✓ Certified Erosion Prevention & Sediment Control Inspector (#15142), SCDHEC
- ✓ Asbestos Inspector (BI-001966), SCDHEC
- ✓ Radiation Safety Officer Certification, APNGA
- ✓ Portable Nuclear Gauge Safety & U.S. DOT Hazmat Certification, APNGA

### SKILLS AND EQUIPMENT USE

GIS, ArcGIS, and ArcGIS Pro  
AutoCAD  
Civil 3D  
GPS equipment

### Experience Summary

- ✓ **Mir Park, Glendale, CO** – Aided in creating a conceptual design used to improve a pre-existing community park using CAD Software.
- ✓ **Estes Park Loop Road, Estes Park, CO** – Aided in drafting civil construction plans and details with AutoCAD, including ESCPs, for roadway construction and realignment.
- ✓ **Marston Lake Phase I, Denver, CO** – Drafted ESCPs for storm sewer construction to receive proper construction stormwater permits from the City and County of Denver (CCD) and CDPHE.
- ✓ **29th and Speer Sanitary Sewer Improvements, Denver, CO** – Drafted ESCPs for sanitary sewer reconstruction and re-grading of a roadway intersection.
- ✓ **Croke Reservoir, Northglenn, CO** – Drafted conceptual park improvements using CAD Software.
- ✓ **58th Ave Improvements (Washington to York), Denver, CO** – Conducted a Phase II ESA of East 58th Avenue from Washington Street to York Street in Adams County and Denver. Helped to create the HASP and MMP. Monitoring the air quality and water quality to keep the project compliant with SDCP requirements. (2022)
- ✓ **Phase I ESA, Fort Lupton, CO** – Conducted a Phase I ESA for a 300+ acre property consisting of eight separate parcels. analyzed current and former environmental hazards, including 27 on-site oil wells from former oil production activities.
- ✓ **Phase I ESA, Longmont, CO** – Conducted Phase I ESA from start to finish, including making site observations and interpreting historical information to make an accurate judgement on potential environmental impacts on project site.
- ✓ **Environmental Monitor for LBP Removal, WY** – Monitored environmental safety procedures during lead-based paint (LBP) removal activities for Wyoming Department of Transportation (WYDOT) in locations such as Guernsey, WY; Buffalo, WY; Riverside, WY; and Douglas, WY.



# Jacob Kriska, EIT

*Environmental Engineer I and AutoCAD Specialist*



Mr. Kriska has diverse experience in the fields of engineering, construction management, and environmental sciences. He is an Engineer in Training with a construction background that gives him a well-rounded understanding of the projects he is involved in. Mr. Kriska is a University of Colorado Boulder graduate, where his studies focused on water resources engineering and treatment. He is currently working with both the Engineering group and the Construction group at SMITH, with a focus on engineering design and creating cost models for temporary and permanent erosion control measures. Mr. Kriska is qualified to analyze data, design Stormwater Management Plans (SWMP), perform noise modeling, prepare reports, and draft construction plans using AutoCAD and Civil 3D.

### EDUCATION

B.S., *Engineering Plus* – May 2022  
*Environmental Emphasis, University of Colorado, Boulder, Colorado*

### EMPLOYMENT HISTORY

*Smith Environmental & Engineering*  
*Dacono, CO, March 2022 - Present*

### PROFESSIONAL CERTIFICATION AND REGISTRATION

- ✓ *CDOT SWMP Administrator of Design, No. BCDE8469*
- ✓ *Registered Engineering Intern, No. EI.0078507*

### CONTINUING EDUCATION

- ✓ *Fundamentals of Engineering Exam (Civil)*

### Experience Summary

Mr. Kriska has provided engineering services on many projects. A description of some of these projects is presented below.

- ✓ **Elbert Bridge Deck Rehabilitation, El Paso County, CO** – Completed the SWMP to obtain the proper permitting for the Elbert Bridge rehabilitation project. Utilized GIS programs to predict the greatest potential for pollution discharge into Black Squirrel Creek.
- ✓ **Brush Paving Projects, Brush, CO** – As the SWMP Designer, completed a SWMP in order to receive proper stormwater permitting for roadway construction in Brush, Colorado through the Colorado Department of Public Health & Environment (CDPHE). Selected appropriate control measures for preventing pollution in water runoff to local receiving waters and the municipal stormwater drainage system.
- ✓ **Estes Park Loop Road, Estes Park, CO** – As the SWMP Designer, drafted Erosion and Sediment Control Plans (ESCP) for roadway construction and realignment to receive proper stormwater permitting through CDPHE.
- ✓ **Marston Lake Phase I, Denver, CO** – As the SWMP Designer, drafted ESCPs for storm sewer construction to receive proper construction stormwater permits from the City and County of Denver (CCD) and CDPHE.
- ✓ **29<sup>th</sup> and Speer Sanitary Sewer Improvements, Denver, CO** – As the SWMP Designer, drafted ESCPs for sanitary sewer reconstruction and re-grading of a roadway intersection.
- ✓ **Mir Park, Glendale, CO** – As an Engineer in Training, drafted civil construction plans and details with AutoCAD, including ESCPs, for park improvement design.
- ✓ **Rico Mine Constructed Wetlands Expansion, Rico, CO** – As an Engineer in Training, drafted pipe network and construction details using Civil 3D for design of wastewater treatment system addressing contaminants in runoff from this collapsed mine.
- ✓ **Bates-Logan Park, Englewood, CO** – As an Engineer in Training, revised civil construction drawings with AutoCAD and calculated runoff of a 100-year storm event to determine required detention volume to accommodate increased impervious area.
- ✓ **City Park, Denver, CO** – As an Engineer in Training, revised construction drawings according to comments from the CCD Department of Parks & Recreation (DPR) for design of a pump station to be constructed at Ferril Lake.

**Shaden Musleh, PE**  
Principal Water Resources Engineer



**Years of Experience:** 26

**Education:**

- MS, 2001, Water Resources/Irrigation Engineering (Emphasis on effect of grid size and digital simulation of groundwater flow), Utah State University
- BS, 1994, Agricultural Engineering, Soil and Irrigation, University of Jordan

**Professional Registrations/Affiliations:**

- Metro Basin Roundtable, At-Large Member
- Certified Project Manager, 2008
- Professional Engineer, CO, 2008 (#42368), NM, 2007 (#18110)
- Member, Colorado River Water Users Association
- Member, Colorado Water Congress
- Member, Colorado Groundwater Association
- Member, American Water Resources Association, CO Section
- Member, International Association of Hydrological Sciences

**Professional History:**

- 2018 – Present Principal Water Resources Engineer – INTERA Incorporated, Boulder, CO
  - 2016 – 2018 Principal Water Resources Engineer – Summit Water Consulting, Broomfield, CO
  - 2015 – 2016 Senior Project Manager – Hydros Consulting, Boulder, CO
  - 2004 – 2015 Group Manager & Senior Project Manager – Hydrosphere Resource Consultants, acquired by AMEC Foster Wheeler (now WSP USA), Boulder, CO
  - 2002 – 2004 Geohydrologist – URS Corporation (now AECOM), Denver, CO
  - 2001 – 2002 Project Engineer – Waterstone Environmental Hydrology and Engineering, Boulder, CO
  - 1996 – 2001 Graduate Assistant, Systems Simulation/Optimization Lab – Irrigation Engineering Department, Utah State University, Logan, UT
- OSHA Hazardous Waste Operations, (40-Hour)



Shaden Musleh is a licensed professional engineer, a project manager and a leader with extensive and broad professional experience in water resources engineering, planning, and management. He has developed cooperative solutions to water resources problems in multi-party settings and has led and managed numerous large-scale projects that involved providing management solutions to complex water resources problems.

**Representative Projects**

**Groundwater Model of ASR System, East Cherry Creek Valley WSD, CO. Project Manager.** Development of a regional groundwater model of the confined aquifers under ECCV service area. Work included helping the client with applications for grants from CWCB Water Supply & Reserve fund, Metro Basin Roundtable (BRT) grants and South Platte BRT grants and securing funding for the project.

**Regional Groundwater Model of ASR System, South Metro Water Supply Authority, CO. Project Principal.** Development of a regional Groundwater of three aquifer storage & recovery systems for three municipal clients. Work includes helping the client with applications for grants from CWCB Water Supply and Reserve fund and Metro BRT grant and securing funding for the project.

**Tabernash Development Water Rights, Tebernash, CO. Project Manage and Technical Lead.** Provides engineering, modeling and litigation support for securing water supply for the development. Works includes analysis of water demand and water supply, research available water supplies and engineering support for water rights litigation.

**Yampa/White/Green Basin Implementation Plan, Colorado State Water Plan, Yampa/White Basin Roundtable, CO. Project Manager.** Led the technical team that developed the implementation plan for the Yampa, White and Green River Basins. The work was funded by State and Basin Roundtable grant sources.

**Energy Water Needs in Northwestern Colorado, Colorado and White Basin Roundtables, CO. Project Manager/Modeling Lead.** Responsible for development of complex water demand projections for anticipated large-scale energy development projects in Northwest Colorado and assessment of the impact of these demands on water supply and water rights. Developed water allocation models for the Colorado and White River basins. The work was funded by State and Basin Roundtable grant sources.

**Best Management Practices, Gore Creek, Eagle River Water & Sanitation District, CO. Project Engineer.** Participated in developing best management practices to mitigate sediment loading in Gore Creek from I-70 in Colorado. Work involved assessment of Colorado Department of Transportation sand application practices and proposing management practices to mitigate sediment loading in Gore Creek.

California | Colorado | Florida | Hawaii | Indiana | New Mexico | Texas | Washington | Australia | France | Switzerland



**Courtney Black, PE**  
Senior Water Resources Engineer



**Years of Experience:** 21

**Education:**

- MS, 2001, Environmental Engineering, University of Florida
- BS, 1999, Civil and Environmental Engineering, Lehigh University

**Professional Registrations/Affiliations:**

- Registered Professional Engineer, CA, 2004, No. 67976; CO, 2005, No. 40429
- Director-at-Large, Chair of Education Committee, 2010-2013, American Water Resources Association
- Board of Directors, 2019 – Present, Colorado WaterWise
- Lead, Climate Resiliency Initiative, INTERA.

**Professional History:**

- 2019 – Present Senior Water Resources Engineer – INTERA Incorporated, Boulder, CO
- 2017 – 2019 Senior Water Resources Engineer – Headwaters Corporation, Lakewood, CO
- 2015 – 2016 Regional Drought Information Coordinator – National Integrated Drought Information System (NIDIS), NOAA, Boulder, CO
- 2008 – 2014 Senior Water Resources Engineer – AMEC Foster Wheeler
- 2005 – 2008 Water Resources Engineer and Planner – CDM Smith Consulting, Denver, CO
- 2003 – 2005 Project Engineer – Ducks Unlimited, Inc., Sacramento, CA
- 2001 – 2003 Water Resources Engineer in Training – CDM Smith Consulting, Sacramento, CA

**Specialized Training:**

- Water Leaders Course – Water Education Colorado, 2012
- 40-hr Conflict Resolution Course, 2016



Courtney Black has over two decades of experience in municipal and basin-wide water resources planning, stakeholder engagement and coordination, grants writing and administration, drought and water conservation planning, water rights engineering, environmental impact study (EIS) planning documents and wetland design. She has management experience with the entire civil engineering project life cycle including the initial survey, design, bidding, construction management and project closure. Courtney has expertise in the various grant opportunities that are available for municipalities. Such expertise was gained through helping numerous municipal clients in Colorado with applications for grant funding and administration of these grants. Courtney has managed and written numerous proposals for water resources planning and engineering projects for municipal clients in Colorado.

**Representative Projects**

**Drought Planning, Dominion Water and Sanitation District, CO. 2022 – Present. Project Manager and Senior Engineer.** Helped Dominion with research and application for a CWCB Water Plan grant, represented client at Basin Roundtable meetings/presentations and supported grant application and administration.

**Groundwater Model of ASR System, East Cherry Creek Valley WSD, CO. 2021 – 2023. Senior Engineer.** Researched, wrote and managed a CWCB Water Supply and Reserve grant application, represented client at Basin Roundtable meetings/presentations and managed the grant administration and work progress.

**Regional Groundwater Model of ASR System, South Metro Water Supply Authority, CO. 2022 – Present. Project Manager.** Researched, wrote and managed applications for a Metro Basin Roundtable Water Supply and Reserve grant and a CWCB statewide grant, wrote the applications and represented client at Basin Roundtable meetings/presentation.

**Water Supply Master Plan Update, City of Steamboat Springs/Mount Werner Water and Sanitation District, CO. 2018 – 2019. Project Manager.** Helped the client with research, writing and management of a CWCB Water Plan grant application.

**Update to Drought Management Plan, City of Thornton, Thornton, CO. 2018 – 2019. Project Manager and Senior Engineer.** Helped the client with research, writing and management of a CWCB Water Plan grant application.

**Water Conservation Plans and Drought Mitigation Plans, Town of Erie, Erie, CO. 2006 – Present (multiple projects/grant applications). Senior Engineer.** Helped the Town with obtaining CWCB Water Plan grants (water conservation and drought grants) for multiple projects and fulfilling grant requirements. This included research, communication with CWCB staff, writing the grants, client representation, presentations and management of grants.

**Update to the Colorado Guidebook of Best Practices for Municipal Water Conservation, Colorado WaterWise. 2022 – Present. Senior Engineer.** Supported the CWCB grant application that was used for this work.

California | Colorado | Florida | Hawaii | Indiana | New Mexico | Texas | Washington | Australia | France | Switzerland



**Liberty Flora**  
Water Resources Scientist



**Years of Experience:** 6

**Education:**

- MS, 2019, Environmental Science, Indiana University School of Public and Environmental Affairs
- MA, 2019, Public affairs, Indiana University School of Public and Environmental Affairs
- BS, 2017, Environmental Science, Indiana University School of Public and Environmental Affairs

**Professional Affiliations:**

- Member, KY American Water Works Association

**Professional History:**

2023 – Present	Water Resources Scientist – INTERA Incorporated, Bloomington, IN
2022 – 2023	Management Consultant – Arcadis, Inc., Louisville, KY
2019 – 2022	Environmental Program Coordinator, City of Bloomington Utilities, Bloomington, IN
2019	Administrative Assistant, City of Bloomington Utilities, Bloomington, IN
2018 – 2019	Water Quality Intern, City of Bloomington Utilities, Bloomington, IN
2017	Intern – Indiana Department of Environmental Management, Indianapolis, IN

**Software and Specialized Training:**

Microsoft Office & Visio  
ArcGIS

Liberty Flora has 6 years of experience in the environmental science field, and has worked for local, state, and private organizations. Liberty was previously employed by a water, wastewater, and stormwater utility, and has developed a broad understanding of how municipal utilities operate. She has the knowledge and expertise to address large, complex issues through research, technical analysis, and stakeholder engagement. Liberty has helped municipal clients with securing funding for water infrastructure projects from sources such as FEMA and EPA.

**Representative Projects**

**FEMA Grant Writing, Arcadis, Inc., Louisville, KY. 2022. Management Consultant.** Contributed to Federal Emergency Management Agency (FEMA) grant writing project aimed to mitigate natural hazard risks.

Building Resilient Infrastructure and Communities (BRIC)

- Developed full engineering and scoping grant applications for water utilities in OH, PA, and Washington D.C.
- Created request for information (RFI) based on grant program requirements, and coordinated with client to ensure information was collected in a timely manner.
- Wrote narrative to support application development, which included history of the site, environmental and climate change considerations, and analysis of socio-economic barriers which may reduce a community’s ability to respond to and recover from a future event that impacts the assets in consideration.

- **EPA Grant Writing, Arcadis, Inc., Louisville, KY. 2022. Management Consultant.** Led efforts to develop application for grants which support innovative management of post-consumer materials, specifically allocated by the Environmental Protection Agency (EPA).

Solid Waste Infrastructure for Recycling (SWIFR)

- Researched SWIFR requirements and created outline of tasks to ensure all components of application were fully addressed.
- Reviewed Preliminary Engineering Report provided by client into application. Created RFI for remaining tasks identified in outline. Coordinated with client for items that were not publicly available.
- Provided guidance to other writers supporting application to maintain a consistent narrative.

**Development of Asset Management and Cybersecurity Plans for SRF Eligibility, City of Bloomington Utilities, IN. 2019 – 2022. Environmental Program Coordinator.** Managed development of Asset Management Plan and Cyber Security Plan to allow City of Bloomington Utilities to become eligible for Indiana Finance Authority (IFA) State Revolving Fund (SRF) loans.

- Met with IFA representatives to review requirements and learn tips for developing Plans.
- Facilitated recurring meetings to encourage coproduction and communication.
- Oversaw Plan development, which included writing narrative, storing information, and making necessary edits.

California | Colorado | Florida | Hawai'i | Indiana | New Mexico | Texas | Washington | Australia | France | Switzerland



4.4.4 Project Team Organizational Chart





# Town of Grand Lake STORMWATER MANAGEMENT PLAN

March 30, 2023

Mr. John Crone  
Town Manager  
P.O. Box 99  
Grand Lake, CO 80447-0099

**Prime Consultant Information:**

AE2S  
State of Incorporation: North Dakota  
Principal Office: 4050 Garden View Drive, Grand Forks, ND 85201  
Agent of Service: Mike Eytel  
325 Lake Dillon Drive  
Dillon, CO 80435

**RE: Selecting AE2S to Help the Town Reduce Nutrient and Sediment Loading to Shadow Mountain Lake through an Effective Stormwater Management Plan**

Dear John,

We are excited about the opportunity to work with the Town and to help you develop an effective stormwater management plan! By selecting AE2S, you'll benefit from the following:

**Extensive Experience Conducting Stormwater Modelling and Resiliency Studies, Helping You Set a Solid Foundation to Build Future Development.** AE2S has completed numerous stormwater management projects for communities like yours. Leveraging that experience, we know how to develop a reliable stormwater management modeling approach that will create an unbiased tool to guide infrastructure improvement projects that are sound and defensible to residents and stakeholders alike.

**Local Knowledge and Understanding of the Unique Challenges for the Town of Grand Lake.** Our project team will be led by me, Mike Eytel, and I have first-hand experience and knowledge of Grand County and the Three Lakes area, as well as experience managing complex projects with water quality issues. Our subconsultant, Brian Murphy, also brings a wealth of knowledge and experience working in the area. Brian Murphy and I have extensive experience working in Grand County and in the Three Lakes area. Our team's expertise, along with our institutional knowledge of local water issues, gives AE2S and River Works a unique ability to provide you with the support necessary to develop a comprehensive local solution to Grand Lake's stormwater management.

**Our Team of Experts Have Experience in Post-Fire Stream Restoration and Construction of Low Impact Design and Best Management Practices.** In addition, AE2S has experts in flood modeling and mitigation, stream restoration, financial planning, and public outreach & communications. With a local resource supported by a comprehensive team, we can help you be successful as we have with many of our past and present clients.

We are excited about this opportunity to partner with you, and we look forward to meeting with you to discuss how we can help you further. Please contact me at (970) 485 – 0483 or michael.eytel@ae2s.com if you have any questions.

Submitted in Service,

Michael Eytel  
Project Manager

Brian Gaddie, PE  
AE2S Authorized Representative to Bind Contract

Brian Murphy, PE, PhD, D.WRE  
Subconsultant - River Works, Ltd.  
Contact information on resume

Mary Price  
Subconsultant - GCWIN  
Contact information on resume

# UNDERSTANDING & APPROACH

## Understanding

While the population of the Town of Grand Lake may be small, the town is the western gateway to Rocky Mountain National Park, bringing in millions of out-of-town visitors to the area annually. Land disturbance and development change the physical, chemical, and biological conditions of our waterways and water resources, disrupting and altering the natural hydrologic cycle. Wildfires have a pronounced effect on the vegetation and landscape by removing plant material and soils that typically filter and return rainfall to the atmosphere through evaporation and transpiration. In addition, buildings, roads, parking lots, and other impervious surfaces further reduce infiltration of rainfall/snowmelt across the land. These changes increase flooding risk, reduce conveyance capacity through sedimentation, and impact water quality in downstream water bodies. The Town has seen these impacts, most notably through plugged culverts, sediment in Little Columbine Creek and the marina, and reduced water quality throughout the Town's lakes.

▶ We have organized our scope and approach based on the RFP's scope of work on RFP page 5. Our proposed approach for evaluating and designing the Town of Grand Lake's Stormwater Management Plan covers five discrete tasks.



Task 1  
**Communication**



Task 2  
**Public Engagement (RFP Task 2)**



Task 3  
**Mapping, Data Collection, and Monitoring (RFP Tasks 1 and 2)**



Task 4  
**Analysis of Existing Conditions and Design Solutions (RFP Task 2)**



Task 5  
**Reporting, Maintenance Considerations, and Funding Options (RFP Task 3/4)**



Task 1  
**Communication**

▶ We propose five meetings will be held throughout the project to inform you of progress and any potential hurdles. Consisting of a Kickoff Meeting, three progress meetings, and one Final Planning Session. The meetings are generally intended to review the following: schedule and budget status, public outreach, progress to date, anticipated progress, and critical or urgent matters/questions.

Effective project management is critical for your project's success. To serve your needs and provide a successful project, we commit to an approach that is:

- **Tailored** to your preferences, including frequency and format, whether written, voice, or text communications.
- **Forward-Looking** so we can plan and alert you well before crucial milestones and decision points, so you will not wonder, "What's coming next?"
- **Collaborative and Transparent** process that keeps you involved and provides peace of mind.
- **Well-Led** by an experienced and trained Project Manager (PM) who has consistently provided successful results on past projects.

When brought together by an experienced PM and backed by a talented team, these items will provide a project that mitigates budget, schedule, and quality risks and exceeds your expectations.

Our PM will make sure meetings are:

- Efficient and productive
- Founded on a well-defined agenda
- Relative to team members in attendance
- Respectful of your time allocated to the meeting
- Followed with meeting minutes and actionable items

Regularly scheduled meetings will allow for proactive communication and quick decisions to keep your project on track and within budget. Further, we will use available technology as appropriate, such as Microsoft Teams or Zoom, to assemble the team no matter where they are located. Using web conference technologies cuts down on travel time and project expenses while still allowing you face-to-face access to key personnel. The use of web conferencing technology will save you money!



Task 2  
Public Engagement (RFP Tasks 2 and 3)

Having input from the residents is critical to support this project. Our approach to public outreach consists primarily of two parts. Utilizing our local team member, Brian Murphy, in early June, we will conduct door-to-door outreach near the stormwater management area providing an informational flyer that describes the Grand Lake Stormwater Management Plan in development and provides notice of the future Town Hall style planning meeting (late July/August). We will reach out to the residents in this area and post flyers at local restaurants and signboards to ensure the message reaches interested parties.

The second part is a Town Hall meeting providing valuable local input on the Stormwater Management Plans' design and implementation. We will coordinate the public outreach effort with the Town of Grand Lake to assure messaging is appropriate and reaches the intended audience. We are tentatively scheduled for late July or early August 2023.



- **AE2S Communications** is our professional in-house communications team, providing you with experts in presenting information in a clear, understandable fashion to ensure residents and stakeholders are properly educated. These professionals will be available to the Town to help with flyers, handouts, or presentations as needed.



Task 3  
Mapping, Data Collection, and Monitoring (RFP Tasks 1 and 2)

To gain an understanding of how the current system is functioning on a hydraulic level, we will conduct a thorough inventory/survey of all existing culverts that reside within the analysis area. As part of this survey we will record the level of blockage that exists in each culvert. We will also gather any land use, terrain, water quality, East Troublesome Fire impact, and flow data from existing GIS databases and previous studies of the area. This info will be used to set up the hydraulic analyses in Task 3.

Due to the costly nature of a long-term water quality monitoring program and the limited funds available for this project, our team proposes a targeted sampling approach focused on identifying the principal contaminants and issues related to the quality of water currently discharging into the marina. Water that reaches the marina primarily comes from two sources: 1.) Little Columbine Creek (North Outfall) and 2.) the local Town drainage system (East Outfall).

We will analyze the water quality conditions of each of these sources separately by collecting sediment samples in deposition areas near each of the marina outfalls. We will also collect a third sediment sample on Little Columbine Creek upstream State Hwy 278. These sediment samples will undergo sieve and hydrometer analysis, total organic content, total phosphorous, orthophosphate, and total nitrogen.



Additionally, we propose to collect two water column grab samples in Little Columbine Creek upstream of State Hwy 278. One baseline sample (May) and one storm event sample (June/ July). We will partner with Grand County Water Information Network (GCWIN) to assist with the local stormwater sampling events. Their local presence will be essential to capturing data promptly and accurately. This effort will help fulfill the required monitoring parameters mentioned in the RFP.

▶ *The sediment samples will provide important insights into the types of contaminants being deposited in the marina and the level of fire impacts that still exist on Little Columbine Creek. The water column sample will then help capture any other contaminants that may not be identifiable in the sediment samples and will provide additional perspective in terms of quantifying pollutant and sediment loads. All sampling data and results as well as recommended sites for future long term monitoring, will be provided to the City as an appendix to the final Stormwater Management Plan (see Task 5).*



**Task 4  
Analysis of Existing Conditions and Design Solutions (RFP Tasks 2 and 3)**

Our team will use the previously constructed HEC-RAS 2D model from the 2022 Silver Jacket Report (see LCC results on map) to analyze the hydraulic conditions in Little Columbine Creek. To analyze the local town drainage area, we will construct an XPSWMM 2D Rain on Grid model and will include a boundary condition to introduce the flows from Little Columbine Creek (see red marker on map). This will allow us to model local hydrologic drainage conditions with accuracy while still accounting for the incoming flows from little columbine creek.

The results of these hydraulic analyses combined with the sampling data will aid in evaluating design solutions and the types of stormwater BMPs that would be appropriate for improving

water quality to each outfall. We will work together with you to select the most suitable BMP and will prioritize Low Impact Development (LID) options wherever possible and practical. We will use existing tools, i.e. Mile High Flood District (MHFD) BMP Design Tools, to size the BMPs appropriately and select strategic installation sites, adhering to MHFD and Grand Lake design standards. Finally, we will prepare several GIS figures documenting our findings, BMP selection, and site selection to assist in public engagement, and develop design exhibits suitable for estimating construction costs that will aid in budgeting and funding requests. Design exhibits will be to a 30% design level.



**Task 5  
Reporting, Maintenance Considerations, and Funding Options (RFP Task 3 and 4)**

Once Town staff have approved the proposed BMPs and the public has been informed, we will work with you to finalize the details of the proposed plan. As part of this process, we will provide planning level construction costs, a plan for future Operation and Maintenance (O&M) requirements, and any permitting requirements associated with the proposed plan.

At this point in the project, as requested in the RFP, we will bring in our AE2S Nexus team. AE2S Nexus, the financial division of AE2S, is a dedicated Financial and Asset Management company comprised of individuals committed to fully understanding issues such as State and Federal funding programs, project financing, utility financial health (revenue adequacy, cost of service, etc.), and asset management. This team will work with

you to identify funding opportunities to expand monitoring efforts in the future and acquire the necessary funds to carry this project through final design and construction.

The final deliverable for this task will be a complete Stormwater Management Plan including all of the information gathered for this task as well as all sampling, findings, results, and figures associated with previous tasks outlined in this approach. We will plan for one review period for Town staff to provide comments prior to finalizing the report/plan. All electronic GIS/ Modeling files will be provided to the town as an appendix to the report.

# SCHEDULE



- Activity Duration
- ◆ Key Project Milestone
  - ◆ 1 Progress Meeting with Town of Grand Lake
  - ◆ 2 Door to Door Grand Lake SWMP Informational Flyer
  - ◆ 3 Town Hall Meeting
  - ◆ 4 Sediment Sampling and Stormwater Samples
  - ◆ 5 Completion of Hydraulic Analysis & Conceptual Design
  - ◆ 6 Completion of 30% Preliminary Design
  - ◆ 7 Submit Draft Management Plan, including Operations & Maintenance, Permitting, and Funding information for Town to Review

The Kickoff and Final Planning Meeting will be held in person while progress meetings will be held virtually.

**Assumptions:**

- Town of Grand Lake awards contract by April 11, 2023
- Notice-to-Proceed Kickoff Meeting by May 1, 2023

# SIMILAR EXPERIENCE

## Grand County, Colorado WATERSHED RECOVERY COORDINATOR

Grand County partnered with Northern Water and NRCS to administer the East Troublesome Fire (ETF) Emergency Watershed Protection (EWP) program to bring meaningful and critically needed recovery to the watersheds damaged by the ETF and Williams Fork Fire (WFF). The County hired River Works to act as the Watershed Recovery Coordinator. River Works is responsible for coordinating and administering watershed protection and recovery associated with the East Troublesome Fire and Williams Fork Fire on behalf of Grand County and in collaboration with Grand County’s watershed partners. The Watershed Recovery Coordinator represents Grand County and acts as a spokesperson for the organization and manages relationships with landowners and the local community. River Works coordinates closely with Grand County’s Water Quality Specialist, NRCS staff, the County’s consultant and contractors, and Northern Water. River Works also administers the EWP Program including preparing paperwork for reimbursements, financial tracking, and coordination with NRCS. In the WFF burn area, River Works has led the recovery efforts with County staff and the USFS through community outreach, post-burn data analysis, and seeking opportunities to work with volunteer organizations.



**CLIENT**  
Grand County

**CONTACT INFO**  
Katherine Morris,  
970-531-8494

**KEY PROJECT ELEMENTS**

- Grand County Experience
- Watershed Protection and Recovery
- Community Outreach and Engagement
- Experience and Familiarity with Various Governing Organizations Surrounding the Town of Grand Lake

## Grand County, Colorado COMPREHENSIVE WATERSHED ASSESSMENT

Learning By Doing (LBD) hired Lotic Hydrological, River Works, and others to conduct a watershed assessment, applying a comprehensive analysis of all available data in the Cooperative Effort Area (CEA) within Grand County. The watershed assessment consists of analysis, interpretation, and reporting on environmental data, including hydrology, water temperature, water quality, stream sediment, macroinvertebrates, fisheries, and riparian data, providing a comprehensive assessment of the aquatic environment, consistent with LBD’s primary goal, to maintain and, when reasonably possible, restore or enhance the aquatic environment in Grand County. The consultant team is analyzing data from Grand County Water Information Network’s (GCWIN) AWQMS database, US Geological Survey, Denver Water, and Northern Water. River Works’ role is assisting with compilation

and review of relevant background information, analysis, interpretation and compilation of available geomorphological data, developing the geomorphic characterizations of all streams in the CEA, and generation of maps and interactive data visualizations. River Works is also helping prepare the assessment report that identifies existing opportunities and constraints for promoting ecological integrity.

**CLIENT**  
Learning By Doing

**CONTACT INFO**  
Kayli Folk  
970-725-3750

**KEY PROJECT ELEMENTS**

- Grand County Experience
- Watershed Assessment
- Proven Experience/Success Working with GCWIN as Teaming Partner

Aurora, Colorado

# LOW IMPACT DEVELOPMENT STORMWATER BMP DESIGN

The City of Aurora contracted AE2S for the design of a new communications tower to provide necessary coverage for fire, police, and rescue operations. The tower site was located in Douglas County and was within the Cherry Creek Reservoir Watershed (a highly regulated and monitored watershed for water quality and sediment loading). The site was also located upstream of Sampson Gulch, an important tributary for the Cherry Creek Basin, and contained an existing roadway ditch that drained into said tributary downstream. Our team designed a Tier 2 Low Impact water quality BMP for the site to provide rate and volume control. We also designed stabilization measures on the existing roadway ditch to reduce sediment loads that would reach Sampson Gulch during larger storm events. Due to the project’s sensitive location, both Douglas County and Mile High Flood District reviewed the proposed design, meaning the BMPs were designed to satisfy both County and MHFD design requirements.

**KEY PROJECT ELEMENTS**

- Experience Designing Low Impact Water Quality BMPs in Colorado While Meeting Multiple Local Colorado Standards
- Experience in BMP Design for Sediment Load Reduction in Channel Systems
- Experience with MHFD Design Tools

**CLIENT**

City of Aurora

**CONTACT INFO**

Elizabeth Carter, PE  
303-619-1656

Kalispell, Montana

# WATER QUALITY IMPROVEMENTS

The City of Kalispell received ARPA funding to study, design, and construct stormwater water quality improvements in three urbanized watersheds. In late 2021, the City contracted AE2S to work on the priority Ashley Creek watersheds. We started by developing a fully dynamic stormwater model for the drainages and evaluating several water quality improvement alternatives, including wet detention basin, treatment wetland, bioswale, and mechanical treatment. Due to cost and space constraints, mechanical treatment was selected. We completed final design for three hydrodynamic separators retrofitted into existing urban storm drain systems. The construction contract was awarded in early 2023 with construction anticipated to be complete by fall 2023.



**KEY PROJECT ELEMENTS**

- Water Quality Improvements in Urbanized Watershed
- Water Quality Improvement Alternatives
- Final Design

**CLIENT**

City of Kalispell

**CONTACT INFO**

Susie Turner, PE  
406-758-7720

# Woodbury, Minnesota

## STORMWATER BMP MAINTENANCE PLAN

The City of Woodbury has over 1,000 BMPs that vary by type, condition, and age. The City, as an MS4, is obligated to inspect and maintain these BMPs. However, despite newer BMP technologies like filtration and underground BMPs being constructed in the City, the City lacked an understanding of how to maintain these newer types of BMPs. Further, several BMP maintenance projects were not received well by residents and lack of documentation about the why behind maintenance put City staff and the Council in a difficult position.

Our team reviewed other cities' and states' BMP maintenance plans to create a maintenance plan template and led a series of review meetings with City staff to customize the template to meet the City's goals and capacities. This became the Woodbury Stormwater BMP Maintenance Plan. In coordination with City staff, our team identified the cost needed to perform minor and major maintenance of each type of BMP. Using that unit cost data, our team prepared an overall cost estimate to implement the plan.

The City is now able to use the maintenance guide when reviewing proposed new BMPs during their development review process and when engaging with residents.



### KEY PROJECT ELEMENTS

- BMP Asset Management Plan
- Private BMP Maintenance Challenges
- Public Education

**CLIENT**  
City of Woodbury

**CONTACT INFO**  
Kristin Seaman  
651-714-3593

➤ **AE2S Communications** helped the City develop a graphical summary of its Stormwater BMP Maintenance Plan to share with the community.

### EXPERIENCE WORKING WITH SIMILAR SIZED COMMUNITIES

When we say we understand working with small communities, we mean it. As a firm, we were founded on serving small, rural communities and continue to look to build relationships with municipalities of all sizes. We have found the most success in working with small communities where we can provide a full suite of services. Over the course of our 30+ year history, we have worked side-by-side with dozens of communities similar in size to Grand Lake, and many tourist-centered mountain towns such as Keystone, Dillon, and Estes Park here in Colorado, and Big Sky and Whitefish in Montana.

# QUALIFICATIONS

As the first step of building an effective partnership for the Town of Grand Lake, AE2S has teamed with River Works and Grand County Water Information Network (GCWIN). Our team brings you the best available combination of stormwater Low Impact Development design expertise, responsive services, and

local knowledge of the Three Lakes available. This means that you can be confident that your project will be feasible and planned specifically with your needs in mind. Our local team is ready to respond to your needs and leverage our national expertise.



- Stormwater Low Impact Development Design Expertise
- Responsive Service
- Local Knowledge



**Mike Eytel**  
Project Manager

**Amber Lefers, PE**  
QA/QC

## PROJECT TEAM

**Brian Murphy, PhD, PE.**  
**D.WRE, PMP**  
Stormwater BMP Planning, Public Engagement, and Local Liaison

**Travis McStraw, EIT**  
Stormwater Modeling, Planning, and Design

**Mary Price**  
GCWIN Stormwater Sampling

**Joey Lane, EIT**  
GIS/CAD

**Abby Ritz**  
Funding Specialist

▶ This team is supported by a deep bench of water resources specialists should the need arise.

# Mike Eytel

## Project Manager

Mike has over 26 years of experience as an accomplished Senior Water Resources Specialist with a proven track record in western water. Mike has extensive knowledge of Federal and Colorado water policy, compact compliance, long-term project management, contract administration, and environmental regulatory compliance. In addition, he is adept in complex collaborative workgroup processes with diverse interest groups and agencies.

### SPECIFIC RELEVANT EXPERIENCE

- **Grand Lake Adaptive Management, Grand Lake, CO - Senior Water Resource Specialist.** Supported the water quality monitoring and assessment of the Three Lakes Collection System. Grand Lake, Colorado’s largest and deepest natural lake, is in the headwaters of the Colorado River in Grand County. A feature of the Colorado-Big Thompson Project (C-BT), Grand Lake is interconnected with Shadow Mountain Reservoir and part of the Three Lakes System, including Lake Granby. The Clarity Memorandum of Understanding (MOU) also requires the preparation of an annual report to summarize what was learned about the C-BT project operational approaches to meet the clarity goals and the resultant effects on water quality and clarity in Grand Lake. The MOU created an adaptive management process to improve Grand Lake clarity while reclamation plans complied with the National Environmental Policy Act (NEPA) requirements.
- **Upper Colorado River Recovery Program - White River Management Plan, White River, CO - Senior Water Resource Specialist.** Led the development of the draft of the White River Management Plan. The plan aids in water development within the White River to work with the Upper Colorado River Recovery Program. This includes working with stakeholders to determine the water needs for the recovery of endangered fish as part of the White River Programmatic Biological Opinion.
- **Upper Colorado River Wild and Scenic Alternative Management Plan, Upper Colorado River Basin - Senior Water Resource Specialist.** Led the development of the Upper Colorado River Wild and Scenic Alternative Management Plan. The Upper Colorado River Wild and Scenic Stakeholder Group was formed as an independent, collaborative group in 2007 to balance the protection of the Outstanding Remarkable Values (ORVs), certainty for the stakeholders, water project yield, and flexibility for water users along the Upper Colorado River.
- **Colorado River Basin Salinity Control Workgroup Member, Colorado River Basin - Senior Water Resource Specialist.** Supported the water quality efforts to reduce salinity in the Colorado River Basin by salinity standards and control measures. Recognizing the rapidly increasing salinity concentration in the Lower Colorado River and its impact on water users, the Colorado River Basin States came together in 1973 and organized the Colorado River Basin Salinity Control Forum (Forum). In 1974, in coordination with the Department of the Interior and the U.S. State Department, the Forum worked with Congress to pass the Colorado River Basin Salinity Control Act (Act). Since the implementation of the program, measures have been put in place, to reduce the annual salt load of the Colorado River by more than 1.2 million tons.



### EDUCATION

Bachelor of Science, Forest Resources, B.S.F.R, Major in Soil and Water Resource Management, University of Georgia

### CONTACT

Mike.Eytel@ae2s.com  
T: 970-406-2697



### WHY MIKE?

Mike is well-versed in protecting watershed health, water quality analysis, and working with diverse stakeholder groups. His local presence and his longstanding relationship and familiarity with the Town of Grand Lake make him the ideal Project Manager for this effort.

# Amber Lefers, PE

QA/QC

Ms. Lefers has more than 20 years of consulting experience, applying hydrology and hydraulic engineering to a wide variety of water resources and civil engineering projects. Areas of specialized expertise include stormwater quantity and quality management, as well as hydrology and hydraulics of rivers and streams. Her interest in LID extends beyond her professional life – she has installed three raingardens on her personal property, converted conventional landscapes to prairie/savannah, and installed rain barrels at her roof downspouts.

### SPECIFIC RELEVANT EXPERIENCE

- **City-Wide BMP Maintenance Plan, Woodbury, MN - QA/QC Engineer.** Provided QA/QC for the development of a city-wide BMP Maintenance Plan to help guide the City to determine the necessary maintenance activities needed to have BMPs function properly over their design life. In addition, a cost estimation tool was developed to forecast long-term capital O&M budget costs. The project was completed by assessing the existing BMPs the City has along with the integration of newer BMPs being utilized for stormwater treatment to provide a wholistic assessment.
- **UW-Madison Arboretum Johannsen Pond Outfall Improvements, Madison, WI - Project Manager.** Prepared and obtained approval for DNR Non-Point Source Grant application. Completed hydraulic modeling of semi-offline stormwater management retrofit for large storm sewer outfall, designed prairie/wetland basin to improve water quality, and prepared constructions plans and opinions of probable cost.
- **Regional Stormwater Improvements, Kalispell, MT - QA/QC Engineer.** Provided QA/QC on the comprehensive regional stormwater planning, permitting, and design that will facilitate development growth while avoiding impacts to downstream FEMA floodplains and structures.
- **Target Infiltration Basins, Fitchburg, WI - Project Engineer.** A proposed retail center and associated commercial development had the potential to impact downstream water resources. The City required a stormwater management approach that reduced sediment loading, while controlling peak discharge and runoff volume. Proposed design included a wet detention basin that discharged to a series of LID infiltration practices, totaling almost 1 acre in size. The system has been installed for several years and has performed extremely well.
- **Stutsman County Water Resource Board Master Plan, Jamestown, ND - Project Engineer.** Stormwater Master Plan for three regions in and around the City of Jamestown for a total planning area of more than 4,500 acres. Included an analysis of existing infrastructure, public outreach, mitigation planning for existing problem areas, master planning for future development, and preparation of an Implementation and Funding Plan for proposed improvements.
- **Spring Harbor Watershed Study, Madison, WI - Project Manager.** Led the development of a watershed-wide XP-SWMM 2D analysis to evaluate numerous watershed improvements, including eight different culvert crossings as well as modifications or creations of stormwater detention facilities.
- **English Coulee Water Quality Renewal Plan, Grand Forks, ND - QA/QC Engineer.** Developed a plan for improving water quality along a highly impaired waterway. Developed a hydrologic and hydraulic model to determine changes to flow regimes that would be created from water quality improvement projects. Finally, the project involved a highly successful public outreach program which gave the municipality the confidence that the community was fully supportive for investing in the coulee.



### EDUCATION

Master of Science, Civil Engineering, University of Wisconsin-Madison; Bachelor of Science, Civil Engineering, Calvin College

### REGISTRATIONS

Professional Engineer: Colorado, Utah, Arizona, Montana, Illinois, Minnesota, North Dakota, South Dakota, Wisconsin

### CONTACT

Amber.Lefers@ae2s.com  
T: 608-572-1352



### WHY AMBER?

Amber is the Water Resource Practice Leader and has managed, been the technical lead, or provided QA/QC on virtually every one of AE2S' municipal drainage and stormwater analysis and design projects. She is also incredibly passionate about LID, including installing LID practices on her own property.

# Brian Murphy, PhD, P.E., D.WRE, PMP

## Project Engineer, Public Engagement, and Local Liaison

Brian is a water resources engineer and fluvial geomorphologist with over 20 years of experience. He has a wide-ranging background in water resources planning and engineering, fluvial geomorphology, and floodplain and stormwater management. From his doctoral research to his consulting and nonprofit experience, Brian focuses on river health, watershed assessments, and stormwater and floodplain management. As a licensed professional engineer in Colorado, he has led and managed river engineering, watershed studies, stream management planning, and floodplain resiliency projects across Colorado—leveraging his multidisciplinary experience and expertise. He is comfortable working at the complex intersection of watershed planning and community needs, and is known for his drive to understand technical issues deeply, skills in partnership building, and enthusiasm for sharing knowledge. He also works on post-disaster projects across Colorado, emphasizing community-informed planning, nature-based solutions, and multi-benefit projects. His PhD research focused on assessing the physical condition of streams seeking to address the “wicked problems” caused by natural and anthropogenic changes on river hydrology and geomorphology. He is a subject matter expert who is skilled at conveying technical and policy information related to river processes and floodplain management.

### SPECIFIC RELEVANT EXPERIENCE

- Watershed Recovery Coordinator, Grand County, CO - Technical Lead.** Grand County partnered with Northern Water and NRCS to administer the East Troublesome Creek Emergency Watershed Protection (EWP) program to bring meaningful and critically needed recovery to the watersheds damaged by the ETF and Williams Fork Fire. As the watershed recovery coordinator, Brian directs the watershed protection and recovery efforts in Grand County, collaborating with Grand County officials, stakeholders, agencies, and landowners in addition to directing consultants and managing contractors. He also administers the EWP Program including preparing paperwork for reimbursements, financial tracking, and coordination with NRCS. Brian supports the WFF recovery efforts with the USFS through community outreach, post-burn data analysis, and seeking opportunities to work with volunteer organizations.
- Learning By Doing Watershed Assessment, Grand County, CO - Geomorphologist and Technical Advisor.** Lotic Hydrological formed a partnership with River Works and others to deliver a comprehensive assessment of watershed conditions in the Upper Colorado River Watershed. The primary goal of the project is to assess hydrological, water rights, water quality, geomorphic, riparian, and biological function data relevant to focus streams in the project area. Brian assisted with compilation and review of relevant background information, analysis, interpretation and compilation of available geomorphological data, and generation of maps and interactive data visualizations. He is also helping prepare the assessment report that will help stakeholders understand where opportunities and constraints exist for promoting ecological integrity.
- Beaver Adaptive Management Plan, Denver, CO - Technical Lead and Project Manager.** River Works partnered with Anabran Solutions to develop a beaver adaptive management plan (AMP) for the Mile High Flood District (MHFD) and City and County of Denver.



### EDUCATION

Doctor of Philosophy, Civil and Environmental Engineering, Colorado State University; Master of Science, Environmental Science and Engineering, Colorado School of Mines; Bachelor of Science, Civil Engineering, Santa Clara University

### REGISTRATIONS

Professional Engineer: Colorado, California, Washington, Texas

### CONTACT

Brian@river.works  
T: 303-345-7595  
2370 Kearney Street  
Denver, CO 80207



### WHY BRIAN?

Brian founded River Works, to focus on researching and addressing problems caused by anthropogenic stressors on lake and stream ecosystems. His passion for improving watershed health, his talent for community planning and public engagement, and his past experience, familiarity, and local presence with the Town make him the perfect technical expert for this project.

# GCWIN

## Local Partner

Grand County Water Information Network was established in 2004 as a collaborative effort to enable better decision-making through science-based water quality monitoring, information-sharing and educational programming. After its initial successes of building a strong membership base and developing its monitoring programs, GCWIN now has expanded its leadership of water quality monitoring to four main programs: Stream Temperature monitoring along the Fraser and Colorado Rivers, Secchi monitoring of Grand Lake and Shadow Mountain Reservoir, Temperature and Specific Conductivity in the Three Lakes region, and cyanobacteria monitoring in the Three Lakes region. GCWIN also has a strong focus on data management and storage. GCWIN serves many stakeholders in the region as a data “sink” by storing a variety of water quality data in our public online database. By collecting and storing this data, it allows the public and stakeholder groups to access historic water quality data for permitting, environmental studies, and operational decision making. GCWIN’s field team is growing, and soon will have three field staff to collect and process water quality samples in Grand County. GCWIN has historically been a “behind the scenes” type of non-profit organization, focusing on data. As water quality issues become more and more important for our community, GCWIN aims to grow our education and outreach programs in Grand County.



# Mary Price

## Stormwater Sampling



Ms. Price is the Executive Director for Grand County Water Information Network (GCWIN) in Grand Lake. Mary has served as Lead Field Technician for GCWIN since 2017. During her six years at GCWIN, Mary has grown her skills, passion, and knowledge for Grand County water resources. Mary has been able to bring her technical science background to GCWIN to strengthen monitoring capabilities. As technology advances and more water quality issues arise, Mary looks forward to growing GCWIN’s monitoring, technology, and database capacity to serve the community.

**EDUCATION**  
Bachelor of Science, Environmental Studies, Florida Gulf Coast University

**CONTACT**  
T: 970-627-8162  
610 Center Drive  
Grand Lake, CO 80447

### WHY MARY?

Mary’s local presence will be key to collecting accurate storm event water quality samples. Her expertise in monitoring technology and knowledge of the area will also be valuable in determining long term monitoring recommendations.

# Travis McStraw, EIT, CFM

## Stormwater Modeling, Planning, and Design

Mr. McStraw has six years of civil and environmental engineering experience in both private consulting and municipal engineering arenas and has a strong background in a variety of stormwater modeling techniques. Since the start of his career Travis has been involved in developing stormwater master plans and understands the enduring impact the plan has on City spending and operations. His technical knowledge of hydraulic modeling combined with his familiarity with municipal systems make him a valuable resource for stormwater master planning. Travis is also a Certified Floodplain Manager.

### SPECIFIC RELEVANT EXPERIENCE

- **LID Stormwater BMP Design, Aurora, CO - Water Resources EIT.** Designed a Tier 2 Water Quality basin in the sensitive Cherry Creek Reservoir Watershed to provide volume and rate control as well as sediment reduction. Provided stabilization for existing roadway ditch that drained into sensitive tributary. Design was reviewed and approved by numerous organizations including Mile High Flood District and Douglas County.
- **Curry Court Flooding Analysis, Fitchburg, Wisconsin - Water Resources EIT.** Developed an XPSWMM 2D Rain on Grid model in a rural area of the city. Modeled driveway culverts and visualized overland flow paths to capture closed basin flooding. Informed the design of new conveyance ditches to help route flooding away from residential structures.
- **2015 Denver Water Quality Master Plan, City and County of Denver, Denver, CO - Engineering Intern.** Performed preliminary analysis for the Water Quality Planning Committee, including the sub-watershed analysis of Nitrogen, Phosphorus, Suspended Sediment, E-coli, and BOD pollutant loads for each of the City’s subwatersheds. He performed a correlation analysis and associated different pollutants with specific land use types. Researched new strategies for Low Impact Development (LID)/green infrastructure implementation which entailed contacting numerous cities and countries. This effort played a key role in obtaining funding for the water quality master plan which was the start of the now well renowned green infrastructure department that exists at the City and County today.
- **Long-Term System Renewal Planning, Eagan, MN - Project Engineer.** Developed a comprehensive rehabilitation and renewal (R&R) plan for a wide range of City infrastructure including water quality BMPs. Worked with City to financially plan for new LID implementation projects to treat problem areas for sediment and nutrient loads as well as the increase of ongoing maintenance costs that would occur as more BMPs were installed.
- **City-Wide XP 2D Modeling and Resiliency Study, Burnsville, MN - Water Resources EIT.** Travis has been the lead modeler for the City-wide XPSWMM 2D modeling effort, covering over 22.5 square miles (14,000+ Links, 1,700+ Subwatersheds). Upon completing the 2D modeling portion of the project, Travis conducted a City-wide risk and resiliency study using GIS scripts and Info Asset Planner to determine locations throughout the City with the highest risk of flooding.
- **Flood Risk Analysis, Billings, MT - Water Resources EIT.** Developed a 2D HEC-RAS model to evaluate flood and drought risk to critical City infrastructure posed by the shifting river channel. Conducted an Ice Jam Analysis (1D HEC-RAS).



### EDUCATION

Master of Science, Civil Engineering, Brigham Young University; Bachelor of Science, Civil and Environmental Engineering, Brigham Young University

### REGISTRATIONS

Engineer-in-Training: Utah

### MODELING SOFTWARE

HEC-RAS 1D/2D, XPSWMM 1D/2D, SRH-2D

### CONTACT

Travis.McStraw@ae2s.com  
T: 303-503-8307



### WHY TRAVIS?

Travis is an expert in hydrologic and hydraulic analysis and has local experience in designing water quality BMPs in Colorado.

# Joey Lane, EIT

GIS/CAD

As a recent graduate, Mr. Lane has already started to form a reputable resume as a CAD drafter and design engineer. He is backed by applicable internship experience, a sound knowledge of CAD software and stormwater design principles, and experience with multiple projects within Colorado mountain communities. Joey is passionate and experienced with drafting, designing, and constructing natural stormwater Best Management Practices (BMPs) to create functional and esthetically pleasing design solutions.

### SPECIFIC RELEVANT EXPERIENCE

- **LID Stormwater BMP Design, Aurora, CO - EIT.** Developed an erosion control plan set to minimize the amount of disturbance and sediment generated on the job site. Assisted in selecting temporary and permanent water quality BMP locations on the job site to minimize sediment mobilization before and after project construction. Efficiently worked through multiple review sessions with Douglas County to get County approval before the project went out to bid. Developed opinion of probable cost for the erosion control plan.
- **Wild Ridge Booster Pump Station and PRV Improvements, Avon, CO - EIT.** Designed erosion control plans to reduce the impact of construction services on the surrounding sites in accordance with Town and county specifications. Assisted in selection of BMP methods and installation locations for temporary and permanent applications. Assisted in drafting of civil site, grading, and utility piping plans for pumping station and PRV improvements sites. Provided opinion of probable cost on all aspects of civil improvements.
- **Schoolmarm Pipeline, Snake River Water District, Keystone, CO - EIT.** Provided construction collaboration services between Owner and involved contracting services. Reviewed shop drawing submittals and ensured materials proposed by contractor comply with District and any additional required specifications. Attended pre-construction planning meetings to help provide supplemental knowledge of design plans.
- **Fish Passage Culvert Replacement, Haines, AK- Engineering Intern.** In December 2020, a devastating storm cycle caused catastrophic flooding in southeast Alaska resulting in major damage to the rural infrastructure. Designed three temporary fix culverts with permanent solutions that would withstand similar storm hydraulic capacity and abide by Alaska fish passage standards. Responsible for hydrologic analysis of three culvert sites in order to find the required hydraulic capacity of each culvert and assisted with hydraulic calculations for each culvert. Also responsible for all CAD design drawings.
- **I-405 NE 132nd Interchange and Fish Passage, Kirkland, WA - Engineering Intern.** Construction of a new interchange consisting of an on and off ramp and two roundabouts, as well as the restoration and rehabilitation of the stream that ran under the interchange through a small circular culvert. New stream included a reconstructed stream bed with fish habitats on the up and downhill ends with an open channel design through box culverts under the interchange. Provided grading and assisted in construction of new storm sewer pipe relocation, eco block retaining walls, and the open channel stream restoration and fish habitats. Worked closely with foreman, project engineers, and operators out in the field on the site every day.



### EDUCATION

Bachelor of Science, Civil Engineering, Washington State University

### REGISTRATIONS

Engineer-in-Training: Colorado

### CONTACT

Joey.Lane@ae2s.com  
T: 970-406-2697



### WHY JOEY?

Joey's CAD experience, his background in designing and constructing naturally aesthetic stormwater BMPs, and his history of working with small Rocky Mountain communities will all contribute to an efficient design process for this project.

# Abby Ritz

## Funding Specialist

Ms. Ritz’s focus is on funding development and supporting a variety of Nexus’ rate study efforts. She has played an integral role in securing funding for numerous projects for clients throughout the region, through programs such as USDA Rural Developments’ Water & Waste Disposal loan and grant program, and State Revolving Funds. In 2020 alone, she helped secure over \$90 Million in loan and grant funding for our clients. Her focused efficiency and attention to detail are invaluable qualities for coordinating with multiple funding sources and ensuring all program requirements are met.

### SPECIFIC RELEVANT EXPERIENCE

- **City-Wide Infrastructure Improvement Project, Larimore, ND - Financial Analyst.** City-wide water, sewer, stormwater, and street replacement effort. Ms. Ritz developed a project funding plan, household impact projections, funding applications, community education resources, and project reimbursement requests. Funding development efforts evaluated state and federal funding sources and applications to all applicable programs. Among those programs were the US Army Corps. of Engineers’ Section 594 Environmental Infrastructure Program and the US Department of Transportation’s BUILD Grant Program. These applications required conducting benefit cost analyses and working with local officials and congressional representatives to secure community and political support for the project.
- **Water Rate Study, Estes Park, CO - Financial Analyst.** Cost of service and rate design study for the Town’s water utility. A primary objective of the study was to develop a prudent financial plan to fund the \$30M+ replacement of one of the Town’s two water treatment plants. In addition to the capital planning, the project also included an in-depth review of all other utility revenue requirements and an analysis of the Town’s fixed versus volumetric revenue generation to ensure stable utility funding.
- **Specific Funding Development Experience**
  - Drinking Water and Clean Water State Revolving Funds
  - Community Development Block Grant
  - North Dakota’s State Water Commission Cost-Share Program
  - North Dakota’s Capital Financing Program
  - US Army Corps. of Engineers’ Section 594 Environmental Infrastructure Program
  - USDA Rural Development’s SEARCH Grant
  - USDA Rural Development’s Predevelopment Planning Grants
  - USDA Rural Development’s Community Facilities Loan Program
  - USDA Rural Development’s Water and Waste Disposal Loan and Grant Program
  - USDA Bureau of Reclamation’s WaterSMART: Water Marketing Grants
  - FEMA’s Hazard Mitigation Assistance Programs
  - US DOT’s BUILD Grant
  - US EPA’s WIFIA Program



### EDUCATION

Bachelor of Business Administration, Investments, University of North Dakota

### CONTACT

Abby.Ritz@ae2s.com  
T: 701-221-0530



### WHY ABBY?

Abby supports many of our funding initiatives and provides a breadth of knowledge for developing the details on funding - a key component for transforming plans into reality. She will actively engage in the project immediately to identify funding sources and coordinate project recommendations with funding opportunities.



**REQUEST FOR PROPOSALS FOR  
THE TOWN OF GRAND LAKE  
STORMWATER MANAGEMENT PLAN**

**MARCH 30, 2023**

# LETTER OF INTEREST/SIGNATURE PAGE

**TOWN OF GRAND LAKE**  
**1026 PARK AVENUE**  
**GRAND LAKE, CO 80447**

IMEG is excited to offer you our services for a **Stormwater Management Plan**. We have carefully read your RFP and we have provided the necessary information to demonstrate our ability to achieve a plan to improve the quality of water reaching your adjacent lakes. IMEG provides a level of focus and dedication that assures success for project planning, design, and implementation—and we offer our expertise to your Town and the residents you serve.

We are a full-service civil engineering firm with an in-depth knowledge of municipal and public works projects augmented by our knowledge of all aspects of stormwater engineering. For more than 100-years our firm has provided engineering expertise to municipal organizations throughout the nation, and we are proud to offer our team of highly qualified professionals with many years of experience in stormwater engineering and floodplain management to your staff at the Town of Grand Lake.

We would like to exceed your expectations as we start a professional relationship with you by thinking beyond the project's initial design—to constructability and long-term maintenance, anticipating both expected and unusual circumstances. We will help to identify alternative funding sources, maximizing your capital budget and helping you develop a community that is more resilient to natural disasters. Most importantly, everything we do for you will have a focus on value, quality, communication, and customer service. We will endeavor to anticipate your needs, as our professional relationship prospers—and will bring a unique, very hands on approach to our serving your unique Town. We will be there for you providing the support and professional services you are seeking—whenever and wherever you need us.

We are confident that the team we have assembled has the technical expertise, experience, resources, and knowledge to complete your project on time and within budget. Each IMEG team member firmly embraces a philosophy of becoming an extension of your staff. We intend to surpass your expectations through dedication to quality, professional integrity, and service excellence. Under your staff's direction we will collaborate throughout the project to ensure that the Town of Grand Lake and your stakeholder's interests are kept in mind every step along the way.

We encourage you to visit our corporate website at [www.imegcorp.com](http://www.imegcorp.com) to learn more about our employee-owned philosophy and to take a tour through the many successful projects we have completed.

Thank you for your consideration,

Sincerely,

TAYLOR GOERTZ, PE  
PRINCIPAL-IN-CHARGE | CLIENT EXECUTIVE  
(AUTHORIZED TO BIND THE COMPANY)

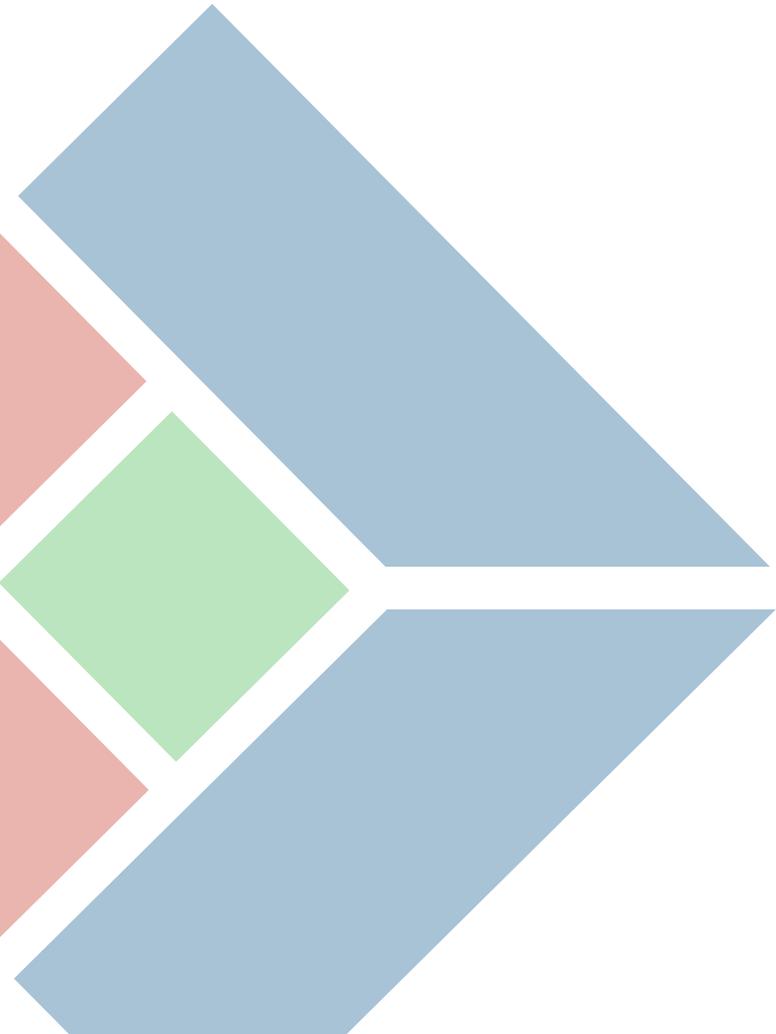
**7600 E ORCHARD ROAD, SUITE 250-S**  
**GREENWOOD VILLAGE, CO 80111**  
**P: 303.796.6000**  
**E: TAYLOR.C.GOERTZ@IMEGCORP.COM**

**Top 10 Engineering Firm in the U.S. (BD+C)**  
**Top 50 Greenest Firm in the U.S.**  
**75 Locations**  
**2,200 Employees**  
**100% Employee-Owned**



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SECTION 1

# PROJECT UNDERSTANDING AND APPROACH

# 1. PROJECT UNDERSTANDING AND APPROACH

The 671-acre Town of Grand Lake is one of Colorado's premier mountain towns. Sited between Rocky Mountain National Park and the Three Lakes area, the Town of Grand Lake is the western gateway to Rocky Mountain National Park, its truly stunning. The Town is benefitted by a 2020 Comprehensive Plan, and a Wildfire Protection Plan. These plans are useful tools in the preparation of a Stormwater Management Plan. The Comprehensive Plan includes this important Vision Statement "The Town of Grand Lake will protect its natural environment, preserve its history, and enhance its economic vitality to ensure quality of life for its residents, businesses, and visitors". In preparing a Stormwater Master Plan for the study area in the Town of Grand Lake, IMEG will endeavor to identify measures to help the Town of Grand Lake in protecting that vision.

IMEG staff are aware of the challenges faced by a small Colorado mountain community dealing with burn scars associated with wildland fire. We know that the East Troublesome Fire burned 187,964 acres and forced the evacuation of Grand Lake, causing the loss of hundreds of structures. IMEG knows that a fire event creates a myriad of issues for a tourist driven economy, we know Grand Lake is deep in post fire recovery efforts, and we would love the opportunity to be a small part of your impressive recovery effort.

Members of the IMEG team have first hand experience with post fire runoff, and played key roles in identifying stormwater mitigation needs and securing numerous grants for stormwater improvements for the City of Manitou Springs in Southern Colorado. IMEG served as City Engineer for five years following the Waldo Canyon Fire, and the City's Flood Recovery Manager/ Public Works Director that served the City of Manitou Springs in those post fire years is now a member of our team. In the weeks immediately following the Waldo Fire, each storm would bring new issues, including being a top story for the local press each time it rained. Fortunately no lives were lost, and only a handful of residential structures were lost. Sited in the floodplain downstream of the burn scar, the historic downtown and City Hall were often evacuated in those early months as a precautionary measure. Roads leading into Manitou Springs were also frequently closed, as bridges were overtopped with sediment laden floodwaters. Tourists were afraid to visit, and many businesses closed.

Through IMEG's direct involvement and oversight of the recovery effort, Manitou Springs residents and businesses were relieved from the devastating residual impacts of the Waldo Canyon Fire. The stormwater mitigation measures that were implemented have been tested by large storms, and the 150 historic structures and 17 historic bridges in Manitou Springs are no longer threatened by flooding. IMEG staff members prepared DOLA funded master plans for critical infrastructure, and helped the City manage over \$16 million dollars of post-fire flood recovery projects.

Similar to the issues you face from Little Columbine Creek, the hydrophobic soils created by the Waldo Canyon fire created

flood related issues in Manitou Springs for approximately three years. Sediment management became a top priority. Impacts were devastating for the first year. The first spring after the fire revegetation of small growth occurred (aided by volunteers and forest restoration groups), though the burn scar remains behind as a reminder still, ten years later. To further augment the IMEG teams experience, we have teamed with AGW. Founded in 1972, A. G. Wassenaar, Inc. (AGW) is a privately owned, multi-disciplined consulting engineering firm specializing in the geosciences and environmental services. With a staff of over 100, their services include, geotechnical engineering, materials testing, construction observations, automated data collection, radon mitigation services, asbestos and lead consulting, soil and groundwater investigations and remediation and industrial hygiene services. AGW has extensive experience with industrial hygiene evaluations following fire events and provided soil sampling and data interpretation around remediated homes following the Marshall Fire in 2021. Sampling was conducted in general accordance with Town of Superior and Boulder County requirements, as well as EPA guidelines.

Manitou's dramatic comeback from the Waldo Canyon Fire earned it the nickname "The Little Town That Could". Fountain and Monument Creeks are running clear again, no longer bearing an ash laden sediment load from the Waldo Canyon watershed. Tourism is fully restored, and It's been a long time since flooding in Manitou Springs was on the local news.

Knowing how to prioritize and make projects more appealing to alternate funding agencies is another service we offer. IMEG has successfully secured BRIC funding for the Town of Morrison which will be utilized to scope mitigation projects and augment their recently completed Hazard Mitigation Plan. We have secured funding for the Town of Golden that will allow the preparation of a Stormwater Master Plan that will identify mitigation projects to protect their downtown area. In addition, on behalf of the Town of Johnstown, we have applied for funding to a Stormwater Master Plan which is under consideration at this time by FEMA. While gaining funding is never promised, we believe our experience helps small communities compete with agencies that have full time staff focusing on attaining alternative funding.



Figure 1: Burn Scar (photo credit Hugh Carey, Colorado Sun)

Preparing a Stormwater Management Plan for the Town of Grand Lake is something the IMEG team is ready for and capable of producing. We know our experience will result in a product that will serve your beautiful community well, one that will use lessons learned as a powerful tool to guide the process from well thought out concepts into construction. Preserving the natural beauty of Grand Lake through low impact measures will be our top priority. Involving your residents and small business owners will also be a critical aspect of the Stormwater Management Plan preparation process, their experience with the post-fire reality is valuable, and public buy-in to proposed risk reduction measure is a critical aspect of project success.

For ease of ranking/review we will address our approach to each of the tasks and deliverables you have in the order you have outlined in the RFP as follows:

## TASK 1: INVENTORY:

IMEG's approach to data gathering begins with meeting with your key staff and in determining where data gaps may exist. We will review the as-built information you may have on file regarding existing storm water facilities and augment this information through on-the-ground data capture. Our GIS staff and surveyors are experts at this type of data capture, and they will adeptly produce a data base of all storm drain facilities, including pipe diameters, manhole locations and inverts. If needed, we will capture ground elevations with a drone, something we have done on numerous projects. IMEG has teamed with AGW, a fire runoff experienced geotechnical group that will expertly assess existing soil conditions and provide a report in advance of mitigation facility scoping. **Key deliverables:**

### DATA COLLECTION:

Topographic Mapping using collected LIDAR data, ground survey at locations where storm drain facility inverts are needed and to augment LIDAR data as needed. A GIS Dashboard that will reflect system data in a comprehensive fashion, and will teach your team how to modify the Dashboard as mitigation projects are completed.

### SOIL AND WATER QUALITY ASSESSMENT AND MONITORING REPORT:

#### Water Quality

In order to provide baseline water quality data prior to implementing any stormwater solutions, AGW will collect samples from various project locations and measure the following parameters in the field:

- total suspended solids
- bacteria count/identification
- dissolved oxygen
- pH
- temperature
- clarity

Additional compounds in surface water runoff may be evaluated, including dissolved metals, nitrates/nitrites, Per- and Polyfluorinated Substances (PFAS), and/or petroleum hydrocarbons.

The results of these measurements will guide IMEG's approach to sediment and runoff capture and containment.

#### Soil Characteristics

AGW will advance soil borings in select locations to evaluate soil characteristics which will be used to evaluate low impact development solutions and other best management practices. Characteristics evaluated will include:

- soil type
- horizons
- percolation
- topography

Additional compounds in soil may be evaluated, including metals, nitrates/nitrites, Per- and Polyfluorinated Substances (PFAS), and/or petroleum hydrocarbons.

#### Monitoring Report

AGW will prepare a Pre-Construction Water Quality Assessment and Soil Characteristics Report which will be utilized to evaluate water quality mitigation needs as outlined in Task 2.

### PROGRESS REPORTING

IMEG will facilitate monthly progress meetings to assure your staff and the public are apprised of findings, and to assure the project's schedule and scope are followed. We will provide a formal progress report at each meeting in the Town's preferred format. Meeting minutes will be produced and made available for review and approval by the team.



## TASK 2: ANALYSIS

IMEG will carefully evaluate the existing stormwater conveyance and street system in the study area. Our team will evaluate water quality and monitoring needs. We will develop mitigation alternatives that provide implementable and maintainable solutions and summarize them in a detailed report and with a user friendly GIS dashboard. We will develop a Public Engagement Plan that assures collaboration with key stakeholders. Through our data gathering efforts we will analyze the existing stormwater system, and determine condition and capacity of the existing stormwater conveyance system. We will determine the system's deficiencies; determine area impacted and area served and utilize this information to develop and prioritize mitigation alternatives.

### **Key Deliverables:**

### **EXISTING STORMWATER SYSTEM EVALUATION AND ANALYSIS:**

- IMEG will prepare all topographic mapping and a hydrologic analysis of the watershed in the post fire environment, appropriately accounting for the sediment that is present in stormwater runoff following a catastrophic fire. We will utilize the bulked flow volume developed and prepare a hydraulic analysis of the conveyance facilities such as culverts and bridges that are currently in place in the study area. We will determine where deposition and overtopping can be expected. Following the existing system hydrologic and hydraulic evaluation, we will initially focus on determining use of low impact solutions are viable, and on what restoration actions can be accomplished quickly in the upper watershed to reduce the amount of ash laden sediment reaching the Shadow Mountain Reservoir.

### **PRE-CONSTRUCTION WATER QUALITY REPORT AND MONITORING STATION SITING:**

- AGW will utilize water quality information obtained in Task 1, above, to determine what pollutants are present in stormwater and to assist in development of a Water Quality Monitoring Plan, which will recommend locations and quantities of monitoring equipment necessary for ongoing water quality evaluation both upstream and downstream of proposed stormwater solutions.
- Temporary and permanent monitoring locations will be integrated into the GIS Dashboard produced by our team. Monitoring will continue for their recommended period after mitigation measures are in place.

### **PROPOSED STORMWATER ALTERNATIVE REPORT:**

- We will prepare a report that summarizes all initial findings in a clear and concise fashion that can be readily understood by all stakeholders. This report will provide alternatives for stormwater runoff mitigation, with a focus on low-impact solutions. The identified alternates will address the post fire initial year conditions that are maintainable for Town crews, and will provide alternatives that can serve the Town after the danger of post fire runoff is abated with young growth—possibly with a multi-use function. We will be particularly focused on implementable alternatives that address woody debris, as this can create system failure as quickly as ash laden

sediment. We know what solutions have worked in the past, and which are more susceptible to failure from these challenges and our report will include a facility prioritization matrix that makes alternative selection easier for your decision makers.

### **PUBLIC OUTREACH AND ENGAGEMENT PLAN:**

- IMEG will immediately develop a Public Engagement Plan in order to assure collaboration with key stakeholders including the Forest Service, Fire Districts, Three Lakes Watershed Association, local residents, business owners, and the Town's key staff and governing body. We will invite post fire restoration volunteer groups such as Team Rubicon to the table, so that their experience in ladder fuel and standing dead reduction can be brought in and utilized immediately. We will reach out to ad hoc groups and homeowner's associations such as the Grand Lake Estates HOA, and pull stakeholder's together through conducting on-line, email and mailed surveys and with informative community workshops. We will maintain transparency and encourage input throughout the project by making project information available on an interactive public page developed by our GIS team, and integrated into the Town's current website.



## TASK 3: STORMWATER MANAGEMENT PLAN PRELIMINARY DESIGN

IMEG will prepare a Preliminary Stormwater Management Plan with Concept Level Construction Documents for the selected mitigation alternatives. Preliminary Cost Estimates will be included to aid in securing funding for these projects. To accurately provide our fee, we have conceptualized the probability that we will be identifying two low impact sediment basins (one exigent), design of one woody debris capture facility (exigent), and preliminary design of up to three conveyance facilities which may include a combination of catchment and stilling basin designs, improvements to existing conveyance capacity through culvert upsizing, stormdrain pipe placement to reduce street conveyance burden, combined with outlet stilling design at the reservoir.

It is important for you to be aware that if design of multiple facilities is required, our fee proposal would be impacted—until alternatives are identified we recommend that the scope of services and design fee for anything other than exigent projects are not negotiated at this time. We have provided a concept level design fee for the selected alternatives as outlined, but discourage execution of the preparation of final design and construction document design contract until alternatives are selected based on the Stormwater Management Plan/Report. Many grants are available that cover facility design costs, and separating design and construction for all alternatives until funding is secured may be the preferred path for these projects, and the path we recommend based on our prior experience. In developing the preliminary design, all conceptualized projects will be compliant with local, state and federal code. **Key Deliverables:**

- Preliminary Stormwater Management Plan/Report
- Preliminary Operations and Maintenance Manual
- Concept Level Plans for selected alternatives (sediment basins, debris trap, water quality pond, outlet protection at reservoir inlet, etc)
- 30% complete Engineering Design Plans, Construction Documents and Specifications for exigent projects (sediment and woody debris capture)
- Funding Matrix summarizing alternative funding sources

## TASK 4: STORMWATER MANAGEMENT PLAN FINAL DESIGN

Where an exigent project (1) is needed to protect water quality, IMEG will produce a final Operations and Maintenance Plan, Final Construction Improvement Plans and Final Construction Documents and aid the Town in bid document production. You are no doubt aware that there is federally designated Special Flood Hazard Area that is not benefitted by a detailed study, so the final hydraulics for the exigent alternative will need to demonstrate no-rise in the base flood elevation (which we will determine in our hydraulic analysis), if a rise is unavoidable, FEMA allows a 1' rise in Zone A. The Town will be required to notify FEMA within 6-months of any changes to this mapped floodplain. We anticipate that an exigent project would include “off-line” sediment and debris capture in order to avoid placement in the mapped floodplain, this will be determined in the earlier Tasks associated with this RFP making impacts to the floodplain difficult to fully and accurately assess in a proposal response.

In seeking funding and in budgeting for future improvements, the Town should consider getting the approximate Zone A special flood hazard area remapped in order to establish a regulatory floodway and improve floodplain management in the conveyance area, new facilities could be mapped in this effort and therein meet FEMA regulation for notification of changes. Please note that these services are not included in our scope for this project, as they could potentially be grant funded. For non-exigent projects, the Town is advised to secure grant funding based on our Preliminary Design Plans and preliminary cost estimates, and

issue a separate RFP for the development of final design plans and construction documents. This will assure that you remain with federal procurement guidelines, and be able to fully recuperate a large percentage of the associated design and construction costs. IMEG staff will assist the Town with grant writing and grant administration. We have not included construction plan and document preparation in our scope for non-exigent projects at this time for these reasons. Key Deliverables:

- Complete Stormwater Management Plan/Report
- Complete Operations and Maintenance Plan
- Complete Engineering Plans and Specifications for exigent projects (2)
- Issue Bid Documents for exigent projects
- Complete Grant Applications (3) for non-exigent projects

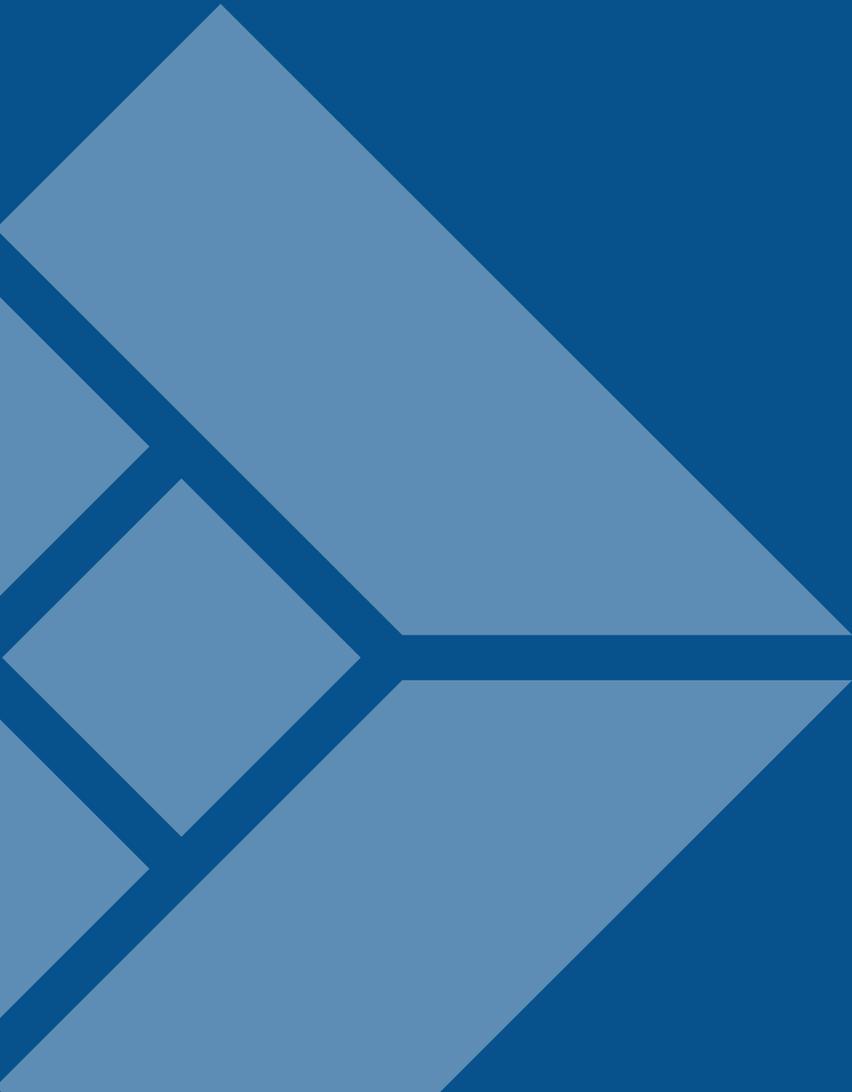


Figure 2: Current Regulatory Flood Map



SECTION 2

# SIMILAR EXPERIENCE



# MUNICIPAL EXPERIENCE

IMEG has vast experience with municipal capital improvement projects. Our team is well-versed in managing municipal contracts and providing engineering services while serving as an extension of the organization.

Provided below are current on-call type contracts and other municipalities/water districts we have provided services for in the past.



## CURRENT CLIENTS

### **CENTRAL CITY** \*NEW\*

On Call Civil Engineering & Land Surveying and Development Plan Review Services

### **CITY OF BOULDER** \*NEW\*

Stormwater and Flood Management, Hydroelectric Power Engineering and Design Services

### **CASTLE PINES METROPOLITAN DISTRICT - 5 YEARS**

On Call Civil Engineering & Land Surveying and Development Plan Review Services

Potable Water Infrastructure, Sewer Collection, Storm Water, Transportation, Trails, Etc.

### **CITY OF GOLDEN - 35+ YEARS**

On Call Civil Engineering & Land Surveying

Potable Water Infrastructure, Non-Potable Water Infrastructure, Storm Water, Sewer Collection, Transportation, Trails, Parks, Etc.

### **CITY OF LONE TREE - 20+ YEARS**

On Call Civil Engineering & Land Surveying and Development Review Services

Storm Water, Transportation, Trails, Parks, Etc.

### **TOWN OF JOHNSTOWN - 20+ YEARS**

On Call Civil Engineering & Land Surveying and Development Review Services

Potable Water Infrastructure, Non-Potable Water Infrastructure, Storm Water, Sewer Collection, Transportation Projects

### **PARK MEADOWS METROPOLITAN DISTRICT - 20+ YEARS**

On Call Civil Engineering & Land Surveying Project Management, Asset Management

### **TOWN OF MORRISON - 9 YEARS**

On Call Civil Engineering & Land Surveying and Development Review Services

Potable Water Infrastructure, Non-Potable Water Infrastructure, Sewer Collection & Treatment, Transportation Projects

## Ancillary Services

- Risk Assessment
- Drone Flights
- Grant Writing
- Master Plans for Critical Infrastructure
- Capital Improvement Planning
- Environmental Services
- Emergency Assistance during natural disasters
- Bridge Assessments
- Scientific modeling of system hydraulic performance
- 3-D models of water/wastewater pump stations
- Representation of clients to regional partners

## PAST CLIENTS

- BACA GRANDE WATER & SANITATION DISTRICT, CRESTONE, CO**
- CITY OF MANITOU SPRINGS, CO**
- CITY OF RAWLINS, WY**
- CITY OF ROCKY FORD, CO**
- CITY OF TORRINGTON, WY**
- CITY OF WRAY, CO**
- PARKER WATER & SANITATION DISTRICT, PARKER, CO**
- TODD CREEK METROPOLITAN DISTRICT, BRIGHTON, CO**
- TOWN OF FOWLER, CO**
- TOWN OF LAGRANGE, WY**
- TOWN OF LUSK, WY**

# CITY OF PICO RIVERA MASTER PLAN UPDATE

PICO RIVERA, CA

Pico Rivera is completing the process of updating the master plans, including the Water Master Plan, Wastewater Collection Master Plan and the Storm Drain Master Plan. The City entered into a contract to develop these updates, as well as the City’s Urban Water Management Plan.

The Water Master Plan includes the update to the existing GIS system, development of a hydraulic model, and site inspections for the water treatment plants and pumps. The plan also evaluated the current population projection, water demand estimates and water supply availability. The conclusion of the plan will include an evaluation of the City’s Budget and development of a CIP.

The Wastewater Collection Master Plan is similar to the Water Master Plan, but the available data is somewhat limited. The original master plan’s hydraulic model is not available, nor is the GIS. IMEG is building the GIS from information provided from LA County, to be incorporated into a new hydraulic model. This hydraulic model was used in combination with the meters installed within the system to determine what areas within the system witnesses inflow and infiltration issues.

The Storm Drain Master Plan is a new master plan. The original evaluation of the storm drain system was developed in the 1960’s. IMEG is developing a new GIS system using as-builts and available documentation, which will then be incorporated into a hydraulic model. This hydraulic model was, then, used to in combination with the hydrology model to evaluate the current capacity of the system.

The GIS database developed from these three master plans will be used in the field using City-provided toughbooks, allowing staff immediate access to the systems.

All three of the Master Plans involved the development of hydraulic models. The Water Master Plan used the City’s GIS system to develop an InfoWater model. Both the Wastewater Collection and the Storm Drain Master Plans utilized InfoSWMM. The sewer system had to be developed using strictly as-built information, since a GIS was not available. This effort resulted in having negative slopes within the model. To resolve this, IMEG provided field survey to more accurately determine the correct slopes. Services included assisting the City in updating their Emergency Response Plan with specific and outlined responses for a variety of situations to protect their staff and provide a safer and more secure work environment.

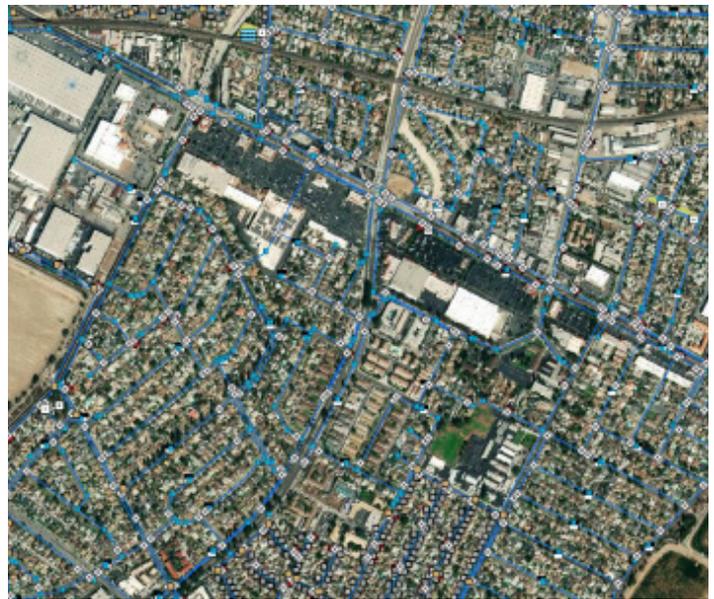
A Risk and Resilience Assessment was completed finding and addressing numerous gaps in their physical, material, IT, and employee security.

Additional services included:

- Policy and procedure review for emergency response plan
- Gap Analysis
- Jurisdictional Crime analysis and report
- Risk and Resilience Assessment and Report

Our team also assisted the City in creating a “*getting back to business*” plan after an emergency situation.

IMEG also provided a **AWIA Risk and Resilience Assessment and ERP** review to discover and address gaps in their security systems.



<b>COST</b>	\$950K
<b>COMPLETION</b>	On-Going
<b>SERVICES</b>	Civil, Water & Wastewater, Security Risk and Resilience Assessment (RRA) Emergency Response Plan (ERP)
<b>REFERENCE</b>	MONICA HEREDIA Deputy Director (City Engineer) Public Works Department 6615 Passons Blvd. Pico Rivera, CA 90660 O: 562.801.2436 E: mheredia@pico-rivera.org

# TOWN OF JOHNSTOWN NORTH SERVICE LINE

JOHNSTOWN, CO

## SEWER INTERCEPTOR INSTALLATION

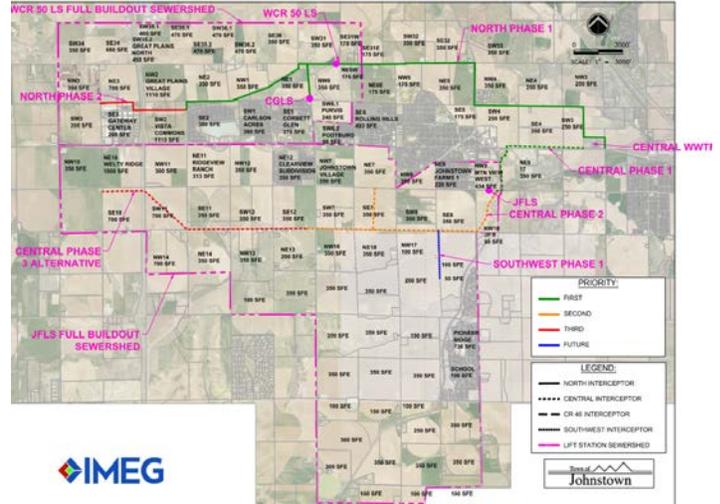
Since the inception of the Town of Johnstown in 1902, infrastructure and planning needs have changed significantly. Much of IMEG's role in finding innovative solutions to the Town's needs include using the existing facilities to the highest best use, upgrading facilities where there is a clear need, and prioritizing the improvement needs for the interceptor design phasing and construction.

Interceptor design by its very nature serves the larger communities needs for public health, wastewater treatment, and financial growth capacity in the community. This is especially true in rural areas where improvements and development that happen within the community can affect the entire community. By planning for future development needs, the Town can address demands from the community in an orderly and cost-effective manner, that uses public resources efficiently and responsibly to continue to promote the quality of life that the Town of Johnstown is known for.

IMEG worked directly with the CMAR to evaluate and prioritize the community's needs. This included review of existing capacity issues, pending development applications needing sewer service upgrades, evaluation of timing and priority to establish a phasing program and timeline. This planning effort served as the basis for creating a successful strategy for bringing infrastructure online in a timely and cost competitive way. In addition, IMEG worked closely with the Town's contractor to evaluate system constructability, establish means and methods for project delivery, and timing of resources for the project construction needs. Everyone involved in the project had a voice from the first day of planning the project.

The capacity of the existing sewer system is undersized for both the current demand and the anticipated future development in the Town's statutory growth boundary. In addition, there are several local developments that are restricted for development until such time as the Town's sewer capacity issues could be addressed. In order to create a system with sufficient capacity to handle the short term and longer vision loads on the system, IMEG worked closely with the Town to evaluate alternatives to upgrade the sewer system, manage immediate demand pressures, and facilitate future growth in the area.

This project involved installing a deep interceptor sewer on the north side of the Town of Johnstown, to extend from west of I-25 to the Central Wastewater Treatment Plant on the east side of the City. This is an approximate length of 40,000 linear feet. This route generally slopes from west to east, however there are a few localized low/high points which necessitated a lift station. One of the planning elements for this project was to eliminate as many lift stations as possible in consideration of the Town's long-term maintenance requirements.



<b>SIZE</b>	Service Area: 8.9 square miles Phase 1 appx 34,000-lf Phase 2 appx 6,000-lf
<b>COST</b>	\$27 million
<b>COMPLETION</b>	2022
<b>SERVICES</b>	Civil, Structural, Mechanical, Electrical, Survey
<b>REFERENCE</b>	Ellen Hilbig, Utilities Director 970.578.9619 / ehilbig@johnstownco.gov

As part of the North Interceptor planning, there was an existing lift station, servicing the Corbett Glen neighborhood, which could be decommissioned with the installation of the deep sanitary sewer. This was replaced with a large lift station near Colorado Blvd and WCR 50, known as the WCR 50 Lift Station. The interceptor, lift station, and associated force mains were designed to serve the ultimate build-out of the town long into the future. The gravity sewer ranges from 12" to 30", the lift station is rated for 6 MGD, and there are two parallel 12" force mains which have approximate length of 1,500 linear feet. The lift station and force mains were designed for incremental expansion for a 40-yr buildout. Along the 40,000 linear feet route, obstructions include the Great Western Railroad, Colorado State Highway right of way, and private properties including agricultural, industrial, and residential land uses. IMEG worked closely with the Town to evaluate alternatives for the construction of a new force main system, extension of a gravity sewer to the wastewater treatment plant, and minimize impacts from over depth sewer construction, and private property interests.

# TOWN OF JOHNSTOWN CENTRAL SERVICE LINE

JOHNSTOWN, CO

## SEWER INTERCEPTOR INSTALLATION

The Town of Johnstown was founded in 1902. Infrastructure and planning needs have changed significantly since the inception of the Town. Much of IMEG's role in finding innovative solutions to the Town's needs include using the existing facilities to the highest best use, upgrading facilities where there is a clear need, and prioritizing the improvement needs for the interceptor design phasing and construction.

Some of the goals for the project included eliminating lift stations and force mains where possible to minimize long term operational costs and maintenance needs. This was done by replacing the existing undersized lift station serving the immediate development area and replacing it with a wet well and lift station with expansion capacity to serve the ultimate development limits for the Town long into the future.

As part of the future phase planning efforts, IMEG is able to decommission an existing lift station further upstream by installing a gravity interceptor as part of the Phase 2 component that dramatically improves the service area that can be addressed, and eliminate an older lift station facility in the process.

Interceptor design by its very nature serves the larger communities needs for public health, wastewater treatment and financial growth capacity in the community. This is especially true in rural areas where improvements and development that happen within the community can affect the entire community. By planning for future development needs, the Town can address demands from the community in an orderly and cost-effective manner, that uses public resources efficiently and responsibly to continue to promote the quality of life that the Town of Johnstown is known for.

IMEG worked directly with the Town of Johnstown to evaluate and prioritize the communities needs. This included review of existing capacity issues, pending development applications needing sewer service upgrades, evaluation of timing and priority to establish a phasing program and timeline. This planning effort served as the basis for creating a successful strategy for bringing infrastructure online in a timely and cost competitive way.

In addition, IMEG worked closely with the CMAR to evaluate system constructability, establish means and methods for project delivery, and timing of resources for the project construction needs. Everyone involved in the project had a voice from the first day of planning the project.

The capacity of the central interceptor for the lower reaches of the sewer system is undersized for both the current demand and the anticipated future development in the Town's statutory growth boundary. In addition, there are several local developments that are restricted for development until such time as the Town's sewer capacity issues could be addressed.



In order to create a system with sufficient capacity to handle the short term and longer vision loads on the system, IMEG worked closely with the Town to evaluate alternatives to upgrade the sewer system, manage immediate demand pressures, and facilitate future growth in the area.

Among the challenges were obstructions along the sewer alignment that include the Little Thompson River, the Great Western Railroad, Colorado State Highway right of way, and private properties including agricultural, industrial, and residential land uses. IMEG worked closely with the Town to evaluate alternatives for the construction of a new force main, extension of a gravity sewer to the wastewater treatment plant, and minimize impacts from over depth sewer construction, and private property interests.

<b>SIZE</b>	Service Area, appx 16 square miles Phase 1 appx 8,600-lf Phase 2 appx 11,000-lf Phase 3 appx 20,000-lf
<b>COST</b>	Overall construction budget \$35 million
<b>COMPLETION</b>	Phase 1 - Fall 2021 Phase 2 - Winter 2021 Phase 3 Design - Winter 2021 Phase 3 Construction - 2022/23
<b>SERVICES</b>	Civil, Survey, Structural, Electrical
<b>REFERENCE</b>	Ellen Hilbig, Utilities Director 450 S. Parish Ave Johnstown, CO 80534 P: 970.578.9619 E: ehilbig@johnstownco.gov

# CITY OF GOLDEN ANNUAL UTILITY REPLACEMENT PROGRAMS

GOLDEN, CO



## ANNUAL ENGINEERING DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES

IMEG provides annual engineering design and construction administration services for utility replacement within the City of Golden. Each year a prioritization of water and sanitary sewer lines that need to be constructed, replaced or rehabilitated based on gaps in the service area, inadequate capacity, and/or pipe condition are identified.

These waterlines are typically old and no longer provide adequate capacity. The existing sanitary sewer lines typically have issues with infiltration, age, and/or corrosion. The damaged sanitary sewer pipe is removed and replaced with new pipe. In locations of high traffic volume, difficult access, and where the pipe is not overly damaged, cured-in-place pipe (CIPP) has been used with a high success rate. New and possibly larger pipelines are installed while the existing waterlines are abandoned in place.

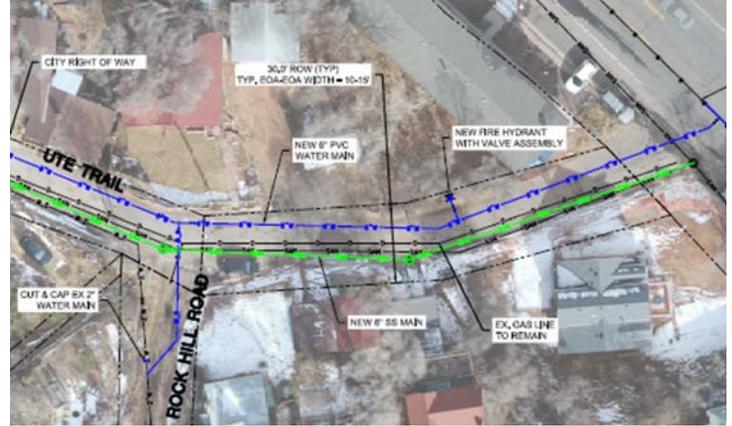
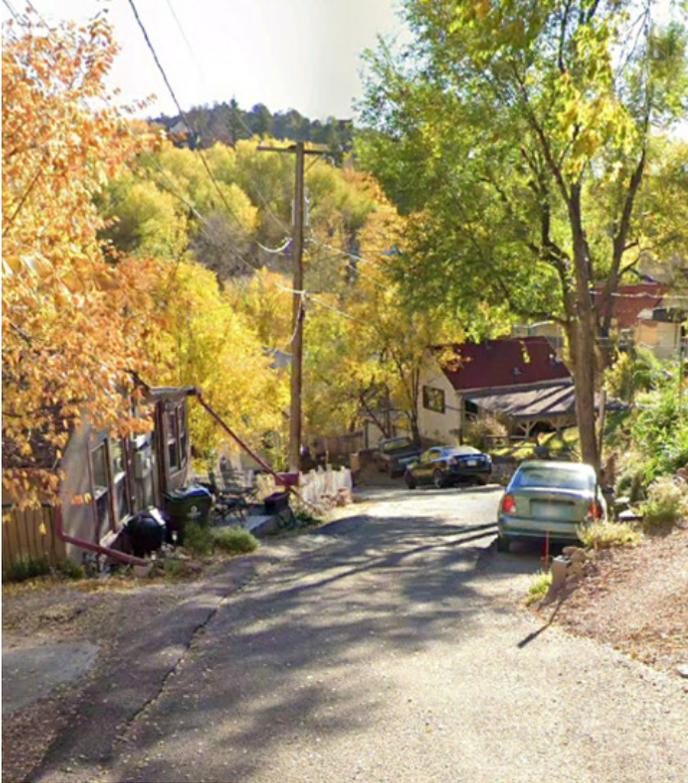
Over the last three years, over 13,000-lf of CIPP has been installed as an option to the traditional remove and replace strategy. The storm sewer projects are more likely to alleviate drainage issues within the community.

Design sizing of these storm sewers includes drainage flow calculations and cost/benefits analysis. This service has been provided to the City of Golden since 1988.

<b>COST</b>	Annual Sewer Budget Varies from Approximately \$500,000 - \$1 million
<b>COMPLETION</b>	On-Going
<b>SERVICES</b>	Engineering Design and Construction Administration Services, Water Pipelines, Sanitary Sewer Lines, Storm Sewer
<b>REFERENCE</b>	Dan Hartman, Public Works Director City of Golden Public Works Department 1445 10th Street Golden, CO 90401 O: 303.384.8150 E: dhartman@cityofgolden.net

# CITY OF MANITOU SPRINGS UTE TRAIL WATER MAIN REPLACEMENT

MANITOU SPRINGS, CO



## WATER DISTRIBUTION SYSTEM AND WASTEWATER COLLECTION SYSTEM

IMEG worked with the City of Manitou Springs to evaluate the water distribution system and the wastewater collection system. During this evaluation, we recommended improvements to be made across the City.

These improvements included on South Path, E. Fountain Place, and Ute Trail. For the portion along Ute Trail, IMEG coordinated efforts with the City, evaluated runoff and stormwater impacts and made recommendations to water and sewer impacts. Recommendations included installing a new 6-inch water main and replacing the existing sewer main with 6-inch PVC. For a full evaluation of the project site, IMEG utilized drone methodology to survey large areas at once.

<b>COST</b>	\$650K
<b>COMPLETION</b>	2018
<b>SERVICES</b>	Civil, Water Distribution System, Wastewater Collection System
<b>REFERENCE</b>	Sara Hartley Former Hazardous Mitigations Officer 301 S. Park Ave. Helena, Montana 59601 O: 719.492.3914 E: nokolisara@gmail.com

# CITY OF MANITOU SPRINGS WATER MASTER PLAN

MANITOU SPRINGS, CO



IMEG’s master plan involved the evaluation of the entire water system, including the raw water reservoir, water treatment facilities, and distribution system. Two models were created and interconnected using a proprietary “Dashboard” tool, allowing the City to evaluate the system under specific conditions, such as drought events. Using the Water Distribution Model, IMEG evaluated the efficiency, water age, velocities, and pressure throughout the entire system and make improvement recommendations to the City.

One of the main discussion points in the Master Plan was on the existing 2 MG tank that provided water to 70% of the City. This tank had never been taken offline for maintenance because there was no known by-pass line, meaning that most of the City would be without water. To remediate this issue, our team recommended that the City install a new 750,000-gallon water tank that will act as a redundant tank to the existing 2 MG tank, allowing it to be taken offline for maintenance. IMEG alongside Gene Schaefer with SDG conducted an analysis to determine the most beneficial location and material for the new storage tank.

This work lead the IMEG team into an on-call engineering contract with the City in which we provided both water and wastewater design, development and system reviews, SOP development along with other services.

<b>COST</b>	\$98,940
<b>COMPLETION</b>	2019
<b>SERVICES</b>	Civil, Master Planning, System Evaluation, Regulation Development, Utilities Design
<b>REFERENCE</b>	Sara Hartley Former Hazardous Mitigations Officer 301 S. Park Ave. Helena, Montana 59601 O: 719.492.3914 E:nokolisara@gmail.com

# PROJECT EXPERIENCE

RECENT PROJECT EXPERIENCE						
QUICK GLANCE						
No.	CONTACT INFO:	TITLE OF EXAMPLE PROJECT	CLIENT	BUDGET/YEAR	% COMPLETE	RFQ CATEGORY TYPE
1	A	Johnstown Farms WW Lift Station (8.3 MGD) (Design and CM)	Johnstown	\$3,500,000/2020	100%	Project Management Services
2	A	Weld County Rd. 50 WW Lift Station (6.68 MGD) (Design and CM)	Johnstown	\$3,300,000/2022	90%	Project Management Services
3	A	Central Phase I WW Collection System (Design and CM)	Johnstown	\$7,500,000/2021	100%	Project Management Services
4	A	Central Phase II WW Collection System (Design and CM)	Johnstown	\$11,500,000/2022	90%	Project Management Services
5	B	<b>Stormwater Design Standards</b>	Johnstown	\$35,000,000/2022*	15%	Stormwater Facility Design
6	B	Alt. Funding Applications for Stormwater Master Plan	Johnstown		10%	Grant Procurement
7	B	Alt. Funding Applications for Transportation Master Plan	Johnstown	5,000/2022*	10%	Grant Procurement
8	D	Recycle Yard and Iowa Street Pond Improvements	Golden	\$345,000/2020	100%	Stormwater Facility Design
9	D	<b>Washington Street and New Loveland Mine Park Pond Improvements</b>	Golden	\$497,000/2021	100%	Stormwater Facility Design
10	C	Pinery Lift Station (.1 MGD)	Starwood LA, LLC	\$250,000/2021	100%	Project Management Services
11	D	Water Treatment Plan Improvements (5 projects)	Golden	\$5,000,000/2017-2021*	100%	Project Management Services
12	D	Alt. Funding Application for Stormwater Master Plan	Golden	\$7,500/2022*	60%	Grant Procurement
13	E	Wastewater Master Plan and Capital Improvement Plan	Manitou Springs	\$65,000/2018*	100%	Project Management Services
14	A	<b>Floodplain Management Services/Development Review</b>	Johnstown	TMNTE*	Ongoing	Floodplain Administration
15	F	<b>Stormwater Master Plan</b>	Pico Rivera	\$120,000/2019*	100%	Stormwater Facility Design
16	F	Water System Master Plan	Pico Rivera	\$85,000/2019*	100%	Project Management Services
17	D	Water System Master Plan and Capital Improvement Plan	Manitou Springs	\$140,000/2017*	100%	Project Management Services
18	I	<b>Floodplain Management Services/Development Review</b>	Morrison	TMNTE*	Ongoing	Floodplain Administration
19	G	Water System Master Plan	LaGrange, WY	\$100,000/2021	100%	Project Management Services
20	I	<b>FEMA BRIC Scoping Project Application and Grant Mgmt</b>	Morrison	\$7500/2022*	80%	Grant Procurement
21	I	Water Service Extension (Morrison to Red Rocks)	Morrison	\$1,000,000/20	100%	Project Management Services
22	H	<b>Floodplain Management Services/Development Review</b>	Central City	TMNTE*	Ongoing	Floodplain Administration
23	C	Utility Replacement Projects (1 per year--last 5 years)	Golden	\$5,000,000/2016-2021	100%	Stormwater Facility Design
24	J	<b>58 Detention Ponds (Conformity Assessments and Modification Design)</b>	Castle Pines Metro	\$60,000/2018	100%	Stormwater Facility Design
25	D	Ute Trail Sewer Main Replacement	Manitou Springs	\$65,000/2018	100%	Project Management Services
26	K	<b>Water, Sewer, Stormwater GIS</b>	Silverthorne	\$750,000/2007-2022	Ongoing	GIS Development
27	L	Water, and Sewer GIS	Ken Caryl Ranch	\$350,000/2016-2022	Ongoing	GIS Development
28	M	Water, Sewer and Stormwater GIS and Planning	Lyons	\$140,000/2013-2022	Ongoing	GIS Development and Planning

\*study or design only

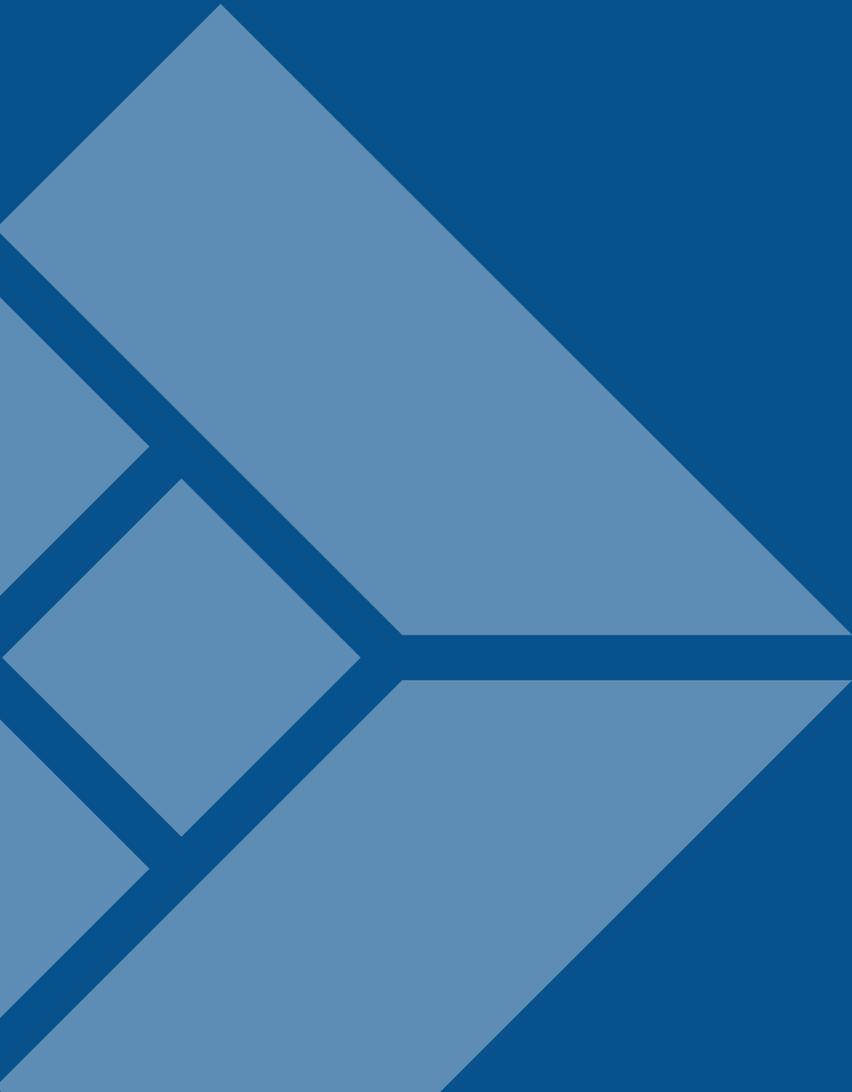
PROJECT CATEGORIES KEY	
■	WW Force Main
■	WW Lift Station
■	WW Gravity Main
■	Potable Water System Project
■	Floodplain Administration and/or Stormwater Facility Design
■	Alternative Funding/Grant Management
■	Stormwater Facility Design
■	Master Plan

PROJECT REFERENCES	
A	
A	Doug Gossett, Town Engineer, 970-829-7878
B	
B	
C	Kurt Jones, Project Manager, (303) 858-9997
D	
D	Ann Beierle, Public Works Director, (303) 384-8153
D	Joseph Lammers, Civil Engineer-CFM, (303) 384-8156
D	Ann Beierle, Public Works Director, (303) 384-8153
E	Sara Hartley, Recovery Manager (former), (719) 492-3914
F	
F	Luis Osuna, Assistant City Engineer, (562) 801-4364
G	Bruce Perryman, AVI, (307) 634-6017
H	Lisa Remhildt, Special Projects, (303) 582-5251 ext.31
I	
I	Kara Winters, Town Manager, (720) 643-3454
I	
J	Jason LeTellier, CPMD Superintendent, (303) 688-8330
K	Zach Margolis, Utility Director, (970) 262.7344
L	Tim Anderson, District Manager, (303) 979-7424
M	Eric Jaap, Engineer, (307) 721-5345



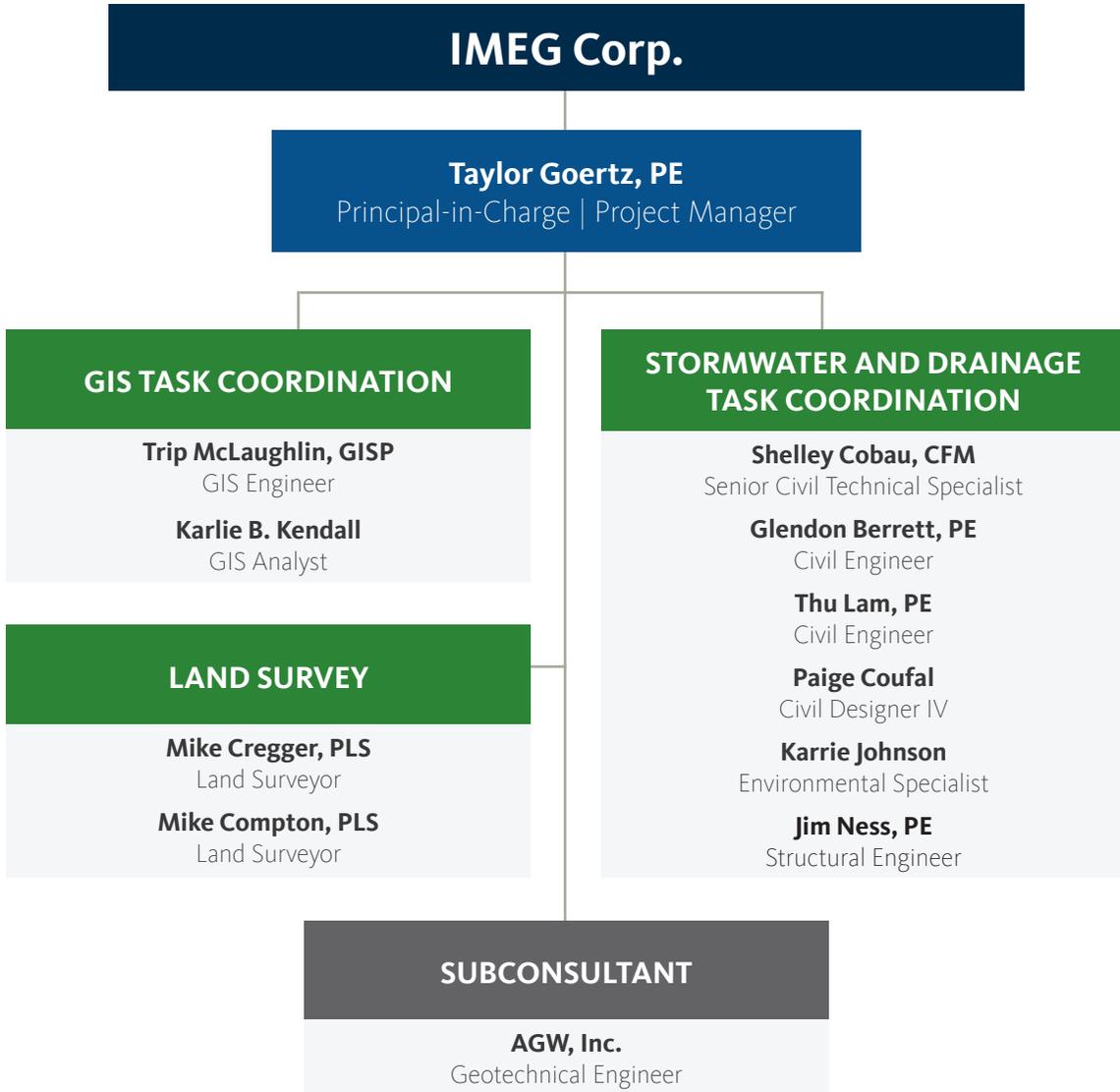
SECTION 3

# QUALIFICATIONS



# 3. QUALIFICATIONS

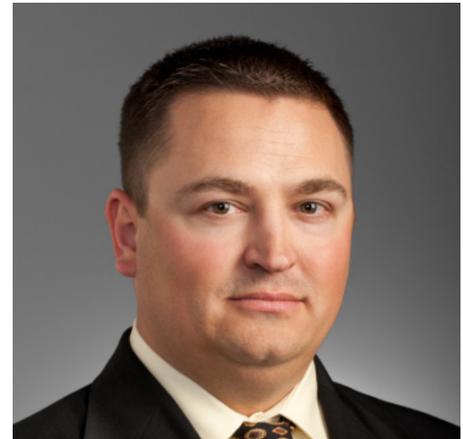
## KEY PROJECT STAFF AND RESUMES



**NO MEMBERS OF OUR TEAMS WILL BE REPLACED DURING THE DURATION OF AWARDED PROJECTS WITHOUT APPROVAL FROM THE TOWN OF GRAND LAKE.**

# Taylor Goertz, PE

PIC | PROJECT MANAGER | CIVIL ENGINEER



Taylor has more than 23 years of varied experience in planning, engineering, management, and construction in site development engineering. His experience includes a wide variety of tasks including public works services, water and wastewater conveyance, stormwater and detention facilities, roadways, recreational facilities, and entertainment projects.

## PROJECT HIGHLIGHTS

- Cadre General Contractors, Centennial, CO, Stormwater Management Plan
- Castle Pines Metropolitan District, Castle Rock, CO, Crestone Way Widening and Water Line Replacement, Included Design of Curb & Gutter, Asphalt, and Storm Improvements
- City of Central City, CO, Miscellaneous On-Call Engineering Services
- City of Golden, CO, 2020 Water and Sanitary Sewer Infrastructure Replacement Improvements
- City of Golden, CO, 2021 Miscellaneous On-Call Engineering Services
- City of Golden, CO, 2021 Miscellaneous Planning Projects
- City of Golden, CO, 2022 Stormwater Detention Pond Retrofit Improvements
- City of Golden, CO, 2022 Utility Replacement
- City of Golden, CO, Water Quality Improvements
- City of Torrington, WY, Torrington, WY, Water Master Plan and Detailed Engineering Analysis of Town Water Supply
- Kolorado River Ranch, LLC, Gypsum, CO, Master Plan/Design for Improvements on 2,000 Acre Ranch, Including Stormwater Management Systems, Regulatory Permitting, Wetlands Delineation, Ranch Headquarters, Lodge & Accessory Dwelling Unit Design & Construction, Grading Plans & Roadway Improvements
- Lola's House LLC, Cherry Hills Village, CO, 15 Cherry Hills Drive, Grading and Stormwater Management Plans for New House Construction
- RTP Company, Orange, TX, Site Stormwater and Wastewater Evaluation
- Town of Johnstown, CO, Complete New Storm Water & Drainage Design Standards
- Town of Johnstown, CO, Wastewater Master Plan
- Town of Morrison, CO, On-Call Flood Plain Administrative Services and Misc. Development Review Services

### Experience

23 Total, 23 with IMEG

### Education

Colorado School of Mines, BS Civil Engineering

### Registrations

Professional Engineer  
Colorado (40237)

### Affiliations

APWA  
Colorado Asphalt Paving Association  
Leadership Douglas County Association

## Shelley Cobau, CFM

SENIOR CIVIL TECHNICAL SPECIALIST



Shelley has over 38 years experience with local governments with a focus on public services, planning, design, plan review, and implementation of both capital and land development projects ranging from large community master plans to small commercial developments and infrastructure projects both in the public and private sectors. Shelley has studied surveying, hydrology, hydraulics, civil engineering, floodplain management, emergency management and continuously seeks to broaden her educational experience.

### PROJECT HIGHLIGHTS

- City of Pico Rivera, CA, Urban Water Management Plan Update
- City of Pico Rivera, CA, Water, Sewer and Storm Drain Master Plan
- City of Las Vegas, NV, Review and final approval of some 3000 technical drainage studies for projects including the Luxor, Bellagio, Excalibur, Del Web's Summerlin and Hard Rock hotels, and \$250M of annual capital projects
- City of Golden, CO, Grant Writing Support for Lena Gulch, Floodplain, Storm Water Mitigation Project
- City of Manitou Springs, CO, Stormwater Master Plan, Water Distribution Master Plan, and Waste Water Conveyance Master Plan
- City of Manitou Springs, CO, Management of numerous capital improvement projects including major street beautification/rehabilitation projects, pedestrian and historic bridges
- City of Santa Fe, NM, Santa Fe River Watershed Action Strategy
- Santa Fe County, NM, Sustainable Land Development Plan, Film Ordinance, Floodplain Ordinance, Home Based Business Ordinance
- Santa Fe County, NM, Galisteo Watershed Rangers Program, designed and implemented an education program focused on sustainable development for 4th grade students
- SERCO/FEMA DR-4440-SD, South Dakota – Mitigation Specialist for declared disaster in South Dakota. Completed mitigation reviews and site visits.
- Southern Sandoval County Arroyo Flood Control Authority, NM, Stormwater Facility Master Plan. Rainfall Event and Data System (READS) Rainfall Record and Rain Gauge Implementation
- Town of Johnstown, CO, 40,000-Ip Sanitary Sewer Expansion - North Phase 1 Sewer Interceptor Design, Including Lift Station and Force Main
- Town of Johnstown, CO, Sanitary Sewer Expansion - Phase 1
- Town of Morrison, CO, As-Needed Miscellaneous Engineering
- Town of Morrison, CO, Hazard Mitigation Plan Assistance/BRIC grant

### Experience

39 Total, 3 with IMEG

### Education

Denver Institute of Technology, AAS  
Cartography

### Registrations

Certified Floodplain Manager (CFM) No.  
US-17-10010

### Certifications

Project Manager Certification

### Affiliations

Association of State Floodplain Managers  
American Public Works Association  
CASFM

## Glendon Berrett, PE

CIVIL ENGINEER



Glendon has vast experience in engineering, design, construction, and management services for both municipal and private clients. He has worked on the design of many diverse projects for water & wastewater treatment facilities, water distribution, sanitary sewer collection and conveyance, storm water improvements. Glendon's diversity of projects provides him with broad based technical abilities in design, coordination skills for interdisciplinary projects, as well as construction administration skills.

### PROJECT HIGHLIGHTS

- Castle Pines Metropolitan District, Castle Pines, CO, Storm Sewer Improvements, Orofino Drive
- Castle Pines Metropolitan District, Castle Rock, CO, Crestone Way Widening and Water Line Replacement, Included Design of Curb & Gutter, Asphalt, and Storm Improvements
- City of Golden, CO, 2020 Water and Sanitary Sewer Infrastructure Replacement Improvements
- City of Golden, CO, 2021 Water and Sewer Utility Replacement Design
- City of Golden, CO, 2022 Stormwater Detention Pond Retrofit Improvements
- City of Golden, CO, Grant Writing Support for Lena Gulch, Floodplain, Storm Water Mitigation Project
- City of Golden, CO, Groundwater Redundancy Planning
- City of Golden, CO, Rimrock Drive Trailhead Access Design, Including Street Narrowing, Trail Access Features, a Restroom Facility, Storm and Detention/Water Quality Improvements
- City of Golden, CO, Storm Sewer Improvements, Corp. Circle
- City of Golden, CO, Storm Sewer Improvements, Iowa-Washington
- City of Golden, CO, Various Storm Improvements
- City of Golden, CO, Vidler Water Collection Tunnel System Pipeline Replacement
- City of Golden, CO, Water Quality Improvements
- Kolorado River Ranch, LLC, Gypsum, CO, Master Plan/Design for Improvements on 2,000 Acre Ranch, Including Stormwater Management Systems, Regulatory Permitting, Wetlands Delineation, Ranch Headquarters, Lodge & Accessory Dwelling Unit Design & Construction, Grading Plans & Roadway Improvements
- Town of Morrison, CO, Raw Water Infrastructure Review & Coordination

### Experience

23 Total, 23 with IMEG

### Education

Colorado School of Mines, BS Civil Engineering

### Registrations

Professional Engineer  
 Colorado (39284)  
 Wyoming (10713)

### Affiliations

American Water Works Association  
 American Council of Engineering Companies of Colorado

**Thu Lam, PE**  
 SENIOR CIVIL ENGINEER



Thu brings over 9 years of civil engineering experience in the design and project management of various underground utilities and facilities projects. Thu has worked in various roles as a project manager on the owner’s side (Southwest Gas, City of Brighton) as well as a field and office engineer on the contractor’s side (Kiewit). Her experience includes the design, scheduling, and project management of gas pipelines, underground utility crossings, and water and wastewater facilities.

**PROJECT HIGHLIGHTS**

- City of Brighton, CO, New 20 MGD Water Treatment Plant
- City of Golden, CO, 2023 Water Treatment Facility Improvements
- City of Phoenix Water Services Department, AZ, Created Multiple Utilities Crossings Exhibits for Water Services
- Hilltop Brothers, LLC, Parker, CO, Fields Development Sewer Lift Station
- Los Angeles County Metropolitan Transportation Authority, CA, 12.3 miles of Gold Line extension from Glendora to Montclair
- Orange County Sanitation District, CA, Two Sanitization Tanks and Associated Piping at Truck Loading Bay Odor Control
- Southwest Gas Corporation, Victorville, CA, 10 miles of high pressure and distribution pipelines replacement on Big Bear Blvd
- Town of Johnstown, CO, Miscellaneous Referral Reviews

**Experience**

9 Total, <1 with IMEG

**Education**

Cal Poly Pomona, BS Civil Engineering

**Registrations**

Professional Engineer

Colorado (0059576)

California (92718)

**Training**

InfoWater Pro

Primevera P6

## Paige Coufal

CIVIL DESIGN ENGINEER



Paige has seven years of experience across a wide range of civil engineering projects. She has been involved in the design of water and wastewater treatment facilities, evaluation and improvement to raw water, potable water, wastewater, and stormwater systems, site development, as well as roadway and trail improvements. Her time with IMEG has provided her with a broad base of technical abilities in design and management for interdisciplinary projects.

### PROJECT HIGHLIGHTS

- City of Golden, CO, Complete New Storm Water & Drainage Design Standards
- City of Golden, CO, Detention Pond Improvements (Including GESC/SWMP)
- City of Golden, CO, 2021 Water and Sewer Utility Replacement Design
- City of Golden, CO, Grampsas Parking Lot Conversion, Including Storm Drainage and Water Quality Improvements
- City of Golden, CO, Groundwater Redundancy Planning
- City of Golden, CO, Guanella Reservoir Revegetation and Update of Stormwater Mitigation Plan
- City of Golden, CO, Rimrock Drive Improvements, Trail Addition, Storm Improvements, and Angled Parking
- City of Golden, CO, Storm Sewer Improvements, Corp. Circle
- City of Lone Tree, CO, Timberline Storm Sewer, Lodgepole
- City of Manitou Springs, CO, 2018 Water Main Replacement
- City of Pico Rivera, CA, Urban Water Management Plan Update
- City of Pico Rivera, CA, Water, Sewer and Storm Drain Master Plan
- Elizabeth Parks & Recreation District, Elizabeth, CO, Casey Jones Park Master Plan
- Kolorado River Ranch, LLC, Gypsum, CO, Master Plan/Design for Improvements on 2,000 Acre Ranch, Including Stormwater Management Systems, Regulatory Permitting, Wetlands Delineation, Ranch Headquarters, Lodge & Accessory Dwelling Unit Design & Construction, Grading Plans & Roadway Improvements
- RTP Company, Orange, TX, Site Stormwater and Wastewater Evaluation
- Stonegate Village Metropolitan District, Parker, CO, Potassium Permanganate and Green Sand Filter Evaluation
- Town of Morrison, CO, Hazard Mitigation Plan Assistance/BRIC grant

### Experience

7 Total, 7 with IMEG

### Education

Colorado School of Mines, BS Geological Engineering

### Affiliations

American Water Works Association

**Karrie Johnson, PWS**  
 SENIOR ENVIRONMENTAL SPECIALIST



Karrie Johnson has 16 years of natural resources experience. She has particular expertise in wetland delineation, with widespread experience in South Dakota and Minnesota. Ms. Johnson is also highly skilled in 404 permitting, mitigation planning, monitoring, and maintenance. Her expertise also includes biological inventories, hydrogeomorphic assessments, floristic quality assessments, and wetland bank developments.

**PROJECT HIGHLIGHTS**

- City of Brandon, SD, East Side Trunk Sewer Jurisdictional Determination and Wetland Delineation
- City of Brandon, South Dakota, Split Rock Creek Bank Stabilization Construction - Monitoring and Reporting for Topeka Shiners and Habitat
- City of Mitchell, SD, Dry Run Creek Channel and Drainage Clean out
- City of Sioux Falls, Sioux Falls, SD, Wetland Delineation, Jurisdictional Determination, HGM and 404 Permitting for Sewer Line Placement
- Clark County Highway Department, Willow Lake, SD, Survey, Traffic Impact Study, Environmental Services, and Design of the Reconstruction of Clark County Road 38
- CSAH 16, Pipestone County, MN, Wetland Delineation of Nine Wetlands and Stream Crossings
- Environmental Scientist for Environmental Resources Management for a 2,500-Acre Wetland Delineation, Union County, SD
- Monitoring of More than 40 Wetland Mitigation Projects and Stream Restoration Projects for City, Land Developers, and Private Landowners
- South Dakota Department of Transportation Wetland Delineation
- South Dakota Department of Transportation wetland Site Monitoring
- Spring Creek, Lincoln County, SD, Wetland Delineation
- U.S. Army Corps of Engineers, Lincoln County, SD, Spring Creek Mitigation Plan Development
- Various City, Land Developers, and Private Landowners, Nationwide, US, Monitoring More than 40 Wetland Mitigation and Stream Restoration Projects
- Wetland Delineation and Assessment of Natural Resources for LG Everist Quarry/ Plant Master Plan, Ortonville, MN
- Wetland Delineation for Meridian Behavioral Health, Pine City, MN
- Wetland Delineation for Spring Creek, Lincoln County, SD
- Wetland Delineation of Nine Wetlands and Stream Crossings, CSAH 16, Pipestone County, MN
- Wetland Hydrogeomorphic (HGM) Assessment for 82 Wetlands Along 21 miles of Road for the South Dakota DOT

**Experience**

19 Total, 10 with IMEG

**Education**

BS, Resource Management, University of Wisconsin - Stevens Point  
 AAS, Natural Resources Central Lakes College, Brainerd, MN

**Certifications**

Professional Minnesota Wetland Delineator WDCP-2010 Cert. #1194

**Affiliations**

Society of Wetland Scientists

## James Ness, PE

STRUCTURAL ENGINEER



Jim provides complete project management services including preliminary design, construction documentation and construction administration. Projects include remodeling of existing facilities, police facilities, municipal maintenance buildings, fire stations, and modifications to existing facilities. Jim has experience working on projects that require the extra attention to structures subjected to extensive wear and tear.

### PROJECT HIGHLIGHTS

- Arapahoe County Water Wastewater Authority, Centennial, CO, Water & Wastewater One-Story Office Renovation
- Castle Pines Metropolitan District, Castle Rock, CO, Miscellaneous Engineering Services
- City of Central City, CO, Miscellaneous On-Call Engineering Review Services for Development
- City of Central City, CO, Miscellaneous Utility Plan/Other City Reviews
- City of Englewood, CO, Little Dry Creek Drainageway and Culverts
- City of Garden City, KS, 0.5 MG Water Tank
- City of Golden, CO, 2021 Miscellaneous On-Call Engineering Services
- City of Golden, CO, 2021 Miscellaneous Planning Projects
- City of Golden, CO, 2021 Water and Sewer Utility Replacement Design
- City of Golden, CO, 2022 Utility Replacement
- City of Golden, CO, Water and Sewer Utility Replacement Design
- City of Golden, CO, WTP Improvements Post Fire Resiliency Project
- Elizabeth Parks & Recreation District, Elizabeth, CO, Casey Jones Park Master Plan
- Hilltop Brothers, LLC, Parker, CO, Fields Development Sewer Lift Station
- Jefferson County Public Schools Construction Management, Conifer, CO, Design to replace an existing raw water diversion structure on a stream supply with potable water
- Town of Johnstown, CO, Sanitary Sewer Expansion, Central Phase 1 - 2,600 linear feet of gravity sewer. 8 MGD lift station with 6,000 linear feet of 12-inch and 16-inch parallel force mains
- Town of Johnstown, CO, Sanitary Sewer Expansion, North Phase 1 - 40,000 linear feet of 12-inch to 30-inch gravity sewer. 6 MGD lift station with 1,500 linear feet of two parallel 12-inch force mains

### Experience

39 Total, 29 with IMEG

### Education

University of Colorado at Denver, MS Structural Engineering  
 South Dakota School of Mines and Technology, BS Civil Engineering

### Registrations

Professional Engineer  
 Colorado (26120)

### Affiliations

SEAC  
 AISC  
 Tilt-Up Concrete Association

# Trip McLaughlin

GIS ENGINEER



Trip has over 25 years in the GIS industry. He has earned his GISP and is a Certified Esri Desktop Professional. Trip has experience in public and private organizations architecting GIS solutions which are tailored to the organizational needs while following industry best practices. Trip provides support to local utility systems for GIS solutions and works to employ strict in-house review and control methodologies to provide accurate and quality solutions which will also address future needs.

## PROJECT HIGHLIGHTS

- Antea Group, Various Locations, Cloud GIS Implementation
- Carbon County, WY, NG911 Data Migration
- City of Albany, NY, Energov Implementation
- City of Big Bear Lake, CA, On-Call GIS Services
- City of Centennial, CO, Strategic Planning
- City of La Junta, CO, GIS Support Services
- City of La Junta, CO, GIS Support Services
- City of Laramie, WY, Utility Network Model Development
- City of Las Cruces, NM, ArcGIS Enterprise Support
- City of Louisville, CO, GIS Support Services
- City of Pico Rivera, CA, Utilities GIS Development
- City of Superior, CO, GIS Support Services
- Consolidated Mutual Water Company, CO, GIS Support Services
- Gilpin County, CO, GIS Support Services
- Greater Nashville Apartment Association, TN, Market Analytics and Application Development
- Juab County, UT, Parcel Management
- Little Thompson Water District, CO, GIS Support Services
- New Fortress Energy, NY, GeoEvent Server
- Park County, CO, GIS Support Services and Application Integrations
- Town of Avon, CO, Drone Collection
- Town of Bennett, CO, CIP and GIS Support
- Town of Breckenridge, CO, GIS Support
- Town of Morrison, CO, GIS Support
- Town of Silverthorne, CO, GIS Support Services
- Vail Resorts, Various Locations, Data and Application Development

### Experience

26 Total, 1 with IMEG

### Education

University of Denver, BA and MA  
Geography

University of Denver, BS Environmental  
Science

### Registrations

GISP Certification

Esri Certified Desktop Professional

## Karlie Sharp

GIS ANALYST



Karlie, a GIS Analyst, works closely with clients to develop data, workflow solutions, and scripting to automate processes to improve efficiencies in organizations. Karlie works with a number of clients providing ArcGIS Enterprise management. She helps clients on a daily basis develop solutions using the ArcGIS Online platform for internal and public facing uses. Her experience in assessing workflows and development of applications which are easy to use and maintain ensures the clients of IMEG's GIS web-based interfaces are optimized to their needs. She has provided data development services for water and sanitation utilities, community development departments, LiDAR extractions for land developments, and environmental analysis and maps for land reclamation projects.

### Experience

6 Total, 1 with IMEG

### Education

University of West Florida, MS, GIS and Business Administration  
Florida Atlantic University, BS, Geology

### Registrations

GIS Certificate

## PROJECT HIGHLIGHTS

- City of Chelsea, MI, Chelsea, MI, Spark Exhibit for Assistance Grant Application
- City of Fort Lupton, CO, Fort Lupton, Ward Analysis
- City of Lone Tree, CO, Lone Tree, General Consultation for City Public Works and Planning Departments,
- City of Lone Tree, CO, ArcSDE Data Design and rebuild
- City of Louisville, CO, Complete GIS Support, Custom scripts, ArcGIS Enterprise, Energov Management
- City of Pico Rivera, CA, Sewer, Storm System development, ArcGIS Online Applications
- Gilpin County, CO, GIS Support, ArcGIS Enterprise Management
- Greater Nashville Apartment Association, TN, Application and Data Development
- Homestead Water District, Water System Development, ArcGIS Online Applications
- Las Animas County, CO, GIS Support
- San Juan Water District, NM, Enterprise Management, Asset Management Integration, App Development
- Town of Bennett, CO, Utility and CIP Development with online dashboards, Permitting Integration
- Town of Frisco, CO, Community Development
- Town of Frisco, CO, Complete Support for all Departments
- Town of Silverthorne, CO, ArcGIS Enterprise, Custom Scripts, Asset Management Integrations, Support for all Town Departments
- Town of Superior, CO, Data Development, ArcGIS Online Applications
- Vail Resorts, Electric Department Data Design and development, Terrain Modeling for Grooming Plans, General Support

## Michael Cregger, PLS

LAND SURVEYOR



Michael has vast land surveying services to municipalities throughout Colorado on a variety of land survey related projects, as well as providing support for a full range of engineering projects. His involvement includes research of the boundaries, easements and right-of-ways of the properties that make up the project, coordinating the field surveys and mapping that is needed for both land survey issues and design. Michael also prepares exhibits and legal descriptions for easements, right-of-ways and parcel descriptions, and coordinates the preparation of subdivision plats, condominium maps and other documents as required by the governmental entities involved. He also coordinates the surveying for projects during the construction phase.

### PROJECT HIGHLIGHTS

- Castle Pines Metropolitan District, Castle Pines, CO, Storm Sewer Improvement, Orofino Dr.
- Castle Pines Metropolitan District, Castle Rock, CO, Crestone Way Widening and Water Line Replacement, Included Design of Curb & Gutter, Asphalt, and Storm Improvements
- City of Central City, CO, Miscellaneous On-Call Engineering Services
- City of Golden, CO, 2021 Miscellaneous Planning Projects
- City of Golden, CO, 2021 Water and Sewer Utility Replacement Design
- City of Golden, CO, 2022 Stormwater Detention Pond Retrofit Improvements
- City of Golden, CO, Grampsas Parking Lot Conversion, Including Storm Drainage and Water Quality Improvements
- City of Golden, CO, Guanella Reservoir Revegetation and Update of Stormwater Mitigation Plan
- City of Golden, CO, Rimrock Drive Trailhead Access Design, Including Street Narrowing, Trail Access Features, a Restroom Facility, Storm and Detention/Water Quality Improvements
- City of Golden, CO, Various Storm Improvements, Detention Pond improvements, Storm Collection Piping replacement and realignments
- City of Lone Tree, CO, General Consultation for City Public Works and Planning Departments
- City of Lone Tree, CO, Storm Drain Improvements, PMD/Acres Green
- City of Pico Rivera, CA, Water, Sewer and Storm Drain Master Plan
- Kolorado River Ranch, LLC, Gypsum, CO, Master Plan/Design for Improvements on 2,000 Acre Ranch, Including Stormwater Management Systems, Regulatory Permitting, Wetlands Delineation, Ranch Headquarters, Lodge & Accessory Dwelling Unit Design & Construction, Grading Plans & Roadway Improvements
- RTP Company, Orange, TX, Site Stormwater and Wastewater Evaluation

### Experience

45 Total, 42 with IMEG

### Education

University of Missouri at Columbia, BS  
Fisheries and Wildlife

### Registrations

Professional Land Surveyor  
Colorado (PE.22564)

### Affiliations

NSPS  
Professional Land Surveyors of Colorado

## Mike Compton, PLS

LAND SURVEYOR



Mike has been practicing Land Surveying for over 42 years for both public and private sector organizations worldwide. He is proficient in High Accuracy horizontal and vertical control surveys, land acquisition, right of way documentation, mapping, and engineering surveys. Mike’s construction experience includes staking of bridges, roadways and pipelines as well as subdivision infrastructure. Mike’s experience was integral part of several 3D scanning projects including: Cargo area of C5 Galaxy airframes for Lockheed Martin, Sinton Road Bridge beneath I-25, and Colorado Avenue for the City of Champions approach.

### PROJECT HIGHLIGHTS

- Castle Pines Metropolitan District, Castle Rock, CO, Crestone Way Widening and Water Line Replacement, Included Design of Curb & Gutter, Asphalt, and Storm Improvements
- Castle Pines Metropolitan District, Castle Rock, CO, Misc. Engineering Services
- Castle Pines Metropolitan District, Castle Rock, CO, Well Improvements Topographic Survey
- City of Golden, CO, 2021 Miscellaneous On-Call Engineering Services
- City of Golden, CO, 2022 Stormwater Detention Pond Retrofit Improvements
- City of Golden, CO, 2022 Stormwater Detention Pond Retrofit Improvements
- City of Golden, CO, 2022 Utility Replacement
- City of Golden, CO, Grampsas Parking Lot Conversion, Including Storm Drainage and Water Quality Improvements
- City of Golden, CO, Rimrock Drive Trailhead Access Design, Including Street Narrowing, Trail Access Features, a Restroom Facility, Storm and Detention/Water Quality Improvements
- City of Golden, CO, Various Storm Improvements, Detention Pond improvements, Storm Collection Piping replacement and realignments
- Elizabeth Parks & Recreation District, Elizabeth, CO, Casey Jones Park Design of Sewer Main and Additional Camp Site, Analysis and design of a sanitary sewer service extension to allow for direct connection at campsites to the existing waste station service at the park
- Town of Johnstown, CO, Sanitary Sewer Expansion, Central Phase 2, 11,000 linear feet of 15-inch to 21-inch gravity sewer
- Town of Johnstown, CO, Sanitary Sewer Expansion, North Phase 1 - 40,000 linear feet of 12-inch to 30-inch gravity sewer. 6 MGD lift station with 1,500 linear feet of two parallel 12-inch force mains

### Experience

42 Total, 1 with IMEG

### Education

Pennsylvania State University, AAS Survey Technology

### Registrations

Professional Land Surveyor

Colorado (25361)

Wyoming (9690)

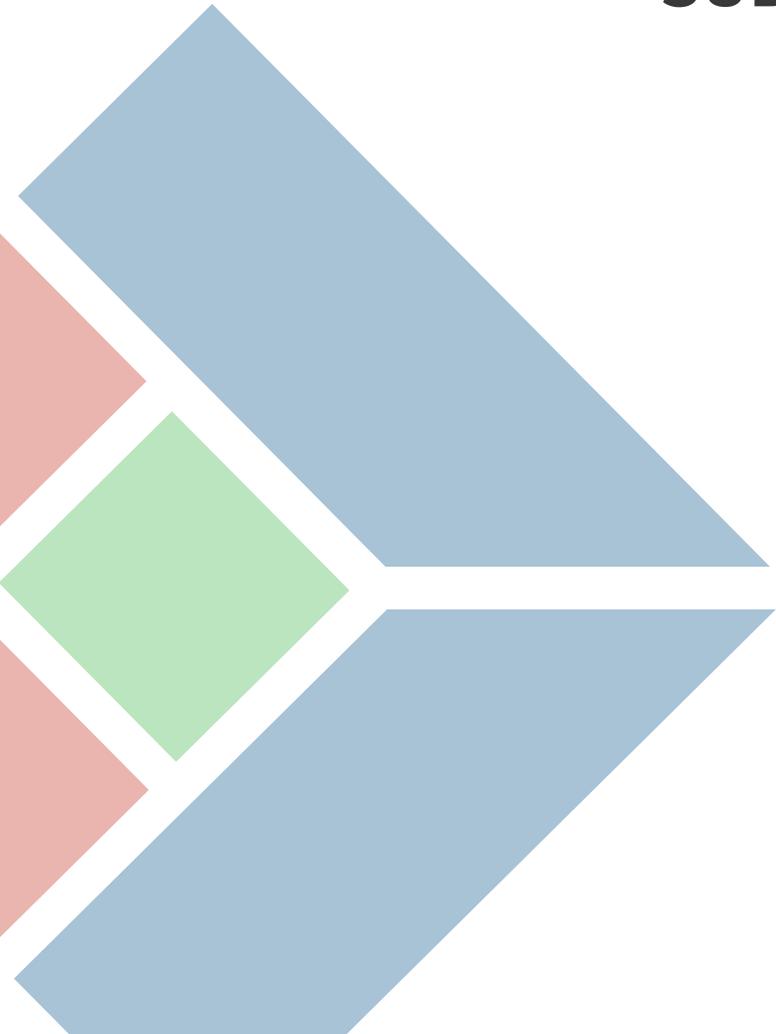
North Dakota (8065)

### Training

OSHA 30

OSHA 10

3. QUALIFICATIONS  
**SUBCONSULTANT RESUMES**





RESUME  
JOSEPH D. GIFFORD, C.I.H.  
Principal Project Manager

EDUCATION:

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B.S., Environmental Health/Industrial Hygiene, Colorado State University, 1988 with honors

CERTIFICATION:

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Certified Industrial Hygienist, American Board of Industrial Hygiene (Certification #8716 Comprehensive Practice)

MEMBERSHIP:

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Engineers without Borders - USA  
American Industrial Hygiene Association (AIHA)  
Rocky Mountain Section - AIHA  
American Chemical Society  
American Conference of Governmental Industrial Hygienists (ACGIH)  
Colorado Association of Methamphetamine and Mold Professionals (CAMMP)  
American Indoor Air Quality Council

EXPERIENCE:

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Mr. Gifford is a Certified, Senior Industrial Hygienist at A. G. Wassenaar, Inc. in Denver, Colorado. He directs a staff of professional industrial hygienists, engineers and scientists providing consulting and assistance to industry, government and the public in health, safety and environmental matters. As a principal at A. G. Wassenaar he is directly involved in client services, our employee training, database development, industrial hygiene and environmental services.

Mr. Gifford has compiled over fifteen years of occupational health, safety and environmental consulting experience. This experience includes emergency response, environmental sampling, and industrial hygiene management in both private industry and government facilities. Projects have included facility-wide health and safety audits, noise monitoring and engineering controls, heat stress monitoring and air sampling for regulated contaminants. Mr. Gifford has managed industrial hygiene projects throughout the United States and Canada. Projects have included indoor air quality assessments, workman's compensation surveys, industrial assessments and monitoring, and program development. Mr. Gifford has assisted industry in OSHA compliance, exposure air sampling, emergency response, waste management, and comprehensive safety programs.

Mr. Gifford has taught Indoor Air Quality and Industrial Hygiene for the University of Minnesota, Northern Arizona University, Colorado State University, University of Alaska-Anchorage, and the Environmental Protection Agency. A Certified Instructor of the NIOSH 582 courses.

By providing on-going RCRA waste management and minimization audits for companies throughout Colorado, Mr. Gifford has been able to reduce disposal and inventory costs for clients. He has provided and directed hazardous waste sampling, characterization, profiling and brokering for both private and public agencies. Mr. Gifford has managed and directly performed DOT compliance audits, OSHA compliance audits, Cal-OSHA compliance audits, RCRA waste management audits and multi-media audits.

Mr. Gifford has directed the emergency response and clean-up of a listed, illegal dump site and provided expert witness assistance for the benefit of the client. Through negotiation with the regulatory agency and client counsel; the site received full closure, with no additional work required.



RESUME  
**JULIE A. BRUNGARDT**  
 Senior Project Manager

EDUCATION

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Bachelor's Degree in Environmental Studies, University of Colorado, Boulder, CO, 2002

EXPERIENCE

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Ms. Brungardt began working with A.G. Wassenaar, Inc. in May 2003. She was hired as a staff environmental scientist for the Environmental Department. Responsibilities include the following:

Industrial Hygiene

- Mold growth and moisture intrusion evaluations in response to water losses
- Initial and conformance mold inspections of basement subfloor and crawl spaces
- Indoor air quality investigations pertaining to mold and fungal growth
- Inspections following fires in residential or commercial buildings

Asbestos

- Air Monitoring Specialist (AMS) duties for asbestos abatement projects
- Asbestos surveys of commercial and residential buildings
- Asbestos sample collection including soil and building materials
- Oversight of soil disturbance of regulated asbestos contaminated soil (RACS) in accordance with 6 CCR 1014-3 §6.0 Section 5.5

Lead Based Paint

- Lead based paint testing within commercial and residential buildings

Phase I

- Site assessments for both buyers and sellers of commercial, industrial and residential real estate

TRAINING AND CERTIFICATIONS

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- Colorado State Certified Asbestos Building Inspector
- Colorado State Certified Air Monitoring Specialist
- Meets the CABI and AMS training / experience requirements of 6 CCR 1014-3 §6.0 Section 5.5.3.
- National Environmental Health Association, Residential Radon Measurement Provider

MEMBERSHIPS

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- American Industrial Hygiene Association
- Colorado Environmental Professionals Association



## RESUME

RACHEL A. PETERSON, P.G.  
Environmental Department Manager

## EDUCATION

B.S., Geology, University of Alaska Fairbanks, 2001

## EXPERIENCE

Ms. Peterson has over 20 years of experience in the environmental consulting and compliance industry, performing and managing diverse soil, groundwater, vapor intrusion, and remediation projects. Clients include homebuilders; oil & gas operators; industrial, commercial and retail developers; municipalities; and open space coalitions, among others. Management duties performed include: the organization of project teams; planning, scheduling and coordination of geologic and hydrogeologic investigations; and preparing proposals and technical reports. She is directly involved in client services, recruiting and hiring, employee training, teambuilding, and driving culture and innovation.

Ms. Peterson's specialties include Phase I Environmental Site Assessments, Soil and Groundwater Investigations and Remediation, Vapor Mitigation, Oil and Gas Regulatory Assistance, Groundwater and Risk Assessment Modeling, Underground Storage Tank Removal, Stormwater Compliance, Underground Storage Tank Compliance and Removal, and Leadership Development.

## TRAINING AND CERTIFICATIONS

State of Wyoming - Licensed Professional Geologist, No. PG-3747  
National Radon Proficiency Program (NRPP) Radon Measurement Professional: ID 111123-RMP  
National Radon Proficiency Program (NRPP) Radon Mitigation Professional: ID 111232 RMT  
CO Licensed Radon Mitigation Professional RMT .0000081  
40 Hour OSHA Environmental Health and Safety for Hazardous Waste Site Operations  
American Red Cross and National Safety Council standard first aid and CPR training  
Oilfield Safety Training  
Stormwater Management and Erosion Control

## MEMBERSHIPS

Colorado Environmental Management Society  
National Ground Water Association  
Society of Women Environmental Professionals  
Professional Women in Building Council – HBA of Metro Denver  
Rocky Mountain - American Association of Radon Scientists and Technologists – Board Member  
The Energy Leadership Institute – Founding Board Member



## RESUME

TOD E. KRAMER, M.S.  
Senior Industrial Hygienist

EDUCATION

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Colorado State University, Fort Collins, Colorado 80523  
Master of Science, Environmental Health/Industrial Hygiene, May 1997

Colorado State University, Fort Collins, Colorado 80523  
Bachelor of Science, Microbiology, May 1988

EXPERIENCE

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Mr. Kramer has served as a Senior Industrial Hygienist with A.G. Wassenaar, Inc. since 1997. He has a foremost interest in client satisfaction and worker health and safety. Specific experience includes:

- Perform industrial hygiene exposure assessments and assist in implementing appropriate control methodology
- Conduct occupational safety audits and recommend proper control measures
- Develop functional health and safety programs for a wide array of needs
- Prepare clear, concise reports detailing work performance, analytical results, and practical recommendations
- Conduct office and task oriented industrial ergonomic evaluations
- Train a variety of disciplines in areas such as Hazard Communication, Ergonomics, Construction Safety, Respiratory Protection, Confined Spaces, and Asbestos Awareness
- Evaluate Indoor Air Quality issues in both residential and occupational settings
- Assess potentially life-threatening atmospheric conditions and other hazards associated with entry into permit required confined spaces
- Perform moisture evaluation and microbiological sampling of moisture impacted residential and commercial properties
- Perform smoke and fire particulate evaluations in residential and commercial properties to assist in remediation and re-occupancy of fire impacted buildings
- Manage projects requiring interaction and coordination between building owners, building occupants, property managers, and various construction trades
- Prepare environmental reports, such as SARA Title Three Tier Two
- Interpret environmental and occupational regulations and aid in regulatory conformance
- Interact with local, state, and federal agencies

## EXPERIENCE cont.

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- Act as an expert witness in legal matters including deposition and trial testimony
- Perform comprehensive building surveys for asbestos and lead products, design appropriate response actions, and prepare contract documents and work specifications
- Conduct regulatory air monitoring and project oversight on a wide range of asbestos and lead abatement projects
- Perform oversight of soil disturbance of regulated asbestos contaminated soil (RACS) in accordance with 6 CCR 1014-3 §6.0 Section 5.5

## TRAINING AND CERTIFICATIONS

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State of Colorado Certified Asbestos Building Inspector/Management Planner

State of Colorado Certified Air Monitoring Specialist

State of Colorado Certified Asbestos Project Designer

Meets the CABI and AMS training / experience requirements of 6 CCR 1014-3 §6.0 Section 5.5.3.

NIOSH 582 – Sampling and Evaluation Airborne Asbestos Dust (McCrone Research Institute)

Microscopical Identification of Asbestos (McCrone Research Institute)

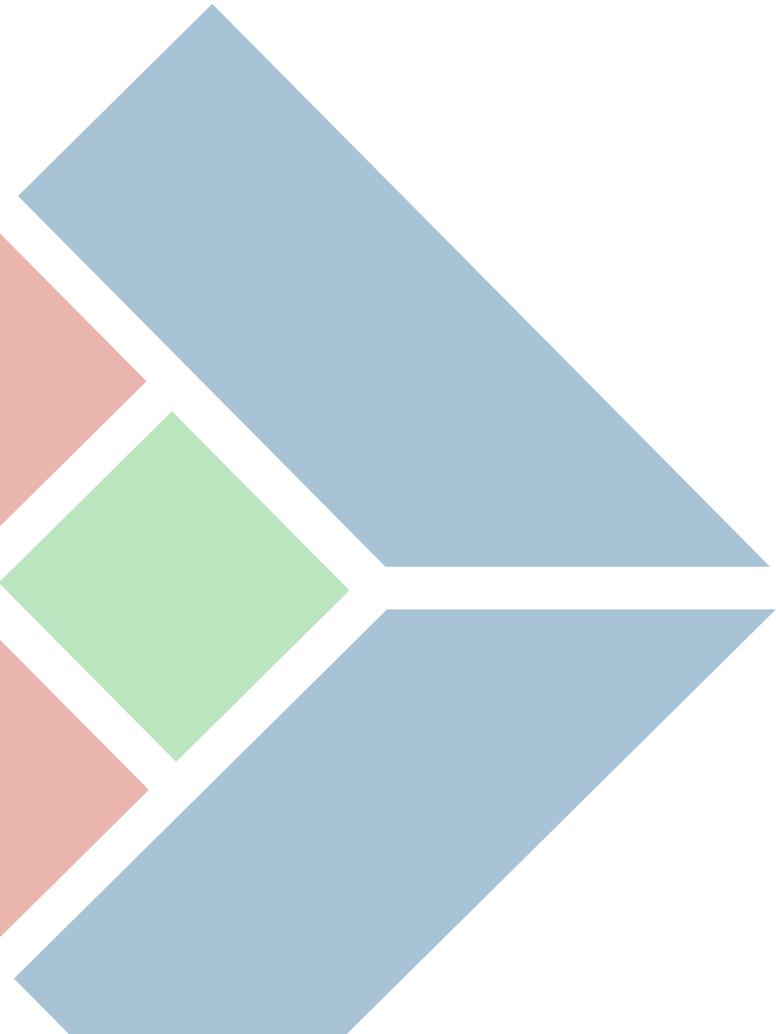
## MEMBERSHIPS

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American Industrial Hygiene Association, National Member

American Industrial Hygiene Association, Rocky Mountain Section Member

3. QUALIFICATIONS  
**COMPANY RESOURCES**



# ABOUT US

WWW.IMEGCORP.COM



We are employee-owned and results driven with a passion for transforming environments and communities through high-performance design and infrastructure.

### AT-A-GLANCE

- Top 10 Engineering Firm in U.S. (BD+C)
- 100% Employee-Owned
- Full-service Engineering & Consulting
- 75+ Locations
- 2,400 Team Members
- 600+ Licensed Engineers
- \$383M in Annual Revenue
- #71 / Top 500 Design Firm List (ENR)

### CIVIL SERVICES

- ADA Compliance Engineering
- Bridges, Retaining Walls & Culvert Design
- Construction Administration
- Drainage, Hydraulics & Hydrology
- Feasibility Studies
- Land Development & Site Design
- Major Highway & Transportation Design
- Municipal Infrastructure
- NBIS Bridge Management
- Permitting (Federal, State, & Local)
- Project Management
- Subsurface Utility Engineering (SUE)
- Survey, Drones & 3D Scanning
- Water & Wastewater Engineering

IMEG is a leading U.S.-based engineering design firm that delivers a rare combination — the broad expertise of a national leader with the personal relationships and deep collaboration of a local firm.

Our civil specialties are municipal engineering, land development & surveying, building engineering, transportation, and construction observation. Our team’s strength is found in our **deep bench of more than 400 professional civil engineers and land surveyors** dedicated to building strong regional connections and reaching beyond the status quo. We bring extensive national, regional, and local knowledge to every client relationship – with a commitment to deliver high quality, cost-effective outcomes through a collaborative and flexible project approach. Key differentiators include:

- Successful, timely delivery of projects
- Accurate, efficient data collection
- Involvement from project initiation to project completion
- State-of-the-art technology and equipment
- Latest training and certification
- Ability to “fast-track” projects
- Single point-of-contact project management

[CLICK HERE TO READ INDUSTRY INSIGHTS FROM IMEG EXPERTS.](#)

# Who is IMEG?

**IMEG is an engineering design firm specializing in building high-performance structures, infrastructure, and strong regional relationships. As a national firm, we've intentionally localized our focus to serve carefully chosen regions and markets, allowing us to put relationships and communicate first, without sacrificing expertise.**

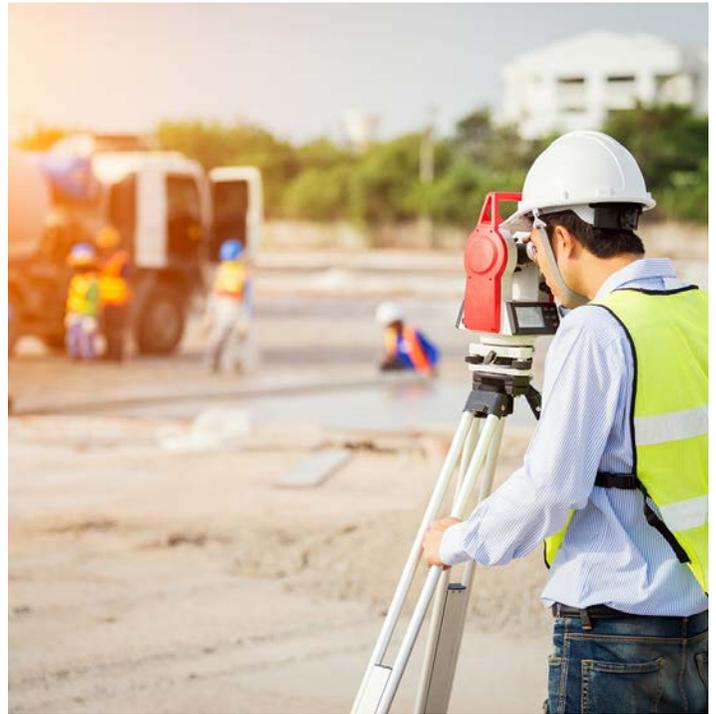
With a combined firm history that dates back over 100 years, IMEG Corporation (IMEG), grew from several firms coming together under one unifying vision: people-centered engineering. As a national engineering and design consulting company, we have intentionally localized our focus to serve carefully chosen regions and markets, allowing us to put relationships and communities first, without sacrificing expertise. IMEG's culture is centered around local relations supported by a deep national bench. Our team of professionals

includes over 1800 members nationwide and 45 employees in Colorado, with 10 focused on Civil Engineering Services just in our Greenwood Village office (200 nationally).

Our Colorado team has recently added a team of four GIS professionals to augment our civil engineering services; this team has a substantial history of working with front range municipalities to further augment the services we offer. We have eight regional civil teams, and we can draw on the expertise from each team if needed to solve complex engineering problems. This deep bench assures that we bring the best and brightest to the project table as we serve you. We believe in the IMEG Civil Differentiators, and this dedication shines through each step of the way from project concept to project completion.

## KEY DIFFERENTIATORS INCLUDE

- Successful, timely delivery of projects
- Accurate, timely, efficient data collection
- Quality Control and Quality Assurance (QC/QA)
- Involvement from project initiation to project completion
- State-of-the-art technology and equipment
- Latest training and certification
- Most cost-effective methods
- Ability to “fast-track” projects
- Single point-of-contact project management



IMEG brings to the Town of Bennett a team of knowledgeable project engineers and floodplain managers whose drainage and engineering expertise cohesively come together to solve issues the Town may be facing now—in the built environment—with an approach that is also mindful of future needs. The team's seasoned style and knowledge of local issues will be geared toward scientific accuracy, while being budget conscious, and finally by being sensitive to providing maintenance solutions versus creating maintenance issues.

As you look through this RFP response, you will see that our experienced team has prepared Stormwater Master Plans, developed detailed master and capital plans for municipal infrastructure and facilities, designed and overseen major capital projects, provided design and project management of numerous stormwater facilities, successfully secured and managed grants—all exceeding the level of expertise you expect when you select a consultant. IMEG's team includes Certified Floodplain Manager's that have prepared and provided review of FEMA CLOMR and LOMR submittals, GIS Professionals that compile data and create user friendly interfaces. We have surveyors on staff that can complete any aspect of surveying including topographic surveying to augment digital data, easement documentation, warranty deed preparation, and preparation of FEMA Elevation Certificates. We also have a Subsurface Utility Engineering team that helps us to assure the accuracy of every project we design, and our Tech Ops group offers professionally piloted drone flights to survey or memorialize any project. Rounding out our team is our security services group, who makes sure critical municipal infrastructure is protected from security threats.

IMEG’s team members have secured millions of dollars in alternative funding for Front Range communities from agencies such as FEMA, GOCO, USDA, NRCS, and CDPHE. We have also secured and managed CDBG funding for a variety of projects. We are experts in preparing funding applications using programs such as FEMA GO and EM Grants, and we provide all aspects of grant management from securing funding to applying for reimbursement requests after the funding is awarded.

**We are a united, people-centered engineering firm. We put relationships and communities first, without sacrificing expertise or quality.**

IMEG also has a proactive and well-regimented quality control process that is used for all of our projects and would be applied to each project assigned as well – steps and milestones are adapted based on delivery method and the result is a high quality deliverable that your staff and the project’s selected construction contractor can trust. Most importantly we know how to communicate with you and your constituents even in the most difficult of circumstances, such as the current COVID19 pandemic or during periods of natural disaster, such as flooding and fire.

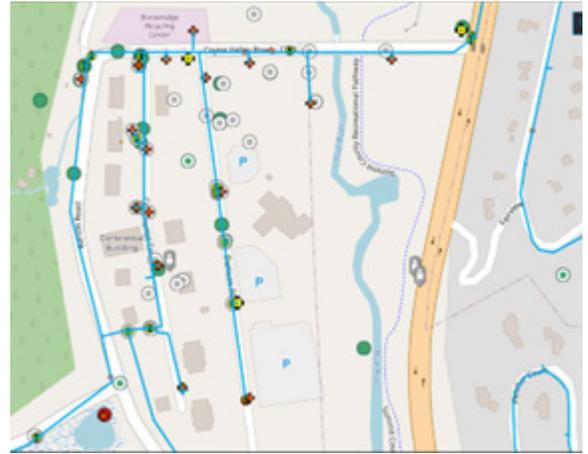
We encourage you to visit our website at [www.imegcorp.com](http://www.imegcorp.com) and see our client testimonials, impressive array of projects, and detailed information about our many state of the art programs.



**WHY CHOOSE IMEG?**

- **Proven Track Record**
- **Depth of Experience**
- **State of the art technology and equipment**
- **Quality Control and Quality Assurance**
- **Cost Effective Solutions Management**

# GEOGRAPHIC INFORMATION SYSTEM (GIS)



**BLR-7120**

Unique Name of Asset	BLR-7120
Type of Object	
Name of Facility Where Asset is Located	Main Wastewater Treatment Facility
Building Location of Asset	WWTP - Operations
Room	Electrical/Blower Room
Wastewater Treatment Process	Secondary Treatment (Aeration)
Upper Level Category	Spec. 11373
Manufacturer of Asset	Tuthill

[Zoom to](#)

IMEG has a full-service line of GIS offerings and seeks to improve organizational efficiencies through the use of GIS. We are an Esri Business Partner and have earned the State and Local Government and System Ready Specialties from Esri as well as being an authorized Esri Marketplace Provider. In addition, IMEG is an authorized Eos GPS retailer to compliment our service offerings.

Our GIS team at IMEG is equipped to take our clients through the lifecycle of GIS. We offer strategic planning services to identify the needs of the organization and develop a roadmap for the future of the GIS. Our data development services use industry standard data models and best practices development methodologies to provide accurate deliverables. To aid in efficient data developments, IMEG uses scripted processes to aid in repetitive tasks. When necessary, we provide field collection services with high accuracy GPS units and drones (UAV) to aid in data developments.

IMEG provides complete ArcGIS Online solutions from the development of applications to dashboards and field workflows using the suite of mobile applications from Esri. IMEG works with clients to create a real time GIS where data collected in the field flows into the GIS in a seamless process. We provide ArcGIS Hub configurations to allow the sharing of data and information to the public as well as internal deployments through the ArcGIS Online platform.

Using ArcGIS Enterprise opens the entire suite of Esri products to organizations. IMEG works with clients to develop the network architecture plan for the server configuration both cloud hosted and on-premise. We provide implementation and update services where our staff will configure the entire ArcGIS Enterprise environment including servers, Portal for ArcGIS and the enterprise databases. We work with our clients to develop the user roles and permissions along with connections to Active Directory when appropriate.

To ensure our clients' success, we provide training on the solutions we provide as well as Esri products and workflows. These may be onsite or remote services depending on the need. We also offer ongoing support services for all aspects of the GIS.



# GRANT WRITING & ADMINISTRATION EXPERTISE & SERVICES



IMEG’s grant writing service is a great way to secure funds for a variety of municipal and government agency projects. Our professionals identify opportunities and know how to write grant applications effectively.

## SERVICES

- Research
- Writing
- Grant Administration

## GRANT ADMINISTRATION

- Budget development, management, reporting
- Environmental clearance, compliance, closeout
- Relationship creation and maintenance with local, state, federal representatives, landowners

## PROJECT TYPES

- Brownfield identification, cleanup and redevelopment
- Frontline service outfitting such as:
  - Police and fire department equipment – firetrucks, police cars, personal protective equipment, radios/communication devices, thermal imagery equipment
- Feasibility studies
- Engineering design
- Park and trail improvements
- Riverfront and dock development
- Comprehensive planning
- Infrastructure development/improvement for: Water, sewer, stormwater, broadband, bike/ trailways

# TEL 6400 TRIBUTARY IMPROVEMENTS

CONSULTANT ENGINEER CERTIFICATION

I hereby affirm that these final construction plans were prepared under my direct supervision and that I am duly responsible for all work shown on these plans.

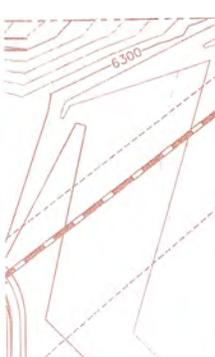
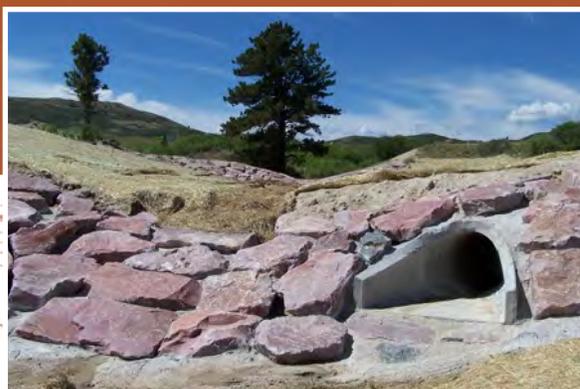



## Request for Proposal STORMWATER MANAGEMENT PLAN

**PROJECT NUMBER: TOGL-004**

Town of Grand Lake

March 30, 2023



**CONSULTANT ENGINEER CERTIFICATION**

I hereby affirm that these final construction plans were prepared under my direct supervision and compliance with all applicable Town of Castle Rock and State of Colorado regulations and standards, respectively, and that I am duly responsible for all work shown on these plans.

*[Signature]*  
Date

THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF THE DIRECTOR OF DEVELOPMENT SERVICES APPROVAL.

RECOMMENDED APPROVAL:

ENGINEERING DIVISION DATE

APPROVED BY:

DIRECTOR OF DEVELOPMENT SERVICES DATE

**POINT SUMMARY**

	WSEL	Q (CFS)	VOLUME (AC-FT)
WD	6256.30	47/A	0.11
10-YR	6257.64	31	0.80
100-YR	6259.55	46	1.50

**REVISIONS**

MAX. DEPTH = 6'

WATER QUALITY FACILITY = 8-12 MONTH

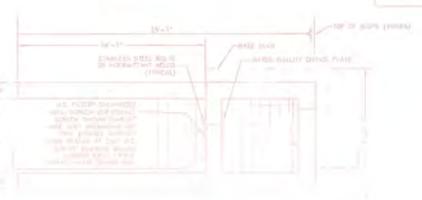
MAX. CHANNEL = 1.50 AC-FT

MAX. RELEASE RATE = 40 CFS

**POINT MARKING DATA SHALL BE SUBMITTED**

CONSTRUCTION AND/OR AS-BUILT

CONSTRUCTION AND/OR AS-BUILT



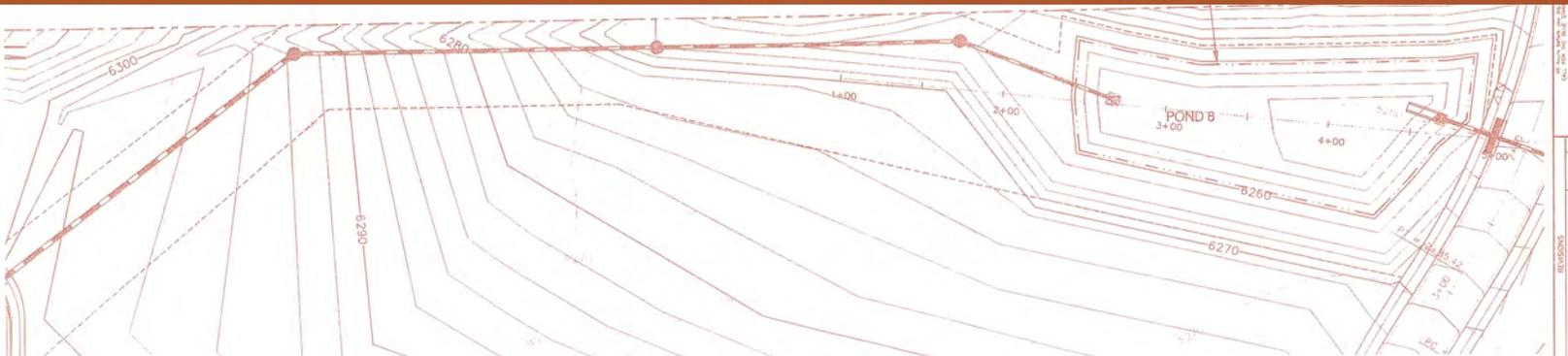
**RG and Associates, LLC**  
Del Norte • Wheat Ridge  
303-293-8107 • www.rgengineers.com

CONSULTANT ENGINEER CERTIFICATION  
 I hereby affirm that these final construction plans were prepared under my direct supervision and that I am duly licensed and responsible for the work shown on these plans.

# TEL 6400 TRIBUTARY IMPROVEMENTS



## SIGNATURE PAGE



THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED FOR ACCURACY AND CORRECTNESS OF THE CALCULATIONS. FURTHERMORE, THE REVIEW DOES NOT APPLY TO QUANTITIES OF ITEMS ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSIDERED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN AND FOR ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK "STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC WORKS" AND/OR OTHER TOWN-APPROVED APPLICABLE STANDARDS.

**CONSULTANT ENGINEER CERTIFICATION**  
 I hereby affirm that these final construction plans were prepared under my direct supervision and that I am duly licensed and responsible for the work shown on these plans.

*[Signature]*  
 Date: \_\_\_\_\_

THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF THE DIRECTOR OF DEVELOPMENT SERVICES APPROVAL.

RECOMMENDED APPROVAL:  
 \_\_\_\_\_  
 ENGINEERING DIVISION DATE: \_\_\_\_\_

APPROVED BY:  
 \_\_\_\_\_  
 DIRECTOR OF DEVELOPMENT SERVICES DATE: \_\_\_\_\_

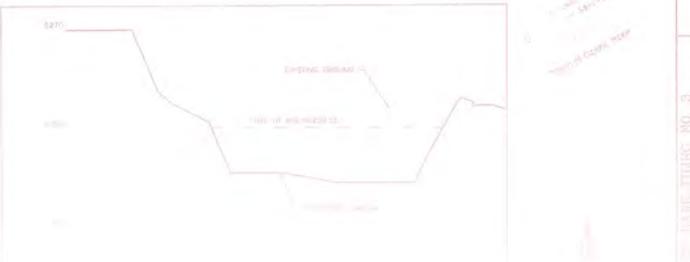
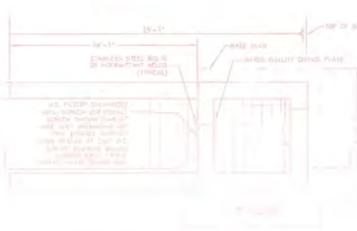
**POND SUMMARY**

	WSL	Q (CFS)	VOLUME (AC-FT)
WD	6255.30	4/A	0.11
10-YR	6257.64	31	0.80
100-YR	6259.55	45	1.50



**CHANNEL POND #**  
 MAX. DEPTH = 6'  
 WATER QUALITY CLASS. = B-2E (NOV)  
 MAX. CHANNEL = 130' (R-1)  
 MAX. RELEASE RATE = 40 CFS

**POND WARNING SIGN SHALL BE INSTALLED**  
 (SEE SPECIFICATIONS FOR DETAILS)





March 30, 2023

Attn: Town Clerk  
Town of Grand Lake  
1026 Park Avenue  
Grand Lake, CO 80447

**RE: Proposal for the Town of Grand Lake Stormwater Management Plan  
Town of Grand Lake Stormwater Management Plan  
Cover Letter/Signature Page RFP/Project #: TOGL-004**

To Whom It May Concern:

RG and Associates, LLC (RGA) is pleased to submit this proposal to provide professional engineering services for the Stormwater Management Plan for the Town of Grand Lake, Colorado.

Our team is well-qualified to serve the town. The RGA team has over 36 years of experience providing design and construction administration services for drainage improvement projects. Our owner and president, Mr. Ricardo J.F. Gonçalves, P.E. will be the Principal-in-Charge and Project Manager for this project, and the primary point of contact with the town. Mr. Gonçalves has over 50 years of experience providing planning, design, and construction administration for municipalities throughout Colorado. He will be supported by a highly-qualified team of engineers and technicians. RGA has worked in Colorado mountain towns like Grand Lake, including Idaho Springs, Central City, Black Hawk, Beaver Creek Ski Area, Arapahoe Ski Area, Buena Vista, Alma, Breckenridge, Eagle and Gypsum. And we have flood damage repair experience working in the towns of Estes Park and Nederland.

Additionally, we provided the Town of Grand Lake with on-call engineering and planning services in 2017 through 2019 and have been currently providing on-call services since 2021. This experience allows us to be uniquely qualified to assist the town with its Stormwater Management Plan.

Our official contact information is:

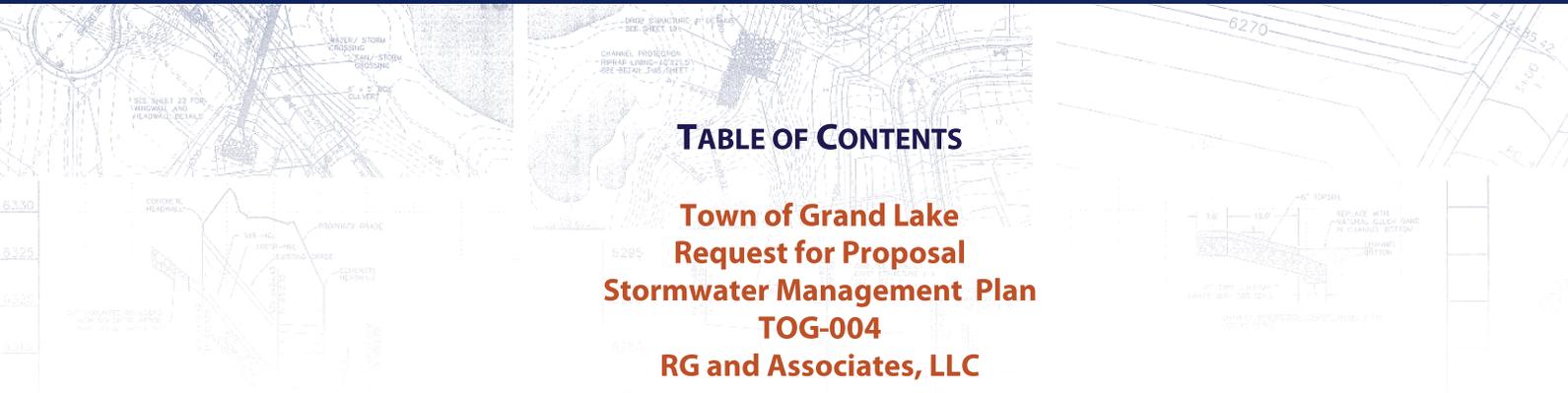
Principal:	Ricardo J.F. Goncalves, P.E.	Email:	<a href="mailto:rickg@rgengineers.com">rickg@rgengineers.com</a>
Direct:	303-468-8484	Website:	<a href="http://www.rgengineers.com">www.rgengineers.com</a>
Mobile:	303-901-2367	Address:	4885 Ward Road, Suite 100
Fax:	303-293-8106		Wheat Ridge, CO 80033

We are confident that our staff has the expertise to successfully complete this project for the Town of Grand Lake. We appreciate the opportunity to submit this proposal.

Sincerely,

RG AND ASSOCIATES, LLC

Ricardo J.F. Gonçalves, P.E.  
President



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## PROJECT UNDERSTANDING AND APPROACH

### INTRODUCTION TO RG AND ASSOCIATES, LLC

The **RG and Associates, LLC (RGA)** team has been providing award-winning engineering, planning and construction administration services to clients throughout Colorado for over 36 years. Our staff assists cities, counties, special districts, and private developers in the planning, engineering, design, and construction management of public infrastructure projects. It is our goal to work closely with our clients to provide services that are efficient, cost-effective and ensure reasonable engineering, planning, and construction administration projects.

#### RG and Associates, LLC provides expertise in the following disciplines:

- Municipal Engineering and Planning
- Special District Engineering
- On-Call Services
- Grant Application and Implementation
- Drainage and Hydrology Engineering
- Flood Recovery Experience
- Water and Wastewater Engineering
- Highway and Roadway Engineering
- Civil and Structural Engineering
- Building Inspections
- Construction Administration
- Stakeholder and Citizen Engagement

#### Regarding Drainage and Hydrology Engineering, RGA provides the following services:

- Master Drainage Studies
- Hydrology and Hydraulics
- Evaluation of Existing Drainage Systems
- Storm Drainage System Design
- Detention Storage Design and Analysis
- Floodplain and Drainageway Modeling
- Development Review
- Conditional Letter of Map Revision (CLOMR)
- Letter of Map Revision (LOMR)
- No-Rise Certifications
- Grading, Erosion, and Sediment Control (GESC)
- Stormwater Treatment and Management

RGA is a certified Disadvantage Business Enterprise (DBE) company through the Colorado Department of Transportation (CDOT) and the Regional Transportation District of Denver (RTD), as well as a Small Business Enterprise (SBE) and Minority/Women Business Enterprise (M/WBE) company certified through the City and County of Denver.

### INTRODUCTION TO CORVUS ENVIRONMENTAL CONSULTING, LLC

RGA has partnered with CORVUS Environmental Consulting, LLC (CORVUS) for this project. CORVUS provides expert ecological consulting services related to the full life cycle a project: from identifying potential natural resource constraints, field studies and data collection, agency scoping and coordination, compliance strategy and reporting, mitigation design, construction oversight, to post-construction monitoring and reporting. CORVUS is a 6-person firm providing professional natural resource consultation services for a wide variety of sectors and client types.

CORVUS' role for the Project will be to document baseline conditions in support of Clean Water Act Sections 401 and 404 permitting for the Project and includes the following:

- Consultation with the US Army Corps of Engineers (USACE), the Colorado Department of Public Health and the Environment (CDPHE), State Office of Historic Preservation (SHPO), and US Fish and Wildlife Service (USFWS) (if required);
- Preparation of a Permitting Approach

CORVUS will act as the primary point of contact for communication between the project team and the above regulatory agencies. CORVUS will work with the Client design team to optimize the compatibility of project design elements with an appropriate permitting approach.

### INTRODUCTION TO FLATIRONS SURVEYING, INC.

RGA has also partnered with Flatirons Surveying, Inc. (Flatirons) for this project. Flatirons Surveying, Inc., founded in 1983, has become one of the largest, independent and locally-owned professional surveying firms in the state of Colorado. They provide land surveying, GIS and aerial mapping for public, private and governmental clients. They offer:

- The experience of over 78,000 completed projects;
- 72 employees;
- 16 mobile field crews for rapid response;
- 6 licensed professional land surveyors
- Over \$1 million invested in the latest robotic and GIS surveying equipment and software.

Flatirons has the size and staffing to accommodate tight schedules and deadlines. They have extensive quality control procedures for field work, drafting and deliverables. They are currently CDOT Prequalified and have extensive knowledge and experience with CDOT requirements and regulations. They are currently or recently the on-call surveying firm for the City and County of Denver, Public Works Division, University of Colorado Facilities Management, Colorado Division of Wildlife, City of Boulder Public Works, Boulder County Open Space, the City of Longmont, City of Wheat Ridge, City of Thornton, Denver Public Schools, St. Vrain School District, Eagle County, and many others. They were chosen for Federal IDIQ contracts covering multiple states for the National Park Service, the USDA Forest Service, the Bureau of Reclamation, the Natural Resource Conservation Service, and the U.S. Fish & Wildlife service. They have worked on numerous topographic design surveys for a wide variety of projects in most cities along the Front Range.

### INTRODUCTION TO KUMAR & ASSOCIATES, INC.

RGA has also partnered with Kumar & Associates, Inc. (K+A) for this project. They are an employee-owned consulting engineering firm specializing in geotechnical engineer, environmental services, construction materials testing and observation, third-party inspections, and laboratory testing. Established in 1989, their staff consists of over 140 professional engineers and geologists, engineering technicians, environmental scientists, and support personnel. They have 17 registered professional engineers, and 80 certified engineering technicians. K+A has over 34 years of documented experience performing geotechnical engineering, engineering geology, and construction observation and material testing services for water and wastewater treatment facilities and large linear projects including water lines, pipelines, and roadway projects located in Denver, Colorado and throughout the State. K+A also has an extensive history of working with various water and sanitation districts along the Front Range and the Western Slope.

### UNDERSTANDING OF THE PROJECT

RGA understands that the town is seeking a Stormwater Management Plan for the west side of the town to improve the water quality reaching the adjacent lakes. We further understand that the water from Little Columbine Creek was impacted by the East Troublesome fire and, among other factors, is contributing to the sediment deposits in the Shadow Mountain Reservoir. Additionally, we understand that Woodpecker Hill runoff flows steeply down the face of the hill, along Park Avenue, and long a flat area of town via roadside ditches and culverts and drains into the Grand Lake Estates HOA marina (Shadow Mountain Reservoir).

We will provide cost-effective stormwater management solutions that emphasize low-impact development (LID) techniques that seek to mimic the natural hydrologic processes of the site, are context sensitive, and maximize the treatment of the stormwater for the study area indicated in the RFP. Additionally, these solutions will promote stormwater management practices that maintain predevelopment hydrology through site design and landscape design techniques that infiltrate, filter, store, evaporate, and detain stormwater close to its source. Lastly, the solutions will promote public safety from contaminants and sediment from entering the reservoir and reduce public expenditures in removing sediment or reducing sediment transportation from the stormwater drainage systems and natural resources areas.

### ABILITY TO PERFORM ALL ASPECTS OF THE PROJECT

RGA can provide a full range of planning and engineering services in-house. RGA has a staff of sixteen (16) personnel, which includes Professional Engineers, a Certified Floodplain Manager, an AICP-certified Planner, a Certified Operator in Responsible Charge, construction administrators, technicians, and administrative staff. Since over 90% of our services are primarily “on-call” and relatively short-term in nature, our personnel are not committed to large, long-term assignments. We have the flexibility to assign staff members to new projects with a relatively short lead time. Once personnel are committed to a project, they remain on the project until its completion.

We will be partnering with CORVUS Environmental Solutions, LLC (CORVUS), Flatirons, Inc. (Flatirons), and Kumar & Associates, Inc (K&A) to provide a full team for the full scope of this project. They will be providing environmental, surveying, and geotechnical services. We have worked successfully with each of these subconsultants on numerous occasions.

### ABILITY TO MEET SCHEDULES WITHIN BUDGET

RGA uses a team-based approach to performing design, and the team/project manager is responsible for preparing a project schedule prior to commencing any work. Projects are broken down by task, and personnel are selected based upon experience and expertise to perform the services required by each task. The estimated man hours to complete the tasks are entered into the schedule and represented on an *MS Project* spreadsheet. RGA evaluates each job individually, then creates a spreadsheet that includes all tasks, subtasks, staff, and associated man hours. This process has proved invaluable over the years, as RGA consistently finishes projects under budget.

For subconsultants, we evaluate each project, and then provide very specific RFP’s to subconsultants that delineate the necessary services, data and final product needed. We spend time meeting with all sub consultants to verify that they have the proper understanding of the scope, schedule, and information that we need to provide services to the town.

### PROJECT APPROACH

#### Task #1 – Inventory:

##### Baseline Data Collection of Site and Project Area

On-the-ground analysis will be completed to ensure that all current infrastructure and drainage ways are within the study area is included in the baseline data collection, including those on private property.

##### Meeting with the Team

Upon Notice to Proceed, RGA will coordinate a meeting with all necessary Town of Grand Lake and Three Lakes Watershed Association staff (the team) to fully understand the existing infrastructure problems and needs and determine areas of concern within the Town of Grand Lake. **This meeting can be completed in person and combined with the project area site visit, but virtual meetings are more time-efficient and encouraged.** Key milestones will be confirmed, and project tasks will be further refined. The project team will be introduced, and clear points of contact will be identified in areas where data coordination will take place to ensure a smooth project startup. Available and needed data will be identified for the successful design of the project documents and responsibility will be delegated and scheduled with the appropriate parties.

##### Pre-Construction Water Quality Report

- **Delineation of WOTUS** – CORVUS and Flatirons will complete a full jurisdictional delineation of WOTUS, including adjacent wetlands. The delineation will follow current USACE methods and guidance on performing a delineation of wetlands as well as the ordinary high water mark. CORVUS will provide the Client with AutoCAD/SHP files of the WOTUS boundaries for use in their impact and fill calculations.

- **ESA Compliance** – CORVUS will assess the study area for the potential to support species listed as threatened or endangered under the ESA and will prepare the results for later inclusion in the IP submittal to the USACE and the necessary documentation for the CLOMR, if required. *CORVUS assumes any consultation with the US Fish and Wildlife Service (USFWS) through the lead federal agency (USACE) will be informal (no Biological Assessment required).*
- **Project Meetings and Agency Pre-Application Coordination (6 meetings)** – CORVUS will participate in an estimated 6 virtual progress meetings or calls with the design team throughout the duration of the Project to provide insight and strategy for revegetation design, and potential environmental permitting requirements. Participation in project meetings provides CORVUS with an opportunity to develop a well-rounded and comprehensive Section 404 permitting approach before drafting the Individual Permit (IP) application. Additionally, participation results in the greatest predictability and efficiency for the design team when undergoing the Section 404 process. This task also includes up to 3 environmental permitting specific meetings (including one field meeting) with the project team, USACE, and CDPHE. This task includes the pre-application meeting(s) and the CSQT related meetings. This pre-application coordination allows the agencies to express any concerns about the environmental permitting, CSQT approach, or the Water Quality Certification (WQC) Request for the Project before submitting the Individual Permit application, Compensatory Mitigation Plan (CMP), CSQT package, or WQC Request.
- **Section 404 Permitting Approach** – Based on CORVUS' participation in progress meetings with the Project team, CORVUS will analyze the project background, proposed improvements, and anticipated impacts to WOTUS to develop a permitting approach for the Project that will serve as the basis of the Section 404 IP Application. This includes crafting a carefully worded project purpose and need statement; identifying key design elements, site, and design constraints; avoidance and minimization measures to WOTUS; and analyzing a set of practicable alternatives that comply with Section 404(b)(1) Guidelines. The USACE expects to see a good-faith effort to achieve the purpose and need with various approaches, including avoiding impacts to WOTUS. USACE cannot issue a permit for a preferred alternative if a practicable alternative exists that would have a less adverse impact on the aquatic ecosystem (known as the Least Environmentally Damaging Practicable Alternative [LEDPA]). As a result, the alternatives analysis in an Individual Permit must include at least three practicable alternatives for the Project and a detailed justification for why the selected alternative is the LEDPA. The set of alternatives included in the IP's Alternatives Analysis often does not directly overlap with the design alternatives prepared by the project engineer.
- **Individual Permit Application** – *Not included at this time.*
- **Survey, Document, and Record Potential Historic Properties Task Management** – CORVUS will coordinate and consult with PaleoWest Archaeology (PaleoWest), CORVUS' preferred heritage consulting firm. PaleoWest will be a sub-consultant to CORVUS and their fee is provided as an expense. As part of the CWA Section 404 compliance process, the USACE must comply with Section 106 of the National Historic Preservation Act (NHPA). To do this, the USACE typically requires prospective permittees to submit the results of a survey for potential historic properties in the USACE permit area (also known as the area of potential effect (APE). Potential historic properties include archaeological sites, farmsteads, irrigation ditches, transmission lines, and railroads. The APE will be surveyed in detail for potential historic properties. The following activities are included in PaleoWest's fee:
  - Request a file search of Office of Archaeology and Historic Preservation (OAHP) records for a 1- mile radius around the survey areas (permit area)
  - Conduct archival research, as needed, to determine if additional cultural resources are present within the project area
  - Conduct an intensive pedestrian inventory of the project area
  - Record the locations of any cultural resources encountered that are 50 years old or older
  - Prepare limited results survey form
  - A mitigation plan for adverse effects on historic properties is not included in this statement of work. *This assumes a Full Class III Documentation Report (triggered by 4 or more "isolated finds", or any "site") will not be required.*
- **Agency Coordination** – CORVUS will coordinate with the USACE and the Colorado Department of Public Health and Environment (CDPHE) to discuss project purpose and need, schedule, preliminary design concepts, potential impacts to WOTUS, and mitigation strategies for the project reach. This task includes all pre-application meeting

(s). This pre-application coordination allows the agencies to express any concerns about the environmental permitting or the Water Quality Certification (WQC) Request for the Project before submitting the Individual Permit application, Compensatory Mitigation Plan (CMP), CSQT package, or WQC Request.

- **CSQT Assessment**– The CSQT is a spreadsheet-based calculator approved for use by the USACE to determine if proposed stream impacts would result in a permanent loss of Functional Feet (FF) (as opposed to linear feet) after completion of a project and therefore possibly require mitigation. The assessment of at least five specific parameters (within the “Reach Hydrology and Hydraulics” and “Geomorphology” Functional Categories) is required at all project sites evaluated for CWA Section 404 purposes, including Reach Runoff, Floodplain Connectivity, Lateral Migration, Bed Form Diversity, and Riparian Vegetation. Assessing these five parameters provides consistency between impacts and compensatory mitigation and allows for a more consistent accounting of functional change. ***This task is not included at this time, as it can be highly detailed and costly, and should not be conducted until the impacts are clearly understood. A high-level CSQT approach will be included as part of the Section 404 Permitting Approach.***
- **FACWet Analysis** – When permanent adverse impacts to wetlands are anticipated, the COMP v2 specifies that a Functional Assessment of Colorado Wetlands (FACWet) analysis be completed and submitted to assist in determining wetland functions impacted and compensatory wetland mitigation ratios required. Based on the results of the delineation and proposed impacts to WOTUS, if it is determined that FACWet may be required, CORVUS will conduct a FACWet analysis on wetlands within the property and provide FACWet data forms and mapping for the future 404 application submittal.
- **Compensatory Mitigation Plan (CMP)** – When permanent wetland impacts greater than 0.1-acre or when stream impacts greater than 0.03-acre are proposed, the USACE requires a CMP to comply with Section 404(b)(1) Guidelines to offset environmental losses resulting from unavoidable impacts to WOTUS. A CMP is not included at this time, and would be part of the 404 submittal package at a later date.
- **Water Quality Certification Request** – As part of the IP application process, a CWA Section 401 Water Quality Certification (WQC) must be obtained from the Colorado Department of Public Health and Environment (CDPHE). Based on email communication with CDPHE on December 2, 2021, the Water Quality Division is still following procedures established in the 2020 WQC Rule to process WQC Requests. ***A Water Quality Certification Request is not included at this time, and would be part of the 404 submittal package at a later date. However a high-level approach will be included in the Section 404 Permitting Approach.***
- **Planting Plan** – Based on the design plans and communication with the design engineer and a landscape architect, CORVUS will provide a planting plan and construction specifications (as needed) for revegetation items such as general notes and specifications for topsoil stockpiling, soil amendments, seedbed preparation, plant material, and seeding and mulching. CORVUS will also collect soil samples in the Project area and send them for testing to a reputable soil testing lab to determine suitable plant species and soil amendments. CORVUS will expense the cost of soil tests. CORVUS anticipates collecting no more than four soil samples.
- **Water Quality Sampling** – The water quality data will be used to quantify the effects of low-impact development strategies on the local watershed. Collecting accurate and precise water quality samples is important to understand the baseline water quality data before development strategies are implemented. Five sampling locations have been determined within the context of the site.

Sampling will be conducted once per month, for 6 months (May-October) documented, and written in a report of a representative water quality analysis of the site. Locations are indicated on the figure on the following page.

- 1) Upstream of Little Columbine Creek entering Town of Grand Lake property limits
- 2) Inlet to potential wetland west of Highway 34
- 3) Inlet to potential wetland East of Highway 34
- 4) Inlet to detention ponds
- 5) Outfall into HOA Marina





Three samples will be collected at each sample location and analyzed by an EPA-certified laboratory:

- Sample A -Total suspended solids, (TSS) - filtered .45micron
- Sample B – Chemical Analysis: Ammonia (NH3), Nitrate (NO3), Nitrite (NO2), Total inorganic nitrogen (TIN), total nitrogen (TN), Total Phosphorus (TP)
- Sample C - Microbiology Analysis – total aerobic, anaerobic, total denitrifying bacteria (CFU)

A final sample will be collected using field equipment following USGS small stream water quality sampling and monitoring guidelines testing for dissolved oxygen, pH, temperature, and clarity (turbidity).

Proposed equipment used for field samples/monitoring:

- HACH handheld D.O. meter (2968800) – Temperature and Dissolved Oxygen
- 2100Q Portable Turbidimeter (2100Q01) – Turbidity (Clarity)
- Pocket Pro+ pH Tester (9532000) - pH

**Topographic Map and GIS**

Flatirons will prepare a Design Topographic Exhibit with 1' contours of the designated area of the site. They will establish a job site benchmark tied to NAVD 88 vertical datum, and data collect topographic site features, surface evidence of utilities (including physical characteristics of invert), curbs, access and design features. They will identify the following items of primary focus on drainage facilities – Streams, drainage ways, road side ditches, culverts, bridges, ponds, lakes, water surfaces and bank areas on both public and private properties. Roads: including edge of asphalt, edge of gravel, centerline, etc. Parcel mapping based on publicly available Grand County GIS data will be included, however boundary determination is not a part of the above-described scope of services, and it is understood that this is not a Land Survey Plat in accordance with CRS 38-51-102.

After receiving the initial survey with topography, RGA will review the survey to confirm the accuracy of the utility mapping, base mapping, impacts in and outside of the right-of-way, and the location, type, quantity, material, diameter, condition, and depth of existing utilities. **If any potholing is needed, it will be identified, and additional cost presented to the Town of Grand Lake at this time.** RGA will also verify the alignment of any water, sanitary sewer, and storm lines in the project area. These two steps lead to the development of a comprehensive and accurate base map. This will be essential not only for the proposed design, but for eliminating future conflicts in the field that precipitates RFI's and/or change orders and developing the proper bid schedule, quantities, and cost estimates. It is our philosophy that it is easier to move a line on the plan rather than performing a re-design or coordinating a relocation of any existing facility during construction.

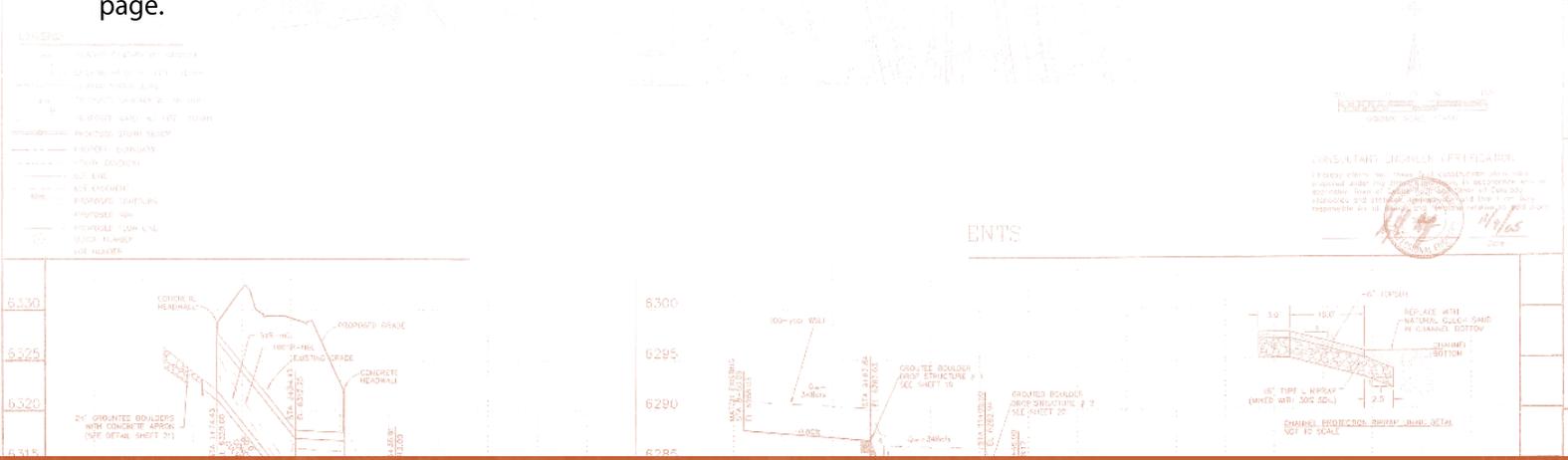
An in-detail review of the utilities is also conducted to ensure all utilities were recorded. This review includes all utility mapping that was provided by the surveyor/locator. After the review, utility companies are contacted to verify utility locations and determine if additional information can be gathered from them. Initial coordination, with an introduction to the project, is sent to all utility companies. Once all information is gathered and reviewed, a field inspection of utilities is conducted to ensure the physical information and digital information match. After the initial coordination and site visit, preliminary design plans are sent to utility companies for their review and coordination in utility relocating or clearance. Along with the preliminary design plans, we include a template letter for them to complete either agreeing with relocations or clearance of any conflicts. All coordination and correspondence between the utility companies and RGA are tracked through a tracking spreadsheet. If no responses are received within the given timeframe, we will request a letter from the client to obtain a response.

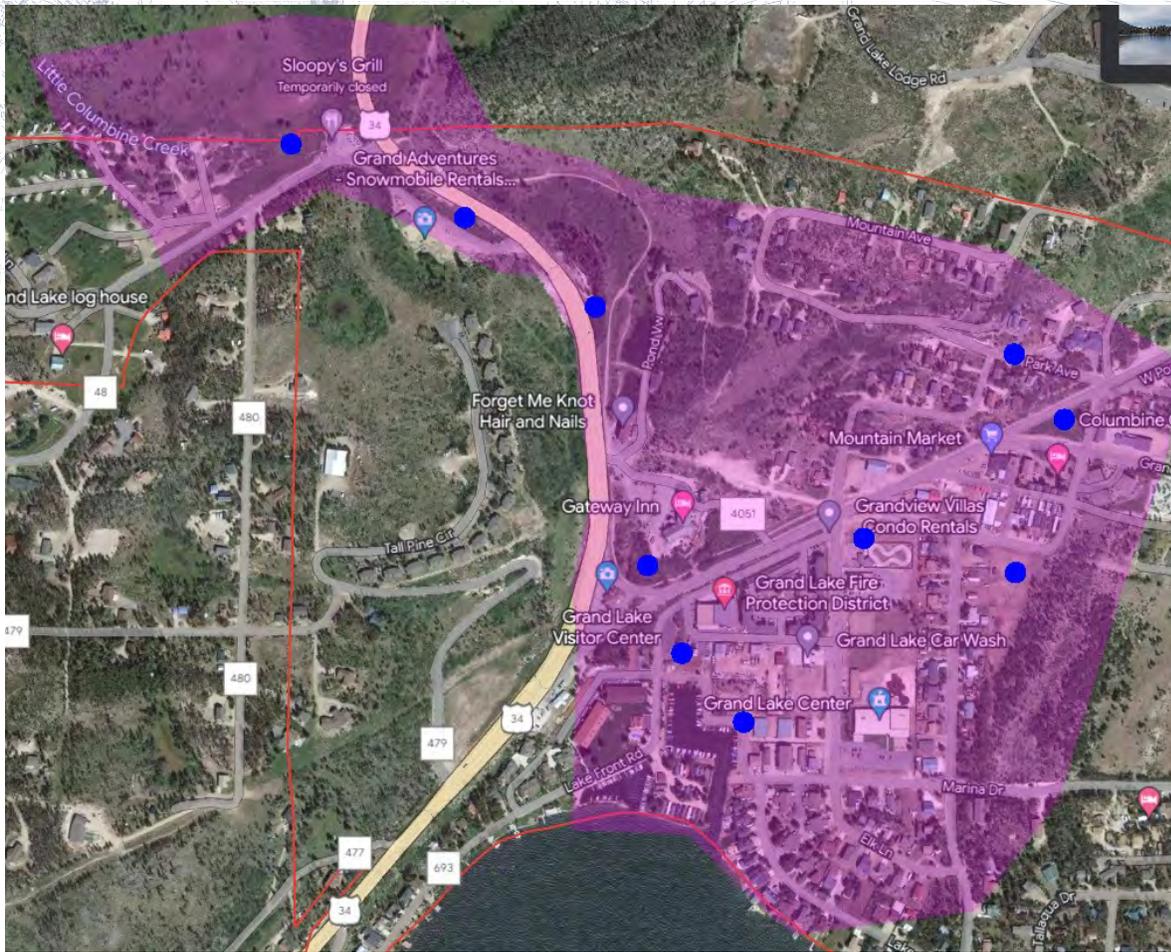
We will provide adequate mapping based upon high-resolution drone topographic data and on-the-ground surveying for non-topographic features and GIS data sets for the purposes of hydrologic analysis of existing drainageways, swales, ponds, water surfaces, channel and storm drainage features.

**Soils Report**

K+A will review published geologic maps and literature for the development area and comment on the local geology with respect to the proposed project. At designated locations, as access and underground utilities permit, K+A will drill ten (10) exploratory borings in areas of interest for the project. The borings are anticipated to range from 15 to 25 feet deep. The final depth of the borings will be determined in the field as drilling progresses and as the sub-surface profile becomes evident. The borings will be made to obtain information on the subsurface profile, to obtain samples for laboratory testing, and to estimate the ground-water level and depth to bedrock, if encountered within the drilled depth. A percolation test will be performed in each boring.

RGA has preliminarily identified the following ten (10) locations for bore collection, see the figure on the following page.





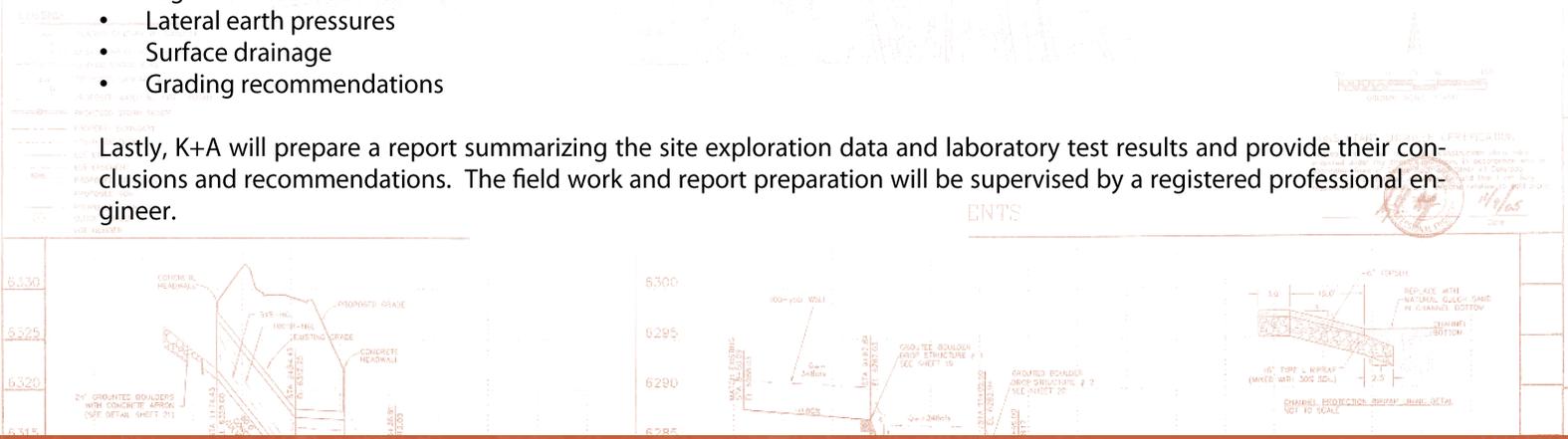
K+A will then conduct a laboratory testing program on selected samples obtained from the borings to determine:

- Moisture content and density of undisturbed fine-grained samples
- Gradation characteristics of coarse-grained samples
- Consolidation and/or swell potential (of fine-grained soil samples)
- Atterberg limits
- Soluble sulfates, pH and resistivity

K+A will then analyze the data obtained from the field and laboratory portions of the study to provide preliminary engineering recommendations for:

- Lateral earth pressures
- Surface drainage
- Grading recommendations

Lastly, K+A will prepare a report summarizing the site exploration data and laboratory test results and provide their conclusions and recommendations. The field work and report preparation will be supervised by a registered professional engineer.



### Monthly Invoices and Supporting Written Progress Reports

Invoices will be sent monthly for the time expended. Accounts will be due and payable within thirty (30) days after the date of the invoice. Whenever the account is more than thirty (30) days delinquent, RGA may suspend further work called for until such account is made current. The fact that RGA may continue to work beyond that time shall not be deemed to be a waiver of its rights hereunder. RGA will submit supporting written progress reports with each monthly invoice.

### Progress Meeting Minutes

RGA will hold periodic progress meetings with the team to ensure the project is proceeding smoothly and on budget. **This meeting can be completed in person, but virtual meetings are more time-efficient and encouraged. The proposed fee includes attendance via an online meeting platform. If in-person attendance is required, additional time and materials for travel time will be needed beyond the proposed fee.**

### Schedule Updates

RGA will provide schedule updates as requested by the team.

**NOTE: If additional baseline information, reports, approvals, or permits are required based upon the findings in Task #1, Task #2, from meetings with “the Team”, or as a result of public comment, additional time and materials beyond the proposed fee may be required and will be requested at that time.**

### Task #2 – Analysis:

#### Analyze Existing Stormwater System

RGA will provide a comprehensive evaluation of the existing facilities related to stormwater runoff, stormwater storage and water quality treatment.

#### Create Graphics/Maps Illustrating Existing Conditions

RGA will create graphics and/or maps illustrating the existing conditions of the project area.

#### Evaluate Water Quality Needs and draft Water Quality Needs Report

CORVUS will evaluate the water quality needs based upon the data collected for the pre-construction water quality report and draft a water quality needs report. This will be sent to the team for review.

#### Evaluate Monitoring Locations and Needs

CORVUS will evaluate the monitoring locations and needs based upon the data collected for the pre-construction water quality report, potential treatment locations and the water quality needs report. These locations will be sent to the team for review as a part of the 50-percent conceptual design phase.

#### Develop Report and Map of Proposed Stormwater Solutions and Locations

RGA will utilize the information obtained from CORVUS, Flatirons, and K&A to make decisions on the feasibility of low-impact development solutions and other best management practices. We understand that the town’s goals are to implement low-impact design solutions, wetlands, stormwater storage, channel design and integrated management practices that serve the stormwater needs of the Town while improving quality of life and lowering impacts on town resources and the surrounding environment within the study area. We will work with and prioritize these goals as hydrogeomorphology allows. We will utilize this information to recommend solutions to improve stormwater quality before reaching the Shadow Mountain Reservoir.

### Develop Public Outreach Plan

RGA will assist the team with obtaining input in the planning process for the Stormwater Management Plan. The proposed public involvement plan involves both community surveys and a community meeting.

A community survey will be developed to obtain more information on drainage problems in the project location, as well as to obtain opinions on the proposed stormwater solutions and locations. The survey will be able to be completed on-line or via paper. To cut down on consultant costs, RGA recommends that the Town print and mail any notifications of the survey or any paper surveys. A compilation of the community surveys will be presented to the Town.

We will work with the team throughout this project to identify any additional areas where community input may be beneficial.

### Task #3 – Stormwater Management Plan

#### Develop Preliminary Stormwater Management Plan and Report

Our proposed team will evaluate the water quality and develop a preliminary Stormwater Management Plan. We will provide a 75% draft for public comment. The final report will address all items in the RFP and incorporate all feedback provided by the town staff and public comment.

#### Develop Preliminary Stormwater Management Construction Documents including Plans, Details, Specifications, Quantities, and Costs

RGA will prepare preliminary engineering documents based on the solutions presented in the preliminary Stormwater Management Plan. Where deemed necessary, additional field data collection will be performed to expand on original findings and recommendations.

Preliminary drawings (75%) will be provided to the team for review. The drawings will incorporate all existing and proposed information into a complete working drawing set for review. Preliminary Technical Specifications (75%) will be provided in an integrated manner with the Town of Grand Lake's standards and specifications. The specifications will be created to eliminate repetition within the proposed specifications and provide for specific clarification where competing codes or standards conflict in requirement. Method of Measurement for payment for work will be provided in all areas that specify unit price contract items. A project description will be submitted along with a preliminary estimate of the construction schedule. A summary of modifications to the Special Conditions will be provided for review and discussion surrounding proposed contract terms and requirements. Additionally, a revised estimate of probable costs will be provided based upon the drawings and specifications. The revised estimate will also include the Schedule of Contract Items and Prices to begin formulation of the final bid schedule.

#### Create Proposed Plan Presentation for a Public Meeting

RGA will create a proposed plan presentation for the public meeting. We will incorporate any feedback received from the team on the presentation.

#### Attend Public Meeting

A community meeting will be completed that can be in-person, virtual, or both to increase attendance and participation at the preliminary 75% draft of the Stormwater Management Plan and Report. RGA will attend the public meeting. Graphic representations and materials will be provided to clearly communicate the proposed Stormwater Management Plan. We will answer any questions from the public and obtain public feedback.

Comments and discussions will be recorded by RGA, and a summary of the meeting will be provided to the project team. The project team is committed to working through and addressing any citizen concerns that are raised in cooperation with town staff.

### Task #4 – Stormwater Management Plan Final Design

#### Address Preliminary Design Comments from Team and Public

Based on staff comments and the input obtained from the public meeting, RGA will prepare pre-final drawings and specifications. In the event previously undiscovered conditions or concerns arise, RGA will coordinate progress meetings among appropriate parties to provide resolve. Comments and decisions will be recorded from all parties. Meeting minutes will then be distributed to all attendees for review and consensus. An updated estimate of probable costs will be provided. The updated estimate will include further refinement in the form of work breakdown structures and project initialization and closeout costs.

#### Finalize Stormwater Management Plan and Report

RGA will perform an in-house peer review by a professional engineer not involved with the project team. The review engineer will review the documents for quality, clarity, accuracy, and concept. Final revisions will then be completed to the Stormwater Management Plan and Report. The final deliverable will be provided as a PDF to the town.

#### Finalize Stormwater Management Construction Documents, including Plans, Details, Specifications, Quantities, and Costs

RGA will perform an in-house peer review by a professional engineer not involved with the project team. The review engineer will review the documents for quality, clarity, accuracy, and concept. We will also have one of our construction administration personnel perform a constructability review of the plans and specifications and review of the estimate of probable cost. We strive to prepare construction documents that are complete, cost-effective, easy for the contractor to interpret, and minimize the need for change orders. Final revisions will then be completed to the Stormwater Management Construction Documents. The final deliverable will be provided as a PDF to the town.

#### Develop Operations and Maintenance Manual

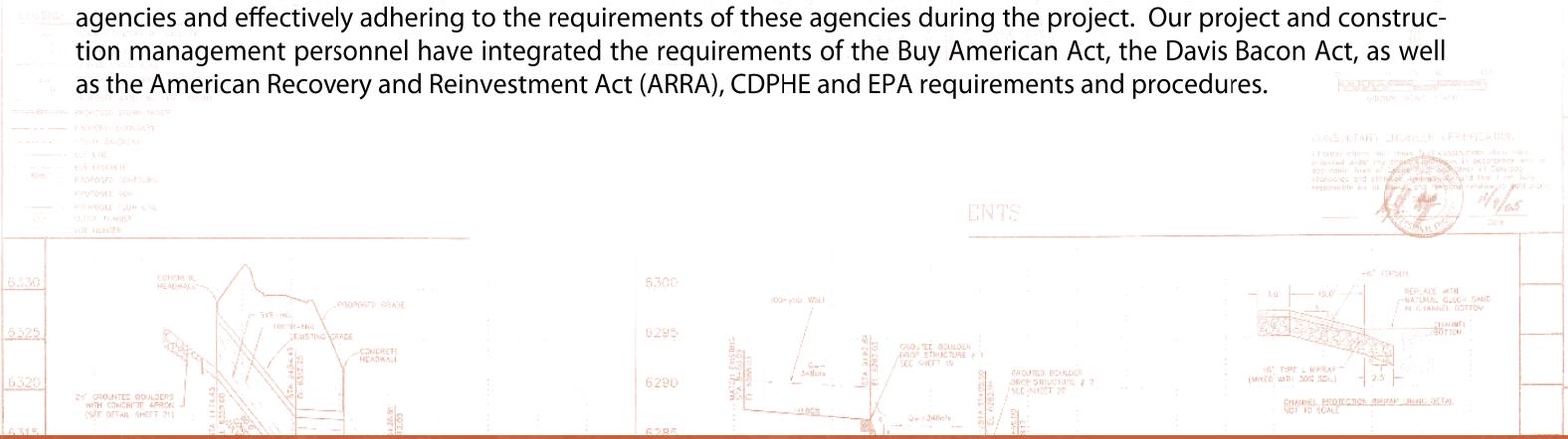
We shall provide a summary of maintenance items to be frequently addressed to maintain the functionality of the recommended design solutions. The final deliverable will be provided as a PDF to the town.

#### Identify Available Funding Options

We shall provide a summary of the available grants and loan options from various agencies for recommended design solutions and the association Best Management Practices (BMPs). We have assisted our clients with obtaining grants and loans for a wide variety of projects, for various loan and grant agencies, totaling over \$35 million dollars.

### Bidding and Construction Administration (As-Needed, Future Agreement)

RGA can also assist with project permitting, project bidding, and construction phases of the implementation of the proposed stormwater solutions on a time and materials basis. RGA has experience working with governmental funding agencies and effectively adhering to the requirements of these agencies during the project. Our project and construction management personnel have integrated the requirements of the Buy American Act, the Davis Bacon Act, as well as the American Recovery and Reinvestment Act (ARRA), CDPHE and EPA requirements and procedures.



## SIMILAR EXPERIENCE

### REFERENCES FROM SIMILAR WORK

#### Similar Project #1: Roadway and Drainage Improvements and Drainage Master Plans (2013 – Current)

**Client:** Town of Buena Vista, Colorado

**Reference:** Shawn Williams, Public Works Director, 719-581-1049, [bvpwdir@buenavistaco.gov](mailto:bvpwdir@buenavistaco.gov)

**Project Description:** RGA has and continues to work on several projects with the Town of Buena Vista that include both roadway improvements and drainage master planning. These projects include improvements to Gregg Drive, Cedar Street, Arkansas Street, Rodeo Road, East Main Street, and Railroad Street. RGA has incorporated several innovative drainage solutions into these designs, that range from gutter “turnouts” that direct stormwater to tree lawns to capture runoff before it reaches the street; open bottom infiltration inlets; infiltration galleries in the gutter pans; and roadside ditches that capture and treat water via longitudinal gravel beds and the use of roadside ditches as linear detention/water quality facilities. RGA has developed the town’s drainage master plan, which directs and dictates numerous smaller facilities such as tree lawns, infiltration galleries, roadside ditch-controlled containment, use of baseball and sport fields for detention and water quality infiltration, instead of a one-size-fits-all regional facility. This approach uses a green storm water infrastructure, primarily retention and local water quality capture instead of large piped systems and discharges to the Arkansas River as fast as possible, this allows for beneficial using the storm water runoff by the town to supplement irrigation. An update to the drainage master plan is ongoing.

**Similarities with Grand Lake Stormwater Management Plan:** The Town of Buena Vista has experienced problems with alluvial erosion and mass wasting of sediments due the gravel / cobble soil composition and the limited ability of soils of that type to establish a stable robust vegetative cover. RGA has studied the soils, hydraulics and hydrology of the Town and surrounding area and determined through a master planned drainage analysis that there are different types of problems and different solutions for each (see description above). The climate for the Town does not promote the establishment of wetlands but the soil make up is well suited for infiltration and the Town has installed infiltration galleries, retention ponds, open bottom ed inlets, etc. to help control unwanted sediment migration and reuse storm-water runoff for groundwater recharge purposes.

#### Similar Project #2: Water Quality Ponds 6 and 7 Drainage Improvements (2022)

**Client:** Conservatory Metropolitan District

**Reference:** AJ Beckman, District Manager, Public Alliance, 303-877-6284, [aj@publicalliancellc.com](mailto:aj@publicalliancellc.com)

**Project Description:** RGA assisted with the design and bidding of drainage improvements to the District’s Water Quality Ponds 6 and 7. Improvements to Pond 6 included the following: removal of a portion of the trickle channel and replacement by extending the 48-inch Reinforced Concrete Pipe (RCP) approximately 80 linear-feet, installation a new manhole, reuse of the existing flared-end section (FES), pouring a concrete transition between the FES and the trickle channel, armoring the area around the new location of the FES with a concrete headwall/24-inch stacked boulders, installing Type M soil riprap, overall improvements to prevent sedimentation and improve water quality. Improvements to Pond 7 included the following: removal and disposal of sediment/vegetation, re-grading of pond bottom, erosion control and re-seeding of pond, site restoration and re-seeding access road, and traffic control.

**Similarities with Grand Lake Stormwater Management Plan:** The Conservatory Metropolitan District has had problems with prior stormwater design that has created excessive erosion and sedimentation in two of the District’s ponds. RGA designed a system that corrects a storm design flaw and surfaces flow problems that has led to the undermining of irrigation piping and a pedestrian trail. The corrective stormwater design has fix problems with sediment transport and erosion with protective hardened surface protection and storm piping mitigation to improvement water quality of the ponds and reduce the need for future maintenance.

### RECENT RELEVANT EXPERIENCE - RGA AND ASSOCIATES, LLC

**Project:** Hilltop Estates Subdivision (2020)

**Client:** David Hubbard/Adamo Homes

**Description:** The RGA team provided design and grading layout for a minor development with four single-family home lots. We provided Construction Drawings, a Phase III Drainage Report, Grading, Erosion, and Sediment Control Report and plans and assisted with coordination with Douglas County.

**Project:** Red Hawk Filing No. 3, Phase 5 (2020)

**Client:** Lennar Homes, Castle Rock, Colorado

**Description:** RGA assisted Lennar Homes with drainage, utility, and traffic conformance letters, updated construction plans, GESC report and GESC plans for the development of Phase 5 within Red Hawk Filing No. 3. RGA also assisted with the original work in 2005, which consisted of a Final Drainage Report for 103 acres and approximately 193 single-family and multi-family homes. The project included several difficult aspects such as encroachment on a Town-owned golf course, application for Federal Emergency Management Association floodplain revision, mountainous terrain, and extensive coordination with adjacent developments for utility connections and design of interconnecting roadways. The development includes a regional drainage system comprised of storm sewer and five detention ponds.

**Project:** On-Call Engineering and Planning Services (2019)

**Client:** Clear Creek County, Colorado

**Description:** RGA provided on-call engineering and planning services to the Community Development Department related to development, driveway, excavation, and floodplain applications. This included review of construction drawings, drainage reports, transportation, impact reports, and other similar documents associated with land development projects to ensure compliance with regulations and conditions for approval. This also included review of plans and reports, verification of compliance with regulations, administration of BMP's, driveway, grading, drainage, and storm-water management, retaining walls, and floodplain development permits. We also completed site inspections to confirm BMPs and compliance with approved site plans. RGA also assisted the county with an update to their site development and grading standards.

**Project:** 2013 Flood Repair Project (2015)

**Client:** Town of Estes Park, Colorado

**Description:** This project consisted of 22 separate repair areas. Work included establishing construction easements, survey pins, repairs and replacements for roadways, trails, retaining walls, repairs to asphalt, concrete, bridges, swales, embankments, and slope and bank stabilization. RGA provided design services including survey, geotechnical and environmental reports and evaluations. RGA produced design plans, contract documents, cost estimates, and has advertised, bidding services and full-time construction management for the town. As part of this work, RGA coordinated with the Town of Estes Park, CDOT, FEMA, all utility providers and obtained required clearances and permits. On behalf of the Town, RGA produced temporary construction easements and exhibits and met with affected property owners to explain the project and obtain signatures for the temporary construction easements. RGA assisted the Town with quarterly reports, scope change requests, and documentation for entry into the EMGrantsPro system. In addition, RGA assisted the Town to ensure that all work complied with the Town of Estes Park, CDOT, FHWA and FEMA requirements and regulations.

**Project:** Massey Draw Drainageway Improvements (2013)

**Client:** Deer Creek Metropolitan District, Jefferson County, Colorado

**Description:** Drainageway improvements to Massey Draw were required to repair major erosion and protect existing trail crossings. The project consisted of grouted, stacked boulder armorment of the trail embankment and a grouted boulder drop structure with creative channel bank treatment and stabilizing channel head cutting protection. This project involved review and permitting through Jefferson County Planning and Engineering, Federal Emergency Management Association, and the Urban Drainage Flood Control District (now Mile High Flood District).

**Project:** McCully/Schell Boulder Creek Floodplain (2013)

**Client:** Patricia and Jim McCully, Weld County, Colorado

**Description:** This improvement project included the placement of a boulder retaining wall to protect a lake/rail rights-of-way along and within the Boulder Creek floodplain. The design involved mapping the floodplain and floodway for approximately a mile and a half of Boulder Creek in an area that had previously only been designated as an approximate floodplain with no floodway. The modeling incorporated a roadway/bridge crossing, an old railroad embankment, several temporary gravel stockpiles, and excavated gravel pits. This project included review and approval of HEC-RAS modeling and project design through Weld County, Federal Emergency Management Association, and the Town of Fredrick.

**Project:** Meadows Filing No. 20 Regional Detention Pond (2012)

**Client:** Castle Rock Development Company, Castle Rock, Colorado

**Description:** RGA prepared modification plans for the outlet structure and regional detention pond to bring it into conformance with existing criteria. The modifications involved the installation of the boulder wall forebay, concrete water quality structure and concrete sedimentation basin.

**Project:** Bond Park Phases I and III (2012)

**Client:** Town of Estes Park, Colorado

**Description:** RGA provided the engineering design for storm sewer, channelization, and infiltration system to eliminate existing drainage problems; replacing asphalt; incorporating parking delineation in decorative stone pattern to eliminate typical painted stripes; eliminating curb and gutter; rock boulder bollards; and flowing curvilinear roadway, sidewalks and planter beds. This project included roadway, drainage, landscape, and streetscape improvements. The work included Macgregor Drive which is directly west of Town Hall. RGA and Winston Associates worked closely with the Stakeholder Committee and Town Staff to complete a detailed design for Phases I and III that was on time, within budget, functional, high-quality, and integrates seamlessly with Estes Parks' downtown.

**Project:** Master Drainage Plan (2010)

**Client:** Town of Estes Park, Colorado

**Description:** RGA developed the Estes Park Drainage Master Plan, which provides an overall guidance plan for the regionalized study areas to aid in the planning of future actions and improvements. The Plan coordinates the use of open spaces, rights of way, drainage tracts and easements to recommend environmentally conscious hydraulic design to remedy existing problems and/or areas where problems may be incurred. The study area is 1,400 acres and considers planning for open spaces, transportation, water quality, water storage, flood plain mitigation, wildlife and other emerging urban/commercial considerations. RGA provided study analysis and design and coordinated the approvals with the Town of Estes Park and Larimer County.

**Project:** Meadows Town Center

**Client:** Castle Rock Development Company, Castle Rock, Colorado

**Description:** This project included approximately 420 single-family and 2,402 multi-family dwelling units with 23 acres of commercial development. RGA provided engineering services for all civil design from sketch plan through construction document approval. Design challenges included balancing earth work activities over 1,200,000 cubic yards of material, connection of major infrastructure utilities through the property and incorporating a meandering drainageway. Drainage improvements included piping the 100-year upstream contributions through the property.

**Project:** Meadows Filing No. 20

**Client:** Castle Rock Development Company, Castle Rock, Colorado

**Description:** The RGA team prepared a Final Drainage Report for 298 acres and approximately 420 single-family and 2,400 multi-family homes. The development included a regional drainage system comprised of central riparian drainage channel corridor between two (2) regional ponds that are approximately 49 acre-feet in size.

**Project:** Bromley Park Master Drainage Plan

**Client:** Bromley Park Metropolitan District, Brighton, Colorado

**Description:** RGA developed the Master Drainage Plan for the Bromley Park Metropolitan District within the City of Brighton. This plan included Regional Detention Ponds for a 2,600-acre drainage area under development. Development consisted of a diverse mixture of single family, multi-family commercial, industrial, and office land uses. The drainage basin is intersected by I-76 and bounded by the Burlington Northern Santa Fe (BNSF) Railroad main line, which required innovative solutions for discharging stormwater from the regional ponds under both I-76 and BNSF embankment and ultimately into the Beebe Draw. The Master Plan also involved wetlands mitigation, water quality issues, and the hydrological aspects of the Beebe Draw that is a major conveyance of the discharge from Barr Lake.

**Project:** Sulphur Gulch Channel Improvements – Phase II

**Client:** Town of Park, Colorado and the Urban Drainage and Flood Control District (now Mile High Flood District)

**Description:** Severe erosion along the banks of Sulphur Gulch exposed abandoned irrigation lines and caused the collapse of a portion of the pedestrian trail, as well as damage to the embankment of the Bar CCC reclaimed water pond. The RGA team acted as design engineer and construction manager for the channel improvements, which included a sculpted concrete drop structure, a grouted riprap grade control structure, and buried riprap channel revetment to increase channel stability. The improvements resulted in a lower water surface elevation during the 10-year storm event. The project also required habitat restoration, wetlands mitigation, and protection of the regional trail system. RGA designed 850 LF of channel improvements along Sulphur Gulch adjacent to the Bar CCC Park. The project involved evaluation of the alignment, approvals from federal, state and local agencies, and construction management. Channel improvements included a sculptured concrete drop structure, grouted riprap grade control structure and buried riprap channel revetment. Design parameters included design coordination with existing bridge abutments and piers, the connection and re-alignment of the Town of Parker Regional Trail System, access from the Bar CCC parking area, and the synchronization with the existing Parker Water and Sanitation District mixing station and associates outfall/channel improvements to Sulphur Gulch at the termination of this project.

**Project:** Longs Way Tributary

**Client:** Town of Park, Colorado and the Urban Drainage and Flood Control District (now Mile High Flood District)

**Description:** RGA provided the design and construction management for the installation of two (2) regional detention ponds. The regional facility improvements consist of two detention ponds, 600-feet of storm sewer, and a connection structure to the existing Town of Parker drainage system. The detention ponds provide 6.0 acre-feet of storage and 1.2 acre-feet of water quality treatment.

**Project:** 20-Mile Regional Storm Water Facility

**Client:** Town of Park, Colorado and the Urban Drainage and Flood Control District (now Mile High Flood District)

**Description:** RGA designed two (2) cell inter-connected regional detention ponds along Plaza Drive adjacent to Cherry Creek. The project involved evaluation of the alignment and hydraulics, approvals from federal, state and local agencies, and construction management. The project included the installation of a 40.5 acre-feet regional detention facility. The basin analysis for the 395 tributary acres was modeled using CUHP and SWMM hydrology for the existing and proposed land uses as dictated by the Newlin & Baldwin Gulches and Basin 4600-09 Outfall System Planning Study. The facility consisted of hydraulically connected dual detention ponds with sediment collection cells and 10.0 acre-feet of controlled release water quality storage. The design also included box culverts and a 54-inch storm sewer system. The 570 cubic-feet per second released into an environmentally sensitive area of Cherry Creek from the detention facility is controlled by a concrete multi-staged weir and a grouted sloping boulder drop structure.



**RECENT RELEVANT EXPERIENCE - CORVUS ENVIRONMENTAL, LLC**

**Big Thompson Confluence Mitigation Bank - Weld County**

Coordinated with the development of a sustainable ecological restoration solution to satisfy regulatory requirements for a wetland and stream mitigation bank under Section 404 CWA. Prepared prospectus and mitigation banking instrument (MBI) documents and presented these to the Inter-Agency Review Team. Conducted wetland delineation, functional assessment of wetlands (FACWet) and streams (CSQT) to determine functional lift and conducted habitat assessments for Preble’s meadow jumping mouse, Ute lady’s tress orchid, and the Colorado butterfly plant. *This is the first mitigation bank approved in the Denver metro area in 20 years.*

**Northgate Detention Pond - USAFA / CDOT / El Paso County**

Technical expert providing natural resource consultation and compliance for US Fish and Wildlife (USFWS) Section 7 consultation in occupied Preble’s Meadow Jumping Mouse (PMJM) habitat, wetland delineation and clean water act (CWA) Section 404 Permitting, CDOT NEPA Categorical Exclusion documentation, and US Air Force Academy (USAFA) consultation and agency compliance.

**US 36 Wetland Mitigation Construction – CDOT Region 1, Boulder County**

Owner’s representative for CDOT on the oversight team for the construction, planting, and corrective actions for the 20 -acre wetland mitigation project required as compensatory mitigation for impacts related to US 36 widening and improvements. Of the 20 total acres, 15 acres are regulated wetlands per a USACE permit. The project complies with USACE and City of Boulder permitting criteria.

**Sand Creek Interceptor Sanitary Sewer Improvements Natural Resources Inventory - City of Aurora**

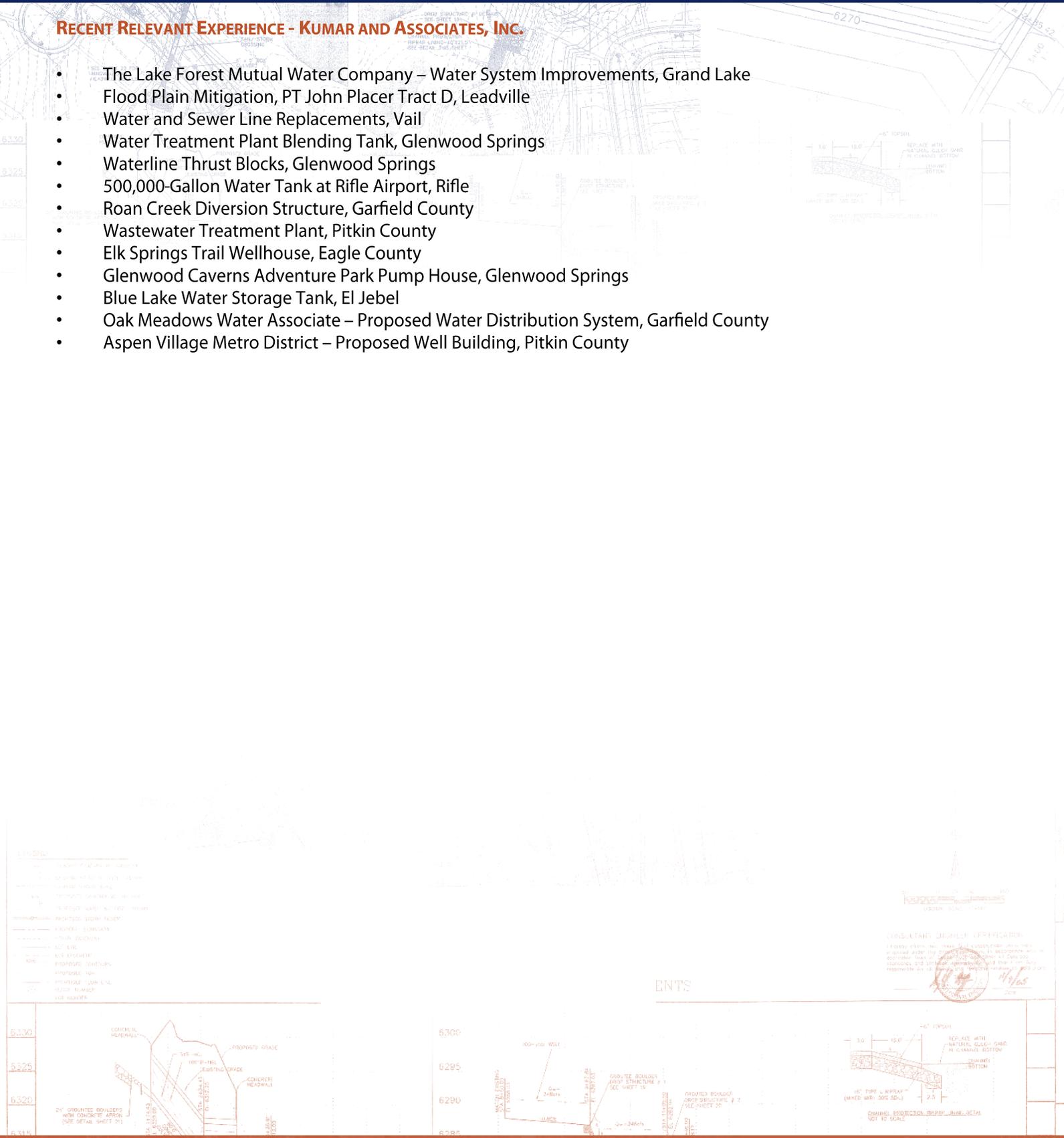
Evaluated and documented the presence of regulated natural resources along three proposed alternative alignments of the Sand Creek sanitary sewer interceptor. Regulatory resources emphasized included wetlands, federally threatened or endangered species and habitat, migratory bird nests, and active and inactive black-tailed prairie dog burrows. Mapped the location of each resource and provided an analysis of the regulatory and permit implications for each proposed alignment.

**RECENT RELEVANT EXPERIENCE - FLATIRONS SURVEYING, INC.**

- Pueblo West Metropolitan District, Pueblo, CO – topographic survey
- Southeast Metro Stormwater Authority, Jamison Tributary Drainage, Centennial – construction survey
- City of Louisville, Louisville Rec Center Playground – topographic design survey
- City of Louisville, Wastewater Treatment Plant on Empire Drive & Highway 42 – topographic survey
- Chartered Homes, Nelson and Airport Road, Boulder County – Drainage study
- Green Mountain Drainage Way, Lakewood, Colorado – topographic design survey
- Montclair Storm Drainage Project, E. 17<sup>th</sup> Ave. to Colfax, Denver, Colorado – construction survey
- Front Range Airport Drainage Study, Watkins, Colorado – Environmental survey
- South Platte River and Erger’s Pond, Brighton, Colorado – topographic survey
- South Platte River, Globeville Phase III, Denver, Colorado – design topographic survey
- St. Vrain Greenway Phase 7B to 11, Longmont, Colorado – topographic survey
- Silver Lake Ditch, Boulder, Colorado – design survey
- Frisco Ditch at Interlocken, Broomfield, Colorado – topographic survey
- Community Ditch Area at Marshall Lake, Boulder, Colorado – topographic survey

**RECENT RELEVANT EXPERIENCE - KUMAR AND ASSOCIATES, INC.**

- The Lake Forest Mutual Water Company – Water System Improvements, Grand Lake
- Flood Plain Mitigation, PT John Placer Tract D, Leadville
- Water and Sewer Line Replacements, Vail
- Water Treatment Plant Blending Tank, Glenwood Springs
- Waterline Thrust Blocks, Glenwood Springs
- 500,000-Gallon Water Tank at Rifle Airport, Rifle
- Roan Creek Diversion Structure, Garfield County
- Wastewater Treatment Plant, Pitkin County
- Elk Springs Trail Wellhouse, Eagle County
- Glenwood Caverns Adventure Park Pump House, Glenwood Springs
- Blue Lake Water Storage Tank, El Jebel
- Oak Meadows Water Associate – Proposed Water Distribution System, Garfield County
- Aspen Village Metro District – Proposed Well Building, Pitkin County

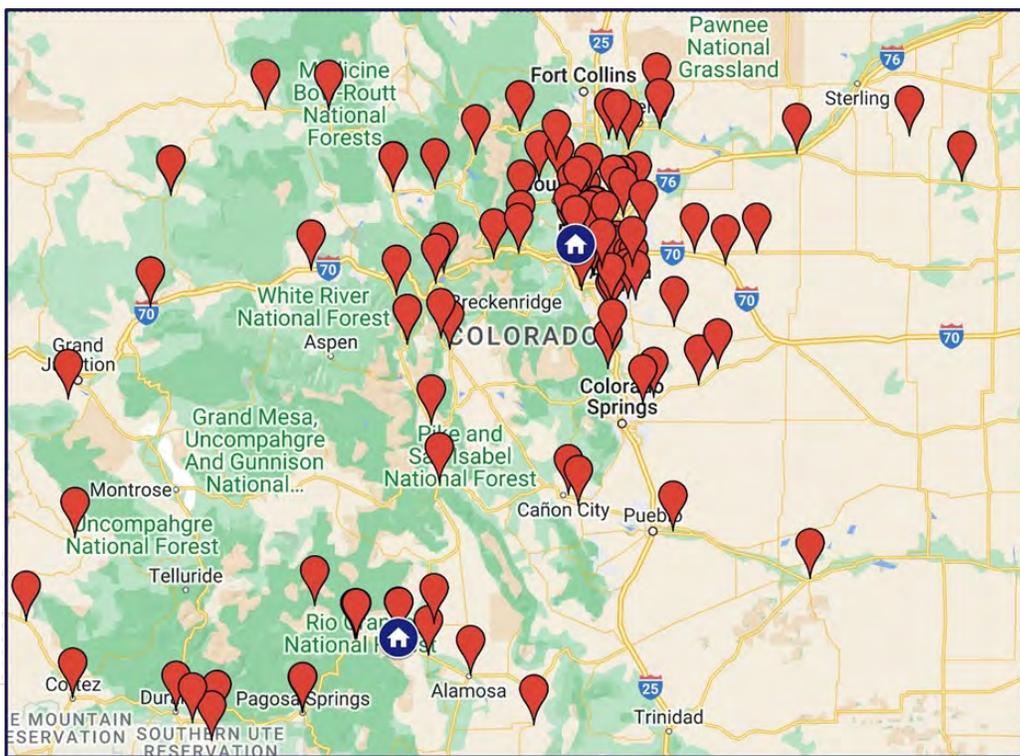


### RG A'S EXPERIENCE WORKING WITH SMALLER-SIZED MUNICIPALITIES

We have extensive experience serving small-sized municipalities throughout Colorado.

- City of Brush!
- City of Castle Pines
- City of Creede
- City of Delta
- City of Leadville
- City of Louisville
- City of Sheridan
- Clear Creek County
- Town of Bayfield
- Town of Buena Vista
- Town of Center
- Town of Dillon
- Town of Dove Creek
- Town of Erie
- Town of Estes Park
- Town of Grand Lake
- Town of Hot Sulphur Springs
- Town of Kiowa
- Town of Jamestown
- Town of Johnstown
- Town of Lochbuie
- Town of Lyons
- Town of Meeker
- Town of Minturn
- Town of Mountain View
- Town of Pagosa Springs
- Town of Palmer Lake
- Town of Parachute
- Town of Poncha Springs
- Town of Red Cliff
- Town of South Fork
- Town of Superior

A map of our representative clients is included below. Our representative experience can be found on our website: [www.rgengineers.com](http://www.rgengineers.com).



## QUALIFICATIONS

RGA proposes to utilize the following individuals to provide professional services to the Town of Grand Lake for this project. We will utilize our sub-consultants, CORVUS Environmental, Flatirons Surveying, and Kumar & Associates. Resumes are included in the appendix of this proposal.

### Key Personnel

**Ricardo J.F. Gonçalves, P.E.,** President, Principal-in-Charge, Project Manager

Mr. Gonçalves will be the Principal-in-Charge and Project Manager for this project and primary point of contact with the town. He will be the overall team leader. He has chosen to be the Project Manager for this project principally due to his extensive civil engineering experience with mountain communities like Grand Lake. Mr. Gonçalves serves as the Chairman of the Technical Advisory Committee of the Cherry Creek Basin Water Quality Authority and an active member of the American Consulting Engineers Council, the American Waterworks Association, Water Environment Federation, and the American Society of Civil Engineers.

Mr. Gonçalves has over 50 years of experience in the planning, design and construction management of a broad range of civil engineering projects. Expertise includes water and wastewater treatment plants, pumping and storage facilities, water and wastewater collection and distribution systems, roadway design, airport planning and design, storm drainage facilities, residential and commercial site planning and development, and recreational space projects. He personally acts as the City Engineer or District Engineer for a number of municipalities and special districts.

**James R. Landry, P.E.,** Senior Project Manager, Chief Operating Officer

Mr. Landry will act as a project manager and assist Mr. Gonçalves with the technical production of the work, managing schedules and communicating with subcontractors. Mr. Landry is a civil engineer with 27 years of experience in utility and roadway design, hydraulic and drainage engineering, and construction management. He has been involved in the preliminary, final design, and construction for a wide range of public and private sector projects. Mr. Landry also represents cities and special districts as their Engineer and/or Manager. He is currently the District Engineer, District Manager and Operator-in-Responsible-Charge for Applewood Sanitation District, the Town Engineer for the Town of Mountain View, and the Operator-in-Responsible-Charge for Cherry Hills Heights Water and Sanitation District and Westridge Sanitation District.

**Gary Welp, P.E., CFM,** Senior Project Manager

Mr. Welp will act as a project manager and assist Mr. Gonçalves with the technical production of the work, managing schedules and communicating with contractors. Mr. Welp has over 26 years of civil engineering design and management experience in master drainage studies, regional drainage, water systems, utility pipe lines, sewer interceptors, and residential and commercial subdivisions. Mr. Welp's responsibilities include hydraulic analysis, drainage studies, floodplain studies, development review, and design of drainage and municipal projects for the company. He is also a Certified Floodplain Manager (CFM).

**Joy McGee, AICP,** Planning Project Manager

Ms. McGee will be the planning project manager and lead public engagement for this project. Ms. McGee has extensive experience as a land use and planning professional with Colorado municipalities. She has a deep knowledge base of best practice planning methods and experience in the interpretation of land use, zoning and subdivision code sections for the review of development applications. She has handled the referral process for many municipalities and has experience with special districts.

**Ernie Kern, P.E., LEED AP, Civil Engineering Manager and Building Official**

Mr. Kern will provide engineering support for all projects. He has 45 years of professional civil engineering experience working for consulting engineering firms and municipalities. He has served in capacities ranging from construction inspection, plan review, and engineering design through project management. He has also completed retrofit designs to alleviate problems in developed areas due to unforeseen growth or inadequate design. Mr. Kern has completed design and project management for various types of engineering projects, including residential and commercial subdivisions; water distribution systems, pump stations, and storage facilities; wastewater collection systems and lift stations; street improvements; and drainage systems, including channels, culverts, drop structures, storm sewers, and detention facilities.

**Jordan Schneider, P.E., Project Engineer**

Mr. Schneider will provide engineering support for all projects. Mr. Schneider has six years of civil engineering experience, including: drafting construction documents and plan sets, basic design calculation, development review, and construction inspection for sewer and water line installation, wastewater treatment plant improvements, sewer lift station improvements, and vault improvements.

**Karl Kluge, Senior Construction Manager/Design Engineer**

As Design Engineer, Mr. Kluge will assist with the design and perform constructability reviews and construction estimates on several of the projects. As Construction Inspector, Mr. Kluge will provide constructability reviews. Mr. Kluge has spent the last 22 years with RGA as a design engineer, AutoCAD technician, construction manager, and senior construction observer of water, sanitary and storm sewer utilities, street construction, water tanks, diversions dams, bridges, water and wastewater treatment facilities, effluent pond lining, storm water structures and erosion control features. Responsibilities include contract document administration and compliance, bidding services, pay applications and change order processing, daily documentation and coordinating construction to final completion and warranty acceptance.

**Gaimé Esparza, Construction Manager/Observer**

Mr. Esparza will conduct constructability reviews. Mr. Esparza has 35 years of construction and project administration and observation experience, including bridge, roadway, general infrastructure, drainage, utility and building design & construction. This includes management of associated personnel, conducting pre-construction conferences, bid coordination, contract and specifications preparation, pay estimate preparation, site coordination and inspection, contract management, project management, and program management.

**Sara Constantine, E.I.T., Design Engineer**

Ms. Constantine will provide engineering support for all projects. She has three years of design engineering experience. She is proficient in ArcGIS, SQL, Coordinate GPS systems, Spatial analysis, Database Management and Microsoft Office.

**Alex Wilde, E.I.T., Design Engineer**

Mr. Wilde will provide engineering support for all projects. He has three years of design engineering experience, including project administration, review of reports and plan sets, basic design calculations, and sanitary sewer inspections. He has knowledge of soils, materials, and testing standards. He is proficient in the use of ArcGIS and Microsoft Office Suite.

**Krystal Welp, Engineering and Planning Technician**

Ms. Welp will assist with project administration, preparation of public engagement and public meeting materials, and preparation of the project deliverables. Ms. Welp has extensive experience providing technician review services through review of municipal codes and criteria manuals and has assisted several clients with the creation of standards and specifications. Additionally, she provides graphic support for all aspects of community plans, ranging from the creation of the project outreach website, design of community outreach materials, to the design of the final document.

### CORVUS Environmental Consulting, LLC. - Environmental Subconsultant

#### Tim DeMasters, Principal, Senior Ecologist

Tim joined CORVUS in 2018 as a seasoned senior ecologist with 15 years of experience working on projects ranging from large hard rock mines in AK, coal mines in WY, pipelines in IL and TX, to many trail, road, solar, stream, reservoir, and other water related projects in CO over the last 9 years. Tim provides expertise in compliance with federal and state environmental regulations related to biological resources, including wetlands, threatened and endangered species, and wildlife. Tim's experience includes working on numerous local agency projects in compliance with federal and local regulations as well as Colorado Parks and Wildlife (CPW) compliance statewide for various sectors. Tim has established strong working relationships with federal and state regulators and wildlife district managers and brings a creative solution-based approach to projects from a high-level down to the specifics.

### Flatirons Surveying, Inc. - Surveying Subconsultant

#### Tom Willis, PLS, Director of Operations and Chief Estimator

Registered Land Surveyor with more than 34 years of professional experience in Surveying, Mapping and GPS/GIS. Also serves as Director of Operations and Chief Estimator for Flatirons Surveying, Inc.

#### James Z. Gowan, PLS, CFedS, Vice President

Registered Land Surveyor with more than 31 years of professional experience in Surveying, Mapping and GPS/GIS. CFedS Certified for work on Federal lands. ALTAs, subdivisions, annexations, topographic mapping, aerial mapping, Hazwoper sites, flood repair sites, construction layout, office and field, rural and urban. Also held leadership roles ranging from Project Manager to Vice President.

### Kumar and Associates, Inc. - Geotechnical Subconsultant

#### James A. Parker, P.E., P.G., Senior Engineer Geotechnical

Mr. Parker has over **22 years of experience** in geotechnical and geological engineering, geological hazards assessment and materials testing and inspection in Colorado, Arizona and Oregon. He is responsible for planning, management and review of geotechnical and geologic assessments, and project management and engineering review of materials testing and special inspection on private and public projects throughout western and central Colorado.

### RGA's Company Resources

RGA has a staff of 16 professional engineers, designers, planners, and construction administration and support personnel who are providing on-call services to our existing special districts and municipal clients. Almost all of the services are for projects of short duration which allow us the flexibility to reassign personnel to new projects on short notice, and we have the in-house depth of resources to ensure that qualified RGA staff members will be available for the duration of each project.

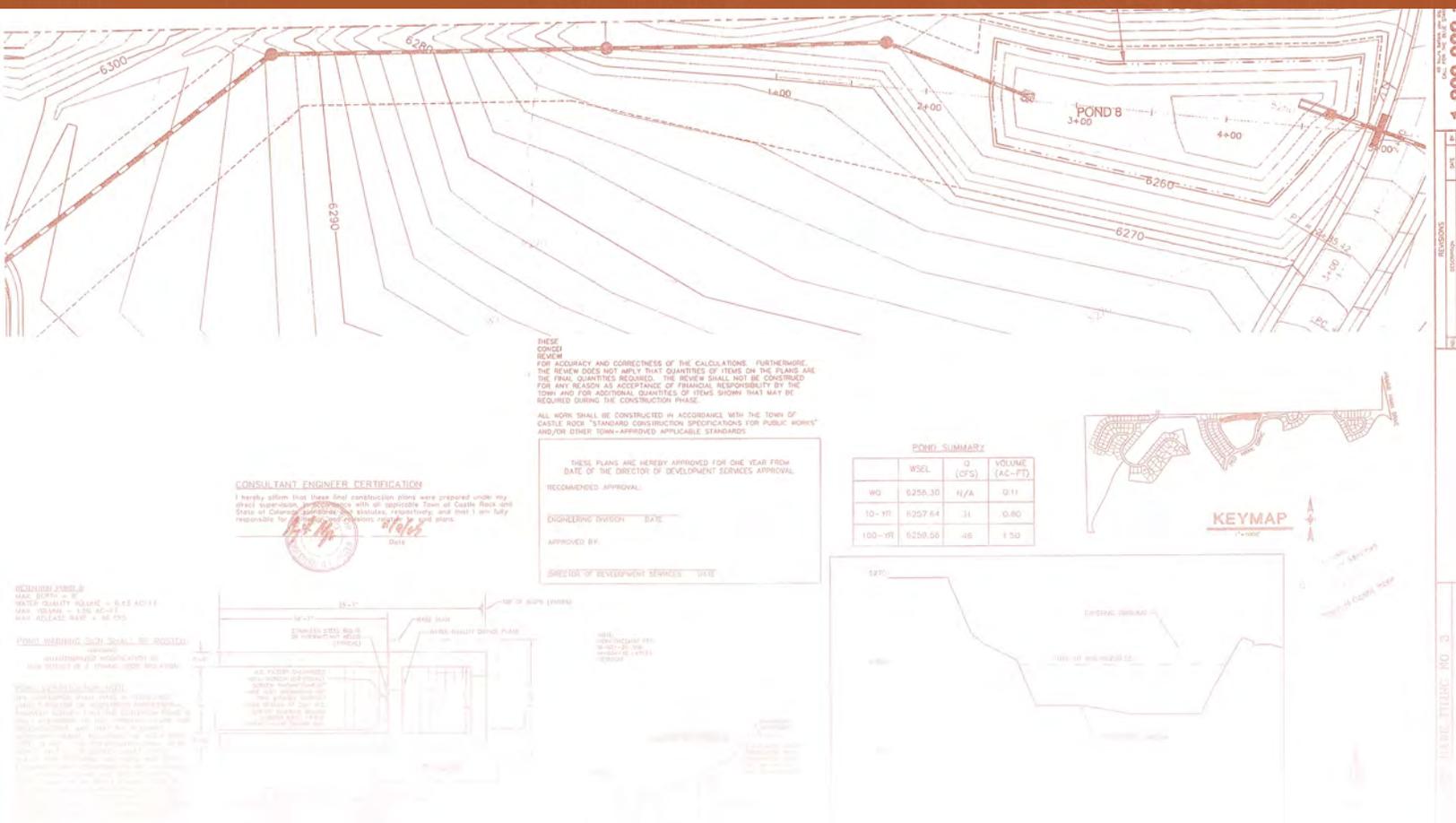
All design work completed by RGA will utilize the latest in civil engineering software provided in AutoCAD Civil 3D. The project team has the support of additional designers and CADD technicians who will use the software to complete all tasks efficiently and on time. RGA also has the latest Bentley/Haestad, MWH Soft storm drainage and EPANET modeling software at its disposal. There is a high-speed large format printer to produce all prints necessary in a short amount of time. RGA has the ability to produce full-size color maps and reports when needed.

CONSULTANT ENGINEER CERTIFICATION  
 I hereby affirm that these final construction plans were prepared under my direct supervision and that I am duly licensed and responsible for the work shown on these plans.

# TEL 6400 TRIBUTARY IMPROVEMENTS



## RESUMES



**CONSULTANT ENGINEER CERTIFICATION**

I hereby affirm that these final construction plans were prepared under my direct supervision and that I am duly licensed and responsible for the work shown on these plans.



THESE PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF THE DIRECTOR OF DEVELOPMENT SERVICES APPROVAL.

RECOMMENDED APPROVAL:

ENGINEERING DIVISION DATE

APPROVED BY

DIRECTOR OF DEVELOPMENT SERVICES DATE

**REVISIONS:**  
 MAX. DEPTH = 6"  
 WATER QUALITY CLASS = B-2E (NOV)  
 MAX. CHANNEL = 1.50 (B-2E)  
 MAX. RELEASE RATE = 40 CPS

**POND WARNING SIGN SHALL BE INSTALLED:**  
 1. 10' x 10' x 10' (NOV)  
 2. 10' x 10' x 10' (NOV)





## **RICARDO J.F. GONÇALVES, P.E.**

PRESIDENT



### **EDUCATION**

#### **B.S., Civil Engineering**

University of Colorado at Boulder

Post-Graduate Studies, Sanitary Engineering

### **PROFESSIONAL REGISTRATION**

**Registered Professional Engineer:** Colorado, New Mexico

### **PROFESSIONAL EXPERIENCE**

Mr. Gonçalves has over 51 years of experience in the design and construction management of a broad range of civil engineering projects. Expertise includes water and wastewater treatment plants, pumping and storage facilities, water and wastewater collection and distribution systems, roadway design, airport planning and design, storm drainage facilities, residential and commercial site planning and development, and recreational space projects. Mr. Gonçalves also has specialized expertise in municipal and special district engineering and administration. He personally acts as the City Engineer or District Engineer for a number of municipalities and special districts.

Mr. Gonçalves has traveled extensively throughout Europe and Africa and is fluent in the Spanish, Portuguese, French, and Italian languages.

### **MUNICIPAL ENGINEERING**

- ***Parker Water and Sanitation District, Todd Creek Village Metropolitan District, Cherry Creek South Metropolitan District, Superior Metropolitan District No. 1, Lincoln Park Metropolitan District, Stonegate Village Metropolitan District, East Alamosa Water and Sanitation District and Paint Brush Hills Metropolitan District.*** District Engineer for the design and construction management of water and sewer facilities, rate studies, master planning, and general on-call engineering services.
- ***Cities of Edgewater and Dacono, and the Towns of Mountain View, Kiowa, Superior and Buena Vista, Colorado.*** City/Town Engineer for water and sewer facilities, streets and traffic, drainage, hydrology, construction administration, inspection, rate studies, master planning, and general engineering services.
- ***Stonegate Village Metropolitan District, Douglas County, Colorado.*** Project Manager for the design and construction of a 1,600 acre development. Projects included eight well facilities, 4.0 MGD water treatment facility, 6.1 MG of potable water storage tanks, water distribution system, 1.1 MGD advanced wastewater treatment system, wastewater effluent reuse system, water pump stations, sewage pump stations, wastewater collection systems, major and minor arterial streets, and the preparation of two service plans for the formation of two separate metropolitan districts. Prepared a drainage study to establish street grades and drainage

basins. Calculated required detention basins, recommended the location of detention ponds, and prepared sizing of storm sewer pipe and road crossings.

- **Parker Water and Sanitation District, Parker, Colorado.** District Engineer for the design and construction management for district infrastructure serving a town of 30,000 people. Over a period of 20 years, projects have included design and construction administration of a 2.0 MGD advanced wastewater treatment plant, 9,000 GPM well system, 9.0 MG of buried treated water storage tanks, over 20 miles of 16-inch to 30-inch water transmission mains and 15-inch to 33-inch sewer trunk mains, pump stations, and preliminary design of 55,000 ac-ft surface water storage reservoir. Also prepared rate studies and assisted in operations and maintenance of the District's facilities.

#### WATER/WASTEWATER ENGINEERING

- **Parker Water and Sanitation District, the Stonegate Village Metropolitan District, the Town of Breckenridge, the City of Monte Vista, the City of Edgewater, Todd Creek Village Metropolitan District, Black Hawk-Central City Sanitation District, Lincoln Park Metropolitan District, Buckhorn Valley Metropolitan District, Fremont Sanitation District, the Town of Florence, Southern Ute Reservation, and the Town of Eckley.** Prepared water, raw water, sewer, and drainage rate studies.
- **Town of Buena Vista, Colorado.** Well Facilities, storage and waterline improvements. Project manager for a new wellhouse treatment facilities, 750,000 gallon water storage tank, and several thousand feet of 6-8" waterline replacements.
- **Paint Brush Hills Metropolitan District, Colorado.** New well and treatment facility, master water plan, water rate study, 5,000 square foot administration building, 4000 gpm booster pump station, 0.5 MG water storage tank. Project Manager for design and construction.
- **Rawlins, Wyoming.** 10 MGD Water Treatment Plant; Project Manager providing process design, architectural and structural design and hydraulic engineering. Process design included pre-sedimentation, chemical addition, coagulation, sedimentation, conventional filtration and chlorination.
- **Black Hawk-Central City Sanitation District, Black Hawk, Colorado.** 0.5 MGD Activated Sludge Wastewater Treatment Plant. As Project Manager provided design and construction administration. The plant was designed to operate in contact stabilization mode during high flows and in the extended aeration mode during low flows.
- **Costilla County Water and Sanitation Assessment Area, Costilla County, Colorado.** As Project Manager, provided the design and construction observation of 15 miles of sanitary sewer line and a 150,000 GPD three-cell aerated lagoon wastewater treatment plant system.
- **Parker Water and Sanitation District South Wastewater Treatment Plant, Douglas County.** Design Evaluation, Value Engineering and Program Management of Colorado. As Project Manager, provided recommendations that saved \$1.5 million in project costs.
- **Rangely, Colorado.** 2.2 MGD Water Treatment Plant and 1.0 MG Water Storage Tank. As Project Manager, provided design, survey and construction management. Process design included pre-sedimentation, chemical addition, coagulation, sedimentation, traveling bridge continuous backwashing sand filter and chlorination. Also designed river intake and raw water pump station.

- **Costa Dorado, Mexico.** 1.6 MGD Wastewater Treatment Facility, As Project Manager, provided evaluation of old facility, and performed preliminary design for a new activated sludge/physical treatment new tertiary reuse facility.
- **Parker Water and Sanitation District, Parker, Colorado.** 2.0 MGD South Wastewater Tertiary Treatment Plant, utilizing, chemical addition, coagulation, two package upflow clarification and dual media filters, and UV disinfection. Project Manager from design through construction.
- **Parker Water and Sanitation District, Parker, Colorado.** 4.0 MG Post-Tensioned Water Storage Tank. Project Manager from design through construction.
- **City of Westminster, Colorado.** Northwest Water Treatment Plant. Provided program management and third-party consultation for the design/build of a 20 MGD WTP utilizing membrane filtration with chemical addition, coagulation and sedimentation pretreatment.
- **City of Westminster, Colorado.** Reclaimed Water Treatment Facility, Provided program management and third-party consultation for the design and construction of 6.0 MGD tertiary effluent treatment, storage and distribution for the reuse system.
- **Parker Water and Sanitation District, Parker, Colorado.** 2.0 MGD North Wastewater Treatment Plant. Provided program management and third-party consultation from design through construction.
- **Beaver Creek Metropolitan District, Avon, Colorado.** Designed a 100 gpm cartridge filtration water treatment system, creek diversion and infiltration gallery, and a 2.0 mgd diatomaceous earth water treatment plant with chlorination for disinfection, and a river diversion and raw water pump station for snow making operations.
- **Town of Nucla, Colorado.** Design manager for 500 gpm river diversion, infiltration gallery and raw water pump station. Also designed 500 gpm Trident package water treatment plant, utilizing pre-sedimentation, chemical addition, coagulation, sedimentation, conventional filtration and chlorination.

## **JAMES R. LANDRY, P.E., CWP**

CHIEF OPERATING OFFICER



### **EDUCATION**

**B.S., Engineering, Civil Option**  
Colorado School of Mines (1993)

### **PROFESSIONAL REGISTRATION**

**Registered Professional Engineer**  
Colorado

### **CERTIFICATIONS**

Class 1 Wastewater Collection System Operator  
Class 2 Wastewater Collection System Operator

### **PROFESSIONAL EXPERIENCE**

Mr. Landry is a civil engineer with 26 years of experience in utility and roadway design, hydraulic and drainage engineering, and construction management. He has been involved in the preliminary, final design, and construction for a wide range of public and private sector projects. Mr. Landry also represents cities and special districts as their Engineer and/or Manager. He is currently the District Engineer, District Manager and Operator-in-Responsible-Charge for Applewood Sanitation District, the Town Engineer for the Town of Mountain View, and the Operator-in-Responsible-Charge for Cherry Hills Heights Water and Sanitation District and Westridge Sanitation District.

### **MUNICIPAL ENGINEERING**

- *District Manager, Engineer, and Operator in Responsible Charge, Applewood Sanitation District.* Responsible for design and construction management of annual improvement projects. Review of all engineering consultants' designs. Technical representative for the District.
- *Town Engineer for the Town of Mountain View.* Review all subdivision and commercial construction plans for compliance with town design standards. Coordinate review team to produce comment letters. Reviews focused on utilities, grading, streets, and drainage improvements. Comment letters generated to ensure compliance with the Town master plans and future development. Coordination with town manager, attorneys, and planners.
- *City-Wide Capital Improvement Plan, Town of Mountain View.* Performed an evaluation of the city's streets, utilities, drainage and traffic facilities. This initial work included geotechnical evaluations of the existing pavement, the development of pavement condition index (PCI) for each street, and coordination with all utility providers. Established a ranking system for the replacement of roadways that factors in the PCI, drainage, utilities conditions and replacement schedule, economic activity rating and traffic volumes.

**UTILITY ENGINEERING**

- *2021 Water Main Capital Improvement Project, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Project engineer for the design of improvements to the district's drinking water distribution system and associated components, including 12,627 LF of 6" water main.
- *2020 Phased Replacement of Collection Lines, Pagosa Springs Sanitation General Improvement District, Pagosa Springs, Colorado.* Project Manager for the completion of a phased replacement plan for the district's 82,277 LF of sanitary sewer pipelines.
- *ARRA and DOLA Water Main Replacement, Town of Kremmling, Colorado.* Project Manager and Design Engineer for 22,000 LF of 8-inch PVC water main, tie-ins, and the replacement of 260 water services and meter pits.
- *Strontia Springs Dredging Inspection, Denver Water, Colorado.* Project Oversight for Construction Administration for dam dredging.
- *Long Lake Feeder Ditch Diversion Structure Replacement, Denver Water, Colorado.* Construction management and inspection of a new diversion structure in Ralston Creek for Long Lake.
- *Conduit No. 94 – Acoustic Fiber Option (AFO) Monitoring System, Denver Water, Colorado.* Construction management and inspection of modifications to Conduit 94 to accommodate the installation of an acoustic fiber option monitoring system.
- *Conduits 31, 94, 72, and 125 Repairs, Denver Water, Colorado.* Project Oversight for various large diameter transmission main repairs.
- *Foothills Treatment Plant Phases I and II, Denver Water, Colorado.* Project Oversight for installation of a weir wall in the chlorine contact basin and installation of 15-inch RCP storm sewer pipe.
- *RTD Northwest Corridor – Conduit No. 94, Denver Water, Colorado.* Project Oversight of Conduit 94 modification due to the Eagle P3 Northwest Corridor Project.
- *Highway 79 Sanitary Sewer Extension Line, Town of Bennett, Colorado.* Project Manager and Engineer for 1,500 LF of 15-inch and 18-inch sanitary sewer outfall line. This project included a 100 LF bore under the Union Pacific Railroad.
- *Lowry Redevelopment Authority, Sanitary Outfall.* Project Engineer for the design of 4,800 LF of 18-inch to 24-inch PVC sanitary sewer outfall line.
- *CDOT State HWY No. 40 Colfax Avenue at Cherry Creek.* Project Engineer for the design of 150 LF of 20-inch waterline under the Colfax Bridge.
- *E-470 Business Metropolitan District Sanitary Sewer and Water Main Improvements.* Design Engineer for the production of plans for 23,100 LF of 12-inch and 16-inch water line; 9,700 LF of 10-inch, 12-inch, and 15-inch sanitary lines; and 5,300 LF of 10-inch force main.
- *Parker Water and Sanitation District, 20 Mile Effluent and Raw Water Lines – Phases I & II.* Project Engineer for the production of plans and specifications for effluent and raw water lines consisting of 23,000 LF of 16-inch pipe, 3,000 LF of 24-inch pipe, and 2,000 LF of 12-inch pipe.

- *Union Pacific Railroad Sanitary Sewer Crossing.* Project Manager and Engineer for 600 LF of 12-inch PVC sanitary sewer line replacement. This project included a 100 LF bore under the Union Pacific Railroad.

#### **UTILITY ENGINEERING – SOUTHWEST METROPOLITAN WATER AND SANITATION DISTRICT**

- *2020 DCIP Water Main Replacement Project.* This project included the replacement of 1500 LF of water main replacement.
- *2019 DCIP Water Main Replacement Project.* This project included the replacement of 755 LF of 12" PVC, 60 LF of 6" PVC and 262" LF of 4" PVC water mains.
- *2018 West Parkhill Avenue Sanitary Sewer Main Replacement Project.* This project included the replacement of 266 LF of 12" sewer line and 169 LF of paving, with appropriate roto-milling, overlay, and markings.
- *2018 South Pierson Street Water Main Replacement Project.* This project included the replacement of 957 LF of 8" water line and 23 ¾" water services.

#### **UTILITY ENGINEERING – PLATTE CANYON WATER AND SANITATION DISTRICT**

- *2020 DCIP Water Main Replacement Project.* This project included the replacement of 3,681 LF of water main with 6" PVC and 1,005 LF of water main replacement with 8" PVC.
- *2020 Depew Water Street Replacement Project.* The existing waterline under the Depew Street Bridge, between West Canyone Drive and West Elmhurst Avenue was replaced.
- *2019 DCIP Water Main Replacement Project.* This project included the replacement of 2,313 LF of 8" PVC and 1,093 LF of 6" PVC water mains.
- *2019 South Sheridan Boulevard Sanitary Sewer Main Replacement Project.* This project included the removal of 300 LF of 16" sewer line, installation of 300 LF of 15" sewer line, two existing manhole connections, and 4 4" sewer services.

#### **UTILITY ENGINEERING – CRESTVIEW WATER AND SANITATION DISTRICT**

- *2015 Water and Sanitary Sewer Replacement Project.* This project included the replacement of 6000 LF of 8 and 10" water line and 1200 LF for 8" sanitary sewer mains.
- *2015 Water District Model.* Assemble a water distribution and sanitary sewer collection system computer model for district. This work included updating of existing mapping with as-built data and coordination with Denver Water.
- *District Water and Sanitary Sewer Model.* The City of Westminster investigated using CWSD lines to eliminate a lift station, as the District's Engineer, RGA reviewed the modeling and associated report.
- *General Construction Projects.* Responsible for the design, bidding and construction management and administration services for all phases of the District's annual sanitary sewer rehabilitation projects.

- *Crestview Sanitation District/City of Westminster Interconnect.* Design of water interconnects between the Crestview Water and Sanitation District and the City of Westminster.
- *Review of Water and Sanitary Construction Projects by Others.* Review designs of water and sanitary relocation projects by others, when they are constructed providing construction inspection and administration services.
- *2014 Sanitary Sewer Replacement Project.* Design of approximately 1,750 L.F. 12" diameter sanitary sewer main to replace aging infrastructure.
- *West 63<sup>rd</sup> Avenue Sanitary Sewer Main Replacement Project.* Design, estimation, construction management and observation/inspection for approximately 615 LF of 12-inch PVC sewer mains, including 150 LF of 24-inch diameter bore and casing under Federal Boulevard. Also included design of storm drain replacement and street repairs associated with the sewer main.
- *2013 Watermain Replacement Project.* Project Manager and Design Engineer for 6,000 LF of 8-inch and 6-inch PVC watermains and lateral tie-ins, 2,000 LF of 20-inch waterline, and roughly 103 water services.
- *2011 Watermain Replacement Project.* Project Manager and Design Engineer for 6,000 LF of 8-inch and 6-inch PVC watermains and lateral tie-ins and roughly 103 water services.
- *2011 Samuel Drive and Canosa Court Sewer Main Replacement Project.* Project Manager and Design Engineer for 1,300 LF 12-inch SDR 35 PVC sewer main.
- *2011 Pecos Street Sewer Main Replacement Project.* Project Manager and Design Engineer for 718 LF of 12-inch SDR 35 PVC sewer main.
- *West 63<sup>rd</sup> Avenue Sanitary Sewer Replacement Project.* Project Manager and Design Engineer for 600 LF of 12-inch PVC with 130 LF bore under Federal Boulevard. Project included utility research and potholing, as well as coordination and approvals from Adams County and CDOT.
- *Goat Hill Phase IIB Waterline Replacement.* Project Manager and Design Engineer for 5,600 LF of 6-inch and 8-inch PVC water main and lateral tie-ins and 119 water services and meter pit relocations.
- *2009 Lowell Boulevard Water Main Replacement.* Project Manager and Design Engineer for the design and construction management of 4,500 LF of 8-inch PVC pipe, lateral tie-ins and services to replace an existing 50 year-old water main in a heavy traffic area.
- *2009 Water Main Replacement.* Project Manager and Design Engineer for 16,760 of 10-inch and 8-inch PVC water mains and lateral tie-ins and roughly 250 water services to replace existing 50 year-old lines in residential areas.
- *2008 Sewer Replacement Project.* Project Manager and Design Engineer for miscellaneous sewer pipe and manholes, in conjunction with Adams County.
- *2007 Water Main Replacement Project.* Project Manager and Design Engineer for the installation of 4900 LF of 8-inch PVC. This work includes reconstruction of portions of Pecos Street, south of I-36. Also, a Project Manager and Design Engineer for miscellaneous sanitary sewer replacements.

- *2006 Water Main Replacement Project.* Design, estimation, construction management and observation/inspection for 6,100 LF of 8-inch and 6-inch PVC water mains replace existing 50-year-old lines in residential neighborhoods.
- *2010 Pecos Street Grade Separation Project.* Project Manager and Design Engineer for the design and construction management of approximately 1,500 LF of a 20-inch Flex Ring locking DIP transmission main replacement, including 150 LF of 36-inch bore and casing under the Union Pacific Railroad.
- *2009 Sewer Rehabilitation Project.* Project Manager and Design Engineer for 11,500 LF of 8-inch cured-in-place pipe, 1,800 LF of 10-inch cured-in-place pipe, and 1,300 LF of 12-inch cured-in-place pipe.
- *2010 Sewer Rehabilitation Project.* Project Manager and Design Engineer for 13,000 LF of 8-inch cured-in-place pipe.
- *2008 Sewer Rehabilitation Project.* Project Manager and Design Engineer for 4,000 LF of 15-inch cured-in-place pipe and 1,200 LF of 18-inch cured-in-place pipe.
- *8-inch Waterline Plans and West 64<sup>th</sup> Avenue Improvements.* Project Manager and Design Engineer for the installation of 3,000 LF of 8-inch PVC in conjunction with roadway and drainage improvements to West 64<sup>th</sup> Avenue between Lowell Boulevard and Pecos Street.

#### **ROADWAY ENGINEERING**

- *Roadway Improvements for Kiowa-Bennett Road and East 72 Avenue, Albert Frei & Sons, Adams County, Colorado.* Project Manager for the design and construction plans for improvements to Kiowa-Bennett Road and East 72<sup>nd</sup> Avenue in Adams County, Colorado.
- *Deceleration and Acceleration Lane Design, Albert Frei & Sons, Adams County, Colorado.* Project Manager for the design and construction plans for a deceleration lane on East 88<sup>th</sup> Avenue and an acceleration lane for Monaco Street in Adams County, Colorado.
- *Roadway Improvements: Railroad Street, Town of Buena Vista, Colorado.* Project manager for roadway improvements, intersection re-design and drainage improvements.
- *Sheridan Bond Improvement Project (SBIP) Zone 1/1A, City of Sheridan, Colorado.* Design Engineer for 15,000 LF of roadway reconstruction and drainage improvements. The zone addresses immediate areas of concern within the City, specifically focusing on West Princeton Place, South Clay Street, South Irving Street and drainage concerns in the Bottoms drainage area.
- *2013 Bond Projects, Town of Buena Vista, Colorado.* Design Engineer for 15,000 LF of utility and roadways, including drainage studies.
- *West Oxford Avenue Reconstruction, City of Sheridan, Colorado.* Project Manager and Project Engineer for the design of 1,400 LF of a major collector road that included complete replacement from right-of-way to right-of-way.
- *Lowell Boulevard Improvements at Mountain Terrace, City and County of Broomfield, Colorado.* Project Manager and Project Engineer for widening Lowell Boulevard between 125<sup>th</sup> and 128<sup>th</sup> to the standard connector section. Work included a geotechnical assessment and pavement design report and a drainage study.

- *West 64<sup>th</sup> Avenue Improvements, Adams County, Colorado.* Project Manager and Project Engineer for the widening of 6,000 LF of roadway.
- *Street Rehabilitation Project, City of Dacono, Colorado.* Project Manager and Design Engineer for 31,000 LF of roadway water main, fittings and valves, fire hydrants, services, and new meters.
- *Quebec Street Improvements.* Project Engineer for redesign of Quebec Street between Alameda and 1<sup>st</sup> Avenue. Work included water, sewer and storm drain improvements for the corridor.
- *Tower Road Phase I and II, Denver, Colorado.* Project Engineer for the development of roadway plans for 16,000 ft of street improvements. Plans included storm, sanitary and waterline improvements. Responsibilities included coordination of 13 team members, sub-consultants, and coordination of all public agencies and utility companies.
- *Stonegate District Roads, Douglas County, Colorado.* Project Manager/Engineer for the development of roadway plans for 14,000 ft of street improvements. Plans included storm, sanitary and waterline improvements. Responsibilities included coordination of all sub-consultants, coordination of all public agencies and utility companies.
- *Starbird, 3<sup>rd</sup> and 4<sup>th</sup> Avenues, Gilcrest, Colorado.* Project Engineer for the development of horizontal and vertical alignment drainage improvements and grading for 1,000 LF of street improvements.
- *West 11<sup>th</sup> Avenue Court, Place and Drive, Broomfield, Colorado.* Project Engineer/Designer for the rehabilitation of 4000 ft. of existing streets and drainage problems.
- *Woodman Road and Academy Boulevard Redesign, Colorado Springs, Colorado.* Project Manager and Design Engineer for the design and drafting of construction drawings, coordinated and conducted pre-construction meeting, coordinated all field verification of existing utilities, coordinated with City and State entities prior to construction.
- *Trail and Parks Improvement Projects, City of Sheridan, Colorado.* Project Manager and Project Engineer for the design of 4,800 LF of pedestrian trails throughout the City.

#### **DRAINAGE STUDIES**

- *Country Club Ranch, Filing No. 2 Master Drainage Plan, Trinidad, Colorado.* Project Manager. Produced drainage study covering over 300 acres, identified 100-year water surface elevation, performed all hydrologic and hydraulic calculations.
- *Bromley Park Master Drainage Plan, Brighton, Colorado.* Project Engineer. Produced drainage study for 3,170 Acres. Performed all hydrologic and hydraulic calculations for study.
- *Hudson Master Drainage Plan, Hudson, Colorado.* Project Engineer. Performed hydrologic analysis, drafted drainage maps and wrote drainage plan.
- *Letter of Map Revision, Cottonwood Creek, Colorado Springs, Colorado.* Project Manager/Engineer. Performed hydraulic analysis, submitted all necessary forms to complete the letter of map revision in the vicinity of Rangewood Drive.
- *Van Buren Channel Renovation, Colorado Springs, Colorado.* Project Manager/Engineer. Prepared construction drawings and documents, coordinated/conducted pre-construction meeting, conducted bid opening, tabulated contractors bid packages, and performed construction inspections for 100 ft. of channel.

**LINCOLN PARK METROPOLITAN DISTRICT**

- *Lincoln Park Outfall Line.* Project Manager and Design Engineer for production of plans, specifications, and easements for 5,500 LF of 12-inch PVC pipe to service north portion of the District.
- *District Facilities Relocation.* Project Manager and Design Engineer for production of plans and specifications for 1,500 LF of 12-inch raw water line, 500 LF of effluent line, and a recirculation manhole to service the effluent pond and provide irrigation water for District open space.

**STONEGATE VILLAGE METROPOLITAN DISTRICT**

- *3.6 MG Water Storage Tank.* Project Manager and Project Engineer for coordinating with S.D.G. to produce plans and specifications for a 3.6 MG concrete tank and associated yard piping.
- *24-inch Water Line.* Project Manager and Project Engineer for production of plans and specifications for 9,220 LF of 24-inch water line. The water line supplies the 3.6 MG tank with water from existing facilities.
- *Sewer and Waterlines.* Project Manager for the development of utility plans for over 5,000 LF of sanitary sewer lines and 15,000 LF of water lines.

**AIRPORT ENGINEERING**

- *Juan Santamaría International Airport, San José, Costa Rica.* Project Manager/Engineer for design, rehabilitation, expansion of the loading ramp and associated taxiway designs.

**LAND DEVELOPMENT ENGINEERING**

- *Red Hawk Filing 3, Castle Rock, Colorado.* Project Manager for a 196-lot subdivision located in Castle Rock, Colorado. Project included several difficult aspects including encroachment on Town owned golf course, application for FEMA floodplain revision, mountainous terrain, and extensive coordination with adjacent developments for utility connections and design of interconnecting roadways.
- *King's Point Filing No. 2 and No. 4, Aurora, Colorado.* Project Manager/Engineer for 353 detached units on approximately 224 acres, including contextual site plan, final plat, and construction drawings. Design of streets, water distribution, sanitary sewer collection, storm sewer system, and a major drainageway improvement, including 3 drop structures. Filing No. 4 included 302 detached unites on 269 acres, with significant drainage improvements and pedestrian bridge.
- *Anthology, Parker, Colorado.* Project Engineer for 3,000-acre master-planned development including up to 6,200 residential units, as well as various commercial development.
- *Mission Viejo, Highlands Ranch, Colorado.* Design Engineer for the single-family residential development for Filing 118G, including street plans, sanitary sewer systems and storm drain systems for 495 lots.
- *Filing 4 at Bromley Park, Brighton, Colorado.* Project Manager for the residential development for Filing 4, containing 44 lots. Plans included street drainage and utility improvements.

**CONSTRUCTION MANAGEMENT/ENGINEERING**

- *On-Call Construction Services for Denver Water.* Project Manager for various Denver Water rehabilitation projects.
- *On-Call Construction Services for City and County of Broomfield, Colorado.* Project Manager for construction inspection services for residential developments.
- *City and County of Denver, Colorado.* Received, logged, and analyzed calls from public concerning damaged curb, gutter and walk for the Curb and Gutter Replacement Program. Managing database using dBase IV and developing construction documents.
- *MCI, Phase VI, Buildings C & E, Colorado Springs, Colorado.* Performed all surveying required for the construction of these two buildings. Maintained a current "As-Built" set of drawings.

## GARY E. WELP, P.E., CFM

SENIOR PROJECT MANAGER



### EDUCATION

#### **B.S., Civil Engineering**

University of Colorado at Denver (1993)

### PROFESSIONAL REGISTRATION

**Registered Professional Engineer: Colorado  
Certified Floodplain Manager (CFM)**

### PROFESSIONAL EXPERIENCE

Mr. Welp has over 25 years of civil engineering design and management experience in master drainage studies, regional drainage, water systems, utility pipelines, and sewer interceptors, and residential and commercial subdivisions. Mr. Welp's responsibilities include hydraulic analysis, drainage studies, floodplain studies, development review, and design of drainage and municipal projects for the company. He is proficient in the use of Adobe Acrobat and Reader, AutoCAD, Haestad StormCAD, NeoUDSewer, HydroPond, CUHP, EPA SWMM 5.0, HEC-RAS, HEC-HMS, Haestad Culvertmaster and Haestad FlowMaster.

- *On-Call Engineer and Development Review, Town of Buena Vista, Colorado.* Project manager for providing on-call staff support services to the town. This includes all aspects of the development review process, from pre-application, engineering review, referral agency coordination, and applicant and developer correspondence. Managing the creation of a Development Handbook, which lays out the engineering standards for development within the town. Created Master Drainage Studies for both east and west of Highway 24. Provides review of applications within the town's floodplain.
- *Development Review, City of Littleton.* Project Manager. Assists the City's Public Works Department with the review of drainage reports, site development plans, subdivision exemptions, stormwater management plans, construction plans and erosion control plans. Prepares comment letters and PDF redline comments and attends meetings or site visits with applicants or their engineers.
- *District Engineer, Westridge Sanitation District, Jefferson County, Colorado.* Project manager for the design and construction management of annual improvements projects, and the administration of annual maintenance and videoing. This work also includes development review from the City of Wheat Ridge and review and construction administration for proposed commercial additions/improvements within the district.
- *District Engineer, Deer Creek Metropolitan District, Jefferson County, Colorado.* Project manager for the design and construction management of annual district maintenance projects, and the administration of storm sewer maintenance and videoing.

- *District Engineer, Highland Park Metropolitan District, Arapahoe County, Colorado.* Project manager for the maintenance of the district's pond systems and infrastructure.
- *District Engineer, Lincoln Park Metropolitan District, Douglas County, Colorado.* Project manager for engineering and construction management services for the district, including administration of and annual reporting for the district's MS4 permit.
- *Storm Drainage Improvements, Conservatory Metropolitan District, Arapahoe County, Colorado.* Project manager for the design and construction administration of storm drainage improvements to the district's Water Quality Control Ponds 6 and 7, including permitting through the City of Aurora.
- *2020 Water Distribution Project, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Project engineer for the design of improvements to the district's drinking water distribution system and associated components, including 12,627 LF of 6" water main.
- *Asset Inventory Report, Town of Center, Colorado.* Project engineer for the creation of an asset inventory for the town. This report summarized the inventory, overall age, and condition of each of the capital assets owned and operated by the town. Provided prioritization of improvements and/or replacements of any aging, damaged or otherwise insufficient assets.
- *US 160 and SH 17 Intersection Project, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Project manager for the design and construction management for the replacement of 675 LF of 8" sanitary sewer and four manholes. This work was completed in partnership with CDOT.
- *2019 Roadway Repairs Project, Lincoln Park Metropolitan District, Douglas County, Colorado.* Project manager for the transfer of ownership for all district roadways to Douglas County. This project included contract document creation and bidding, and construction administration for all improvements to the roadways, sidewalks, cross pans, and curb and gutter.
- *Access in CDOT Right of Way and Gravel Access Road Extension, Rio Grande County, Colorado.* Project manager for the design and construction administration of access to Flying W Ranch from State Highway 160 and extension of the gravel access road on the property. This included coordination with Colorado Department of Transportation (CDOT) for an Access Permit, Notice to Proceed and culvert installation and coordination with San Luis and Rio Grande Railroad Company for a railroad crossing.
- *RedHawk Filing No. 3, Phase 5, Castle Rock, Colorado.* Project manager for 29-lot subdivision within the Red Hawk Filing No.3. The project consists of roadway, sanitary sewer, water line design and regional detention pond improvements.
- *Legends Club Subdivision, Douglas County, Colorado.* Project Manager for the design and grading layout for a minor development with four single-family home lots. Provided construction drawings, a Phase III Drainage Report, grading, erosion and sediment control report and plans and coordination with Douglas County.
- *Elm Road Reconstruction, Brush!, Colorado.* Project Manager for the reconstruction of Elm Road to address drainage issues, provide paved roadway and ADA compliance for non-conforming sidewalks, handicapped ramps and crosspans.
- *Meadows Filing No. 20 Phase 2, Area 2, Plat Amendment 7, Oakwood Cluster West, Castle Rock, Colorado.* Project Manager for the re-plat and construction plans for 56 lots of residential cluster

homes within the Meadows No. 20 development. The project consisted of the re-use and development of previously installed infrastructure, adjacent to regional detention pond.

- *2013 Flood Mitigation, Nederland, Colorado.* Project Manager is providing the Town of Nederland design and construction management assistance for recovery from the 2013 flooding and coordination with FEMA in the contractual aspects of project funding. The project consists of removal of 2900 tons of material to restore road to pre-flood conditions and to also mitigate future flooding event by improving the drainage system and installing a series of new culverts.
- *Meadows Filing No. 20 Parcel D and E, Castle Rock, Colorado.* Project Manager for the re-plat and construction plans for 50 lots of residential cluster homes within the Meadows No. 20 development. The project consisted of the re-use of previously installed infrastructure, next to a community pool site.
- *Meadows Filing No. 20 Phase 1B and 2B, Castle Rock, Colorado.* Project Manager for the re-plat and construction plans for 137 lots of residential cluster homes within the Meadows No. 20 development. The project consisted of the re-use of previously installed infrastructure, a new park and new roadway layout.
- *East Alamosa Water and Sanitation District, Alamosa, Colorado.* Re-design, replacement and approval of the District's two primary lift stations and the proposed rehabilitation of the portions of the District's water system and sewer system.
- *Town of Buena Vista, Colorado.* Project Manager. Master Drainage Reports for the east side of the Town tributary to the Arkansas River and the west side of the Town tributary to Cottonwood Creek.
- *Berkeley Homes, Parker, Colorado.* 33 lot subdivisions. Construction management to facilitate construction and construction of sub-dividers for developer and new infrastructure and development in Parker, Colorado.
- *Massey Draw Erosion Mitigation Drainageway Restoration Project.* Project Manager. The project was the restoration of to major trail crossing in Massey Draw that had severely eroded. The mitigation included the installation of new culverts, grouted drop structure, grouted slope protection and site stabilization and re-grading. The project required coordination with ACOE, UDFCD, Jefferson County and the Foothill Park and Recreation District.
- *Development Plan for Colorado Motor Sports Park in Deer Trail, Colorado.* Project Manager. The development plan studies 243 acres of on-site proposed raceway, enclosed grandstands and 2000 space parking lot that included developed and undeveloped areas off-site as it may impact regional detention ponds.
- *Redhill Forest POMWACA PER and EA, Fairplay, Colorado* Project Manager. The Study covers the entire subdivision and the securing funding through USRDA for the replacement of 40-percent of the water lines that were incorrectly installed and froze on a regular basis.
- *East Alamosa Water and Sanitation District Capital Improvement Master Plan.* Project Manager. The Study the entire district and studies the conditions of the water lines, sewer lines and lift station to provide a program of maintenance and replacement of aging infrastructure within the District.
- *McCully and Schell Floodplain Analysis, Weld County, Colorado* Project Manager. The Study provide analysis of the existing and proposed floodplain and established a floodway for approximately two miles of Boulder Creek near WCR 20 ½.

- *Master Drainage Study for High Plains Raceway, Colorado Amateur Motor Sports Association.* Project Engineer. The Study encompassed 900 acres of on-site proposed raceway developed and undeveloped off-site as it may impact regional detention ponds and a major drainageway.
- *Bond Park Phases I and III, Estes Park, Colorado.* Project Manager. This project included: storm sewer, channelization and infiltration system; underground conduit bank for irrigation control wires, utilities, fiber options, and electrical system; replacing asphalt pavement; eliminating curb and gutter; 3-foot high rock boulder bollards, curvilinear roadway, sidewalks, and planters.
- *20-Mile Regional Detention Pond, Parker, Colorado.* Project Engineer. Designed, performed modeling and coordinated the 50 ac-ft storm detention facility for the Urban Drainage and Flood Control District and the Town of Parker.
- *Sulphur Gulch Drainageway Improvements, Parker, Colorado.* Project Manager/Engineer. Performed hydraulic and HEC-RAS analysis for extensive improvements at the confluence with Cherry Creek. The project was in Prebles Jumping Mouse habitat and required environmental permitting. Also performed construction services for this project.
- *CLOMR and LOMR – 6400 South Tributary, Castle Rock, Colorado.* Project Manager/Engineer. Performed hydraulic and HEC-RAS analysis needed to complete the conditional letter of map revision for the Red Hawk subdivision.
- *Zone 3 High-Pressure 30-inch Water Transmission Pipeline – Parker Water and Sanitation District, Parker, Colorado.* Project Manager for 49,000 LF of 30-inch water transmission main. High-pressure (300 psi) transmission main connecting two separate 5 MG tanks to the water system via pressure-reducing vaults. The project required design and construction within limited rights-of-way, two major roadway bores, and river crossings at Cherry Creek and Oak Gulch. Coordinated with geotechnical and environmental sub-consultants, and utility companies.
- *West Interceptor – Parker Water and Sanitation District, Parker, Colorado.* The West Interceptor is a 14,000 LF 30-inch to 18-inch sanitary sewer along the banks of Cherry Creek in Douglas County. In addition to the design function, the project was in Prebles Jumping Mouse habitat and required extensive environmental permitting.
- *General Engineering Services, Deer Creek Metropolitan District, Highland Park Metropolitan District, Green Valley Metropolitan District.* Project Manager for general services regarding metropolitan district operation. Duties include planning, estimating anticipated capital expenditures, fee optimization, and project oversight for construction of major facilities within the District.
- *20 Mile Effluent and Raw Water Lines, Phase I & II, Town of Parker and Urban Drainage and Flood Control District.* Project Engineer. Produced plans and specifications for effluent and raw water lines consisting of 23,000 LF of 16-inch pipe, 3,000 LF of 24-inch pipe and 2,000 LF of 12-inch pipe. Facilities interconnect the wastewater treatment plant and proposed well facilities to the existing effluent pond.

#### **DRAINAGE ENGINEERING**

- Storm Drainage Improvements, Conservatory Metropolitan District, Arapahoe County, Colorado
- RedHawk Filing No. 3, Phase 5, Town of Castle Rock, Colorado
- Legends Club Subdivision, Douglas County, Colorado
- Meadows Filing No. 20, Upland Park, Town of Castle Rock, Colorado
- Meadows Filing No. 20, Amendment 7, Town of Castle Rock, Colorado

- Meadows Filing No. 20 Casing Pipe
- Meadows Filing No. 20 – Phases 1 to 4
- Meadows Filing No. 20 Phase IB, Town of Castle Rock, Colorado
- Meadows Filing No. 20, Town of Castle Rock, Colorado
- Meadows Town Center, Town of Castle Rock, Colorado
- Bromley Park Storm Drainage Master Plan – Channel and Detention Design, Bromley Park
- Final Drainage Study for Bromley Park Filing No. 4, Filing 101, and Filing 203, City of Brighton
- Phase III Drainage Study for Stonegate Roads Phase I & II, Douglas County
- Trinidad Master Drainage Plan and Major Channel Analysis, City of Trinidad
- Highlands Ranch Filing No. 118, 118L, 118K, 134, and Floodplain Study, Douglas County
- Highlands Ranch Golf Course Clubhouse, Douglas County
- Longs Way Tributary Regional Detention Pond Design and Specifications
- Cottonwood OSP Basin Mapping, Town of Parker
- Coal Creek Floodplain Mapping, Town of Superior

**TECHNICAL MANUAL REVIEW AND MANUAL REVISION FOR SEVERAL MUNICIPALITIES IN COLORADO:**

- Town of Parker, Storm Drainage and Environmental Criteria Manual
- Town of Parker, Trails, Parks, and Open Space Manual
- Town of Hudson, Drainage Manual
- Town of Dacono, Drainage and Construction Manual
- City of Trinidad, Storm Drainage Design Criteria Manual
- Town of Superior, Storm Drainage Design Criteria Manual
- Clear Creek County, Standard and Criteria Manual
- City of Leadville, Criteria and Construction Standards
- City of Littleton, Storm Drainage and Criteria Manual

In the Denver area, Mr. Welp has also aided in the preparation of numerous drainage studies for Highlands Ranch, Cross Creek, Red Hawk, Meadows, Colorado Technical Center and Bromley Park.

**TECHNICAL DEVELOPMENT REVIEW FOR MUNICIPALITIES IN COLORADO:**

Mr. Welp assists with on-call development review services to a wide variety of municipalities and special districts. He is well versed at reviewing land development documents, drainage and erosion control plans and reports, and floodplain applications. He has or is currently providing development review for the following municipalities:

- City of Brighton
- City of Brush!
- City of Leadville
- City of Littleton
- City of Sheridan
- Clear Creek County
- Grand County
- Lincoln Park Metropolitan District
- Paintbrush Hills Metropolitan District
- Rio Grande County
- Town of Bennett
- Town of Dacono
- Town of Buena Vista
- Town of Gilcrest
- Town of Hayden
- Town of Kersey
- Town of Lochbuie
- Town of Parker
- Town of Red Cliff
- Town of Superior
- Westridge Sanitation District

**Joy McGEE, AICP**  
PLANNING PROJECT MANAGER



**EDUCATION**

**Masters Work in Architecture**

University of Colorado at Denver

**Bachelor of Environmental Design**

University of Colorado Boulder

**German Architectural Studies**

University of Regensburg, University of Munich and University of Stuttgart

**PROFESSIONAL REGISTRATION**

**American Institute of Certified Planners (AICP)**

**PROFESSIONAL EXPERIENCE**

Ms. McGee has extensive experience as a land use and planning professional with Colorado municipalities. She has a deep knowledge base of best practice planning methods and experience in the interpretation of land use, zoning, and subdivision code sections for the review of development applications. She has handled the referral process for many municipalities and has experience with special districts.

Ms. McGee has or is currently providing on-call development review services for the following municipalities:

- Town of Buena Vista
- Town of Center
- Town of Grand Lake
- Town of Kiowa
- Town of Lochbuie
- Town of Palmer Lake
- Town of Poncha Springs
- City of Brush!
- City of Leadville
- *City of Leadville, Colorado.* Planning consultant to provide on-call development review services. Assisting with code revisions to reduce conflicts within their municipal code, including short-term rentals and accessory dwelling units.
- *Town of Buena Vista, Colorado.* Planning consultant to provide on-call development review services. Attends weekly development review team meetings, manages referral agency process and is working with town staff to create a more efficient development review process. Assisting with the preparation of the Development Standards Handbook, which lays out the planning and engineering standards for development within the town. Assisting with code revisions for clarity on process items and the removal of unnecessary development standards.

- *Town of Lochbuie, Colorado.* Planning consultant to provide expertise for development proposals. Conduct pre-application meetings with developers and work with town staff members in the review of new subdivision and commercial retail projects.
- *City of Greenwood Village, Colorado.* Planning manager for the land use entitlement approval process, metropolitan district interface, long-range planning and planner-of-the-day functions, Master Development Plan and redrafting of the Land Use Development Code.
- *Reutzel and Associates, LLC.* Project manager for real estate entitlement application processing and provided planning oversight on development cases and codes.
- *City of Aurora, Colorado.* Project Manager in the Office of Development Assistance, managed land use development review projects and city department coordination.
- *The Transit Expert.* Transportation Planner, prepared transportation planning documents, presentation graphics and maps, Community Sustainability Assessments, and assisted with funding and network design of transit services.
- *Peak Investments Corporation.* Vice President for Planning, managed entitlement process applications and FDIC construction status and assessments.
- *City of Steamboat Springs, Colorado.* Acting Planning Director, managed the planning department for the city, development review, Comprehensive Plan Update, and the Recreational Trail Plan.



## **ERNIE KERN, P.E., LEED AP**

CIVIL ENGINEERING MANAGER AND BUILDING OFFICIAL



### **EDUCATION**

**B.S., Civil/Environmental Engineering and Construction Administration**  
University of Wisconsin (1974)

### **PROFESSIONAL REGISTRATION**

**Registered Professional Engineer:** Colorado, Wisconsin

### **PROFESSIONAL EXPERIENCE**

Mr. Kern has 45 years of professional civil engineering experience working for consulting engineering firms and municipalities. He has served in capacities ranging from construction inspection, plan review, and engineering design through project management. He has also completed retrofit designs to alleviate problems in developed areas due to unforeseen growth or inadequate design. Mr. Kern has completed design and project management for various types of engineering projects, including residential and commercial subdivisions; water distribution systems, pump stations, and storage facilities; wastewater collection systems and lift stations; street improvements; and drainage systems, including channels, culverts, drop structures, storm sewers, and detention facilities.

### **MUNICIPAL ENGINEERING**

- Building Department Services: Town of Superior, Colorado, City of Dacono, Colorado, Town of Hudson, Colorado, City of Golden, Colorado, City of Edgewater, Colorado, City of Lafayette, Colorado, Park County, Colorado
- 24<sup>th</sup> Avenue And Sheridan Boulevard Water Line Replacement, City of Edgewater, Colorado
- Pavement Management System Rating, City of Denver, Colorado
- 22<sup>nd</sup> Avenue Rehabilitation, 17<sup>th</sup> Avenue Rehabilitation, City of Edgewater, Colorado
- 30-Inch Ashland Drain Rehabilitation, City of Edgewater, Colorado
- 600-Acre Drainage Study and Design, Stonegate Village Metropolitan District, Douglas County
- Drainage and Erosion Control Plan, Bramalea – 155-Acre Mall Site, Brighton, Colorado
- Grading Plan and Earthwork, Stonegate Village Metropolitan District – 360-Acre Mixed-Use Development, Arapahoe County, Colorado
- Grading Plan and Earthwork, Dawson Ridge – 280-Acre Mixed Use Development, Douglas County
- Storm Drainage Detention Facilities, E-470 Public Highway Authority, Douglas County
- Tower Road Design, Denver International Airport, Colorado
- Apron and Roadway Grading, Hayden Centennial Airport, Colorado
- Master Drainage Study, Dawson Ridge – 1,700-Acre Development, Town of Castle Rock
- Dawson Boulevard, 2 Miles, Dawson Ridge Subdivision, Castle Rock, Colorado
- 2<sup>nd</sup> Avenue Bridge, Town of Superior, Colorado



## JORDAN SCHNEIDER, P.E.

PROJECT ENGINEER



### EDUCATION

**B.S. Civil Engineering**  
University of Wyoming, Laramie, WY

### PROFESSIONAL REGISTRATION

**Registered Professional Engineer**  
Colorado

### PROFESSIONAL EXPERIENCE

Mr. Schneider has five years of civil engineering experience, including: drafting construction documents and plan sets, basic design calculation, development review, and construction inspection for sewer and water line installation, wastewater treatment plant improvements, sewer lift station improvements, and vault improvements. He is proficient in AutoCAD Civil 3D, Adobe Photoshop, Bluebeam Revu, Bentley WaterCAD, and Microsoft Office. He also has experience with ArcGIS, Microstation, Matlab, SpecsIntact, and Solid Works.

### KEY PROJECT EXPERIENCE

- *2021 Water Main Capital Improvements Project, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Design/Project Engineer. Drafted a capital improvements plan set for approximately 10,000 LF of water main for the East Alamosa Water and Sanitation District. Coordinated with the District, subsurface utility contractor, and surveyor to develop preliminary base mapping and determine proposed alignment for new waterline in AutoCAD.
- *Maple Grove Park Irrigation Water Bypass, Prospect Recreation and Park District, Wheat Ridge, Colorado.* Design Engineer. Evaluated design survey for the feasibility of rerouting an irrigation water supply to a roadside drainage swale. Drafted construction plans for the installation of piping and a construction cost estimate.
- *Water Quality Pond #6 Improvements Project, Conservatory Metropolitan District, Aurora, Colorado.* Design Engineer. Preliminary plan and profile design for the extension of an existing storm pipe and concrete FES outlet, per Aurora Water Storm Drainage Infrastructure Standards.
- *Planned Development Disinfection System for Well, Town of Buena Vista, Colorado.* Design Engineer. Drafted well disinfection system piping, appurtenances, and details for a proposed development in Buena Vista, Colorado.
- *DCIP 2021 Water Main Replacement, Platte Canyon Water and Sanitation District, Jefferson County, Colorado.* Design Engineer. Corresponded with subsurface utility contractor to develop existing utility base mapping and environmental consultant to meet Clean Water Act Section 404 compliance for the relocation of a water line across Lilley Gulch.

**PREVIOUS EXPERIENCE**

- *Engineer I, Calibre Engineering, Inc.* Designed the irrigation and potable water systems for single-family, mixed-use, and commercial-use developments using WaterCAD. Drafted roadway, storm, potable water, irrigation water, sanitary sewer, and erosion and sediment control drawings for PUD developments and U.S. Military improvement projects using AutoCAD. Prepared a storm water pollution prevention plan for a Squadron Operations Facility at the Cannon Air Force Base in New Mexico. Using National CAD Standards, prepared construction drawings for the demolition of outdated buildings at the Omaha, Nebraska VA Medical Center. Drafted water plans and overall utility plans per Denver Water Standards.
- *Staff Engineer, TST Infrastructure, LLC.* Drafted construction documents, drawings, and specifications for design-bid-build construction projects in various water and sanitation districts. Produced preliminary design reports, feasibility studies, GESC reports, location and extent requests, county permit requests, engineering cost estimates, change orders, pay requisitions, project closeout documents, as-built drawings, and other construction project related tasks. Reviewed product submittals, pay applications, RFIs, and CORs. Inspected the installation of sewer and water lines, wastewater treatment plant improvements, sewer lift station improvements, vault improvements, and corresponded daily with the contractor, operator, and owner. Led pre-bid, bid opening, pre-construction, and weekly progress meetings for construction projects.
- *Civil Engineering Intern, HDR Engineering, Inc.* Compiled Project Manuals, construction agendas, and plan sets, reviewed quantity requirements, bid tabulations, daily and monthly progress reports, and wrote letters to city officials and contractors, inspected construction projects, attended city council meetings and weekly contractor meetings, and surveyed job sites. Used Civil 3D to calculate quantities of specific project items and updated sheets in a sheet set.

## KARL KLUGE

SENIOR DESIGN ENGINEER, SENIOR CONSTRUCTION MANAGER AND SENIOR CONSTRUCTION OBSERVER



### EDUCATION

**B.S.E.T., Civil Engineering Technology, Structural Option**

Wentworth Institute of Technology (1980)

**A.E., Civil Engineering Technology, Construction Option**

Wentworth Institute of Technology (1978)

### REGISTRATION

**WASH-Erosion Control Certification Training**, Boulder County (2006, 2009)

**Certificate, Basic Principles of Occupational Safety**

Southern Maine Technical College (1998)

Completed Auto CAD 2D and 3D courses  
Southern Maine Technical College (1997)

Complete Civil 3D Fundamentals (2016)  
Comm-Tech – Auto Desk Training Center

**PCI-Precast/Prestressed Concrete Institute Technician/Inspector**

Level I & II (1992)

### PROFESSIONAL EXPERIENCE

Mr. Kluge has spent the last 21 years with RGA as a design engineer, AutoCAD technician, construction manager, and senior construction observer of water, sanitary and storm sewer utilities, street construction, water tanks, diversions dams, bridges, water and wastewater treatment facilities, effluent pond lining, CIPP lining, storm water structures and erosion control features. Responsibilities include contract document composition, administration and compliance, project layout and design, plan review, development review, including FDP, plats and easements, construction and engineering cost estimates, bidding services, pay applications and change order processing, daily documentation, standard and detail updating and coordinating construction to final completion and warranty acceptance.

Mr. Kluge has provided field engineering and design for projects with budgets over \$10 million and specializes in reinforced concrete, precast/pre-stressed and post tensioned concrete, structural steel, pressure piping and supports, prefabricated metal buildings, drilled piers and caissons, precast piles, steel H and sheet piles, soil densification, pressure grouting, foundations and retaining walls, historic and industrial building restoration, timber and masonry building and bridge construction.

**WATER TRANSMISSION**

- *2021 Water Main Capital Improvement Project, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Design engineer for the design of improvements to the district's drinking water distribution system and associated components, including 12,627 LF of 6" water main.
- *2020 DCIP Water Main Replacement Project, Southwest Metropolitan Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the replacement of 1500 LF of water main replacement.
- *2020 DCIP Water Main Replacement Project, Platte Canyon Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the replacement of 3,681 LF of water main with 6" PVC and 1,005 LF of water main replacement with 8" PVC.
- *2019 DCIP Water Main Replacement Project Southwest Metropolitan Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the replacement of 755 LF of 12" PVC, 60 LF of 6" PVC and 262" LF of 4" PVC water mains.
- *2020 Depew Water Street Replacement Project, Platte Canyon Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the replacement of the existing waterline under the Depew Street Bridge, between West Canyone Drive and West Elmhurst Avenue.
- *2019 DCIP Water Main Replacement Project, Platte Canyon Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the replacement of 2,313 LF of 8" PVC and 1,093 LF of 6" PVC water mains.
- *2018 Water System Improvements, Buena Vista, Colorado.* Design Engineer on 4 fire hydrant additions to the system, 410 LF of new 6" DI pipe water line and 750 LF of replacement of existing water line with 6" DI pipe. Work included 21 water service re-connections, curb, gutter and sidewalk replacement, and 3,600 SY of asphalt pavement.
- *2018 S. Pierson Street Water Main Replacement Project, Southwest Metropolitan Water and Sanitation District, Littleton, Colorado.* Design Engineer, Field Engineering, and on-call observer for the replacement of 960 LF of 8" water main with 3 water main and 23 water service re-connections. The work was subjected to Denver Water approval. Miscellaneous other projects included a 4" air vent and vault replacement, a water main connection that consisted of 10", 12", and 16" asbestos pipe (ACP) removal and replacement, fitting and gate valve installations. The project included asphalt patching, milling and street overlay in accordance with Jefferson County.
- *2018 6<sup>th</sup> Avenue Water Line Improvement, Monte Vista, Colorado.* Design Engineer for replacement of existing waterline, connections, gate valves in an intersection and adjoining side streets.
- *2016-2017 Water System Improvement Projects, Buena Vista, Colorado.* Designer of water line additions, upgrades and replacements within the town. Work deals with CI pipe and subgrade mixed in with boulders.
- *2015 Water and Sanitary Sewer Main Replacement Project, Crestview Water and Sanitation District, Adams County, Colorado.* Designer, Contract and Construction Manager for 3,800LF of 8" and 6" PVC water mains replacement with multiply tie-ins to a 10 "water main and 97 water service reconections. 950LF of 12" sanitary sewer main replacement, bypass pumping, existing sewer line removal and reconnecting 15 sanitary sewer services. MH removal, replacement and lining. 5000 SYs of removal and patch paving. Street roto-milling and a 2" Sx overlay. Miscellaneous concrete sidewalk replacement

- *January 2015 - June 2015, Estes Park, Colorado.* Construction Manager and Senior Construction Inspector for flood damage repair projects. Projects included retaining walls and rip rap replacement in Fall Creek and miscellaneous asphalt pavement and concrete replacement projects thought out the Town of Estes Park. Projects follow CDOT, FEMA and FHWA standards.
- *April 2013 - December 2014, City and County of Broomfield, Colorado.* Inspector. Part Time County Inspector of developments located in Broomfield County. Inspected sanitary sewer, water, storm lines and structures, and street construction projects. Structures included pond inlets and outlets features, CDOT wing walls, box MHs, inlets and precast box culverts. Inspected over lot grading, subgrade and road base to streets, asphalt pavement, along with curb, gutters and sidewalks and trails.
- *2012-2015 Eagle P3 Fastracks- Northwest Rail Electrified Segment, Denver Transit Partners/Crestview Water and Sanitation District, Adams County, Colorado.* 2012- 2015. Design Reviewer, Construction and Contract Representative for CWSD and Coordinator with DTP/CWSD on 20"and 14" water main and 21" and 15" sanitary sewer main relocations from the proposed electrified rail systems. Miscellaneous items included 980LF of 36" borings and casings for water and sanitary line crossings under creeks and railroad ROWs; landfill relocation for water and sanitary line crossings and a 20" water line crossing above Clear Creek by suspending the water line/casing from an existing 4 span precast concrete bridge.
- *Trailside Academy, Crestview Water and Sanitation District, Adams County, Colorado.* 2018-2019. Design reviewer and on call Field Engineer for sanitary sewer and water main connections and services into the school property. Reviewed architecture and landscape plans.
- *Midtown Development, Filing 1, 2, 3, 4, 5, 6, 7 & 8, Crestview Water and Sanitation District, Adams County, Colorado.* 2013-Present. Design reviewer for the District. Review of the construction water and sanitary sewer plans supplied by the developer. Developed the review and comment letter for correction to the Developer's engineer.
- *2014 Water Main Replacement, Schedule A & B, Crestview Water and Sanitation District, Adams County, Colorado.* Contract and Construction Manager, and Senior Construction Observer for 800LF of 16" and 820LF 6" PVC water mains with multiply tie-ins, including a 16" tie in to a 3.25MG steel water tank and 11 water service reconnections. Miscellaneous items included 1,000 SY of temporary and permanent asphalt patching, painting and weld inspections. Designer of the tank connection.
- *2013 Water Main Replacement, Schedule A & B, Crestview Water and Sanitation District, Adams County, Colorado.* Designer, Auto Cad Reviewer, Contract and Construction Manager, and Senior Construction Observer for 3,600LF of 20", 14", 12", 10", 8" and 6" PVC water mains with multiply tie-ins and 103 water service reconnections. Miscellaneous items included 6,000 SY of temporary and permanent asphalt patching. Work started in the winter and continued to the summer of 2013.
- *2012 Goat Hill Phase 2B Water Main Replacement, Crestview Water and Sanitation District, Adams County, Colorado.* Water main designer, Construction and Contract Manager and Coordinator with Adams County. Contract reviewer and Senior Construction Observer for 5,500 LF of 8" and 6" PVC water main, tie-ins and 123 water services relocations to replace an existing 50-year-old CI water main in a residential neighborhood under complete street replacement and storm water system improvements.
- *2011 Water Main Replacement, Crestview Water and Sanitation District, Adams County, Colorado.* Designer, Contract and Construction Manager and Senior Construction Observer for 5,600 LF of 8' and 6" PVC water main and tie-ins and 106 water services to replace an existing 50-year-old CI water main in a residential neighborhood.

- *2010 Pecos Street Grade Separation 20" Water Transmission Main Replacement, Crestview Water and Sanitation District, Adams County, Colorado.* District Design Reviewer, Contract and Construction Manager, and Senior Construction Observer for 1,130 LF of 20" DI-restrained water main for relocation around a County Grade Separation over the Union Pacific, Burlington Northern, and Santa Fe Railroads. The 20" water main project includes 150 LF of 36" bore and casing under the railroad ROW and 4 unique tie-ins each completed within 8 hours to have the existing main back in service. Project was completed in April of 2011 due to phasing.
- *ARRA and DOLA 2009 Water Main Replacement, Town of Kremmling, Colorado.* Designer, Senior Construction Observer. Performed construction management, administration, on-call problem-solving, and inspection for 22,000 LF of 8" PVC water main, tie-ins, and 260 water services to replace an existing 50-year-old water system and street pavement replacement. Unique features of this project were the unknown locations of the existing 4" and 6" CI waterlines and appurtenances.
- *2009 Water Main Replacement, Schedule A and B, Crestview Water and Sanitation District, Adams County, Colorado.* Senior Construction Observer. Performed construction management and administration services, inspections, daily documentation, and problem-solving for 5,900 LF of 10" and 8" PVC water main and tie-ins and 96 water services to replace an existing 50-year-old line in a residential neighborhood.
- *Lowell Boulevard Water Main Replacement, City of Westminster, Colorado.* Construction Manager and Senior Construction Observer for the replacement of an existing 60-year water main with 1,400 LF of 12" PVC pipe. Miscellaneous items included a valve vault, water services, directional bore, and paving for the trench and street.
- *2009 Lowell Boulevard Water Main Replacement, Crestview Water and Sanitation District, Adams County Colorado.* Construction Manager and Senior Construction Observer/Inspector for 4,300-LF of 8" PVC pipe, lateral tie-ins and services to replace an existing 50-year water main on a heavily travelled boulevard that was under construction for street, sidewalk and storm sewer replacement by another contractor.
- *20-Mile Road Effluent and Raw Waterlines, Parker Water and Sanitation District, Colorado.* Senior Construction Observer for 11,600 LF of dual 16" PVC Effluent and 5,500 LF of 24", 16" and 12" PVC Raw Waterlines. Miscellaneous items included 600 LF of 54" diameter tunneling and casing under existing streets.

#### **UTILITIES/TREATMENT/COLLECTION**

- *2019 South Sheridan Boulevard Sanitary Sewer Main Replacement Project, Platte Canyon Water and Sanitation District, Littleton, Colorado.* Design engineer and construction administrator for the removal of 300 LF of 16" sewer line, installation of 300 LF of 15" sewer line, two existing manhole connections, and 4 4" sewer services.
- *2018 Collection System Improvements Project, Monte Vista, Colorado.* One of the design engineers that worked on sanitary sewer video evaluation for 12,000 LF of 6", 8", 10", and 15" lines for CIPP lining with 186 re-established service connections. Work also included 41 manhole rehabilitation and point repairs. Established a usable city base map of the collection system.
- *2018 W. Parkhill Avenue Sanitary Sewer Main Replacement, Southwest Metropolitan Water and Sanitation District, Littleton, Colorado.* Designer and on-call field engineer and observer of existing 225 LF of 12" VC pipe removal and replacement. Project included asphalt trench patching, milling and street overlay.

- *2018 Annual Cleaning and Videoing and 2018 Annual Root Cutting, Applewood Sanitation District, Jefferson County, Colorado.*  
Design Engineer for establishing contract documents and plans/exhibits for bidding. Work continued into construction management and evaluation of videos to update the overall system conditions spreadsheet used to determine the following annual maintenance schedule. Also established manhole observation data sheets for individual manhole evaluation and record.
- *2018 Sanitary Sewer Line Excavation, Point & CIPP Repair, Applewood Sanitation District, Jefferson County, Colorado.* Design Engineering, Construction Manager & Observer for 5 point repairs on sanitary sewer lines and manhole. Work included 4,600 LF of cured-in-place (CIPP) pipe with service reconnections. The work was established from annual system status report, from yearly videos reviews.
- *2018 Sanitary Sewer Rehabilitation, Columbine Water and Sanitation District, Littleton, Colorado.* Design Engineer for 6,600 LF of 8" cured-in-place (CIPP) pipe with 79 services to be reestablished. Work included evaluation of 31 brick manholes and specifying lining rehabilitation.
- *2017, 2018, Applewood Sanitation District, Golden, Colorado.* Perform engineering, plan review, contract document and bid composition for maintenance of the sanitary sewer system. Revise and update District standards and details. Also, the Locate Technician for daily locate requests.
- *2017 Capital Improvement Project, Applewood Sanitation District, Golden, Colorado.* Designer, Construction Manager and Observer for sanitary sewer point repair and CIPP/slip-lining project.
- *2017, 2018 On Call Engineering, Observation and Development Review, Crestview Water and Sanitation District, Adams County, Colorado.* Development reviews and observation of sanitary and water facilities based off Crestview Water and Sanitation District standards. Provided engineering development of standards and details.
- *2016-2017, Wastewater Treatment Plant Rehabilitation, Fairways Metropolitan District, Boulder, Colorado.* Construction management and observation for the rehabilitation of a 0.17 MGD wastewater treatment plant, tertiary filtration and effluent lift station project. Project included sludge removal, pond grading, synthetic lining and reconstruction of piping and diversion vaults at 2 lagoons, a wetland and a settling pond. Also, work included the construction of the foundation and the pre-engineered/fabricated steel building, preformed payroll verification, interviews, pay application and change order processing.
- *2016 Water Storage Improvements, Jamestown, Colorado.* Construction management and inspection for the complete removal of interior paint and the repainting of a .15MG steel water tank and interior spot coating repair of a .070 MG steel water tank. All coating and disinfection in accordance with AWWA. Also, preformed pay application and change order processing. Work included management of cleaning and disinfection during subfreezing temperatures and coordination with the town.
- *2014, Long Lake Feeder Ditch Diversion Structure Replacement, Denver Water, Denver, Colorado.* On call structural inspector of a steel reinforced concrete diversion dam.
- *Semper Water Treatment Plant Sedimentation Basin Buildings, City of Westminster, Colorado.* Senior Construction Observer and Special Inspector for the construction of two (2) 7,500 SF pre-engineered metal buildings over existing concrete sedimentation basins. Duties included the inspections of the special epoxy paint over the structural steel and the unique HVAC system to minimize the humidity.

- *40 MG Effluent Pond Relining, Stonegate Village Metro District, Parker, Colorado.* Senior Construction Observer for the relining of the pond with a sandwiched liner below the subgrade.
- *93<sup>rd</sup> and Wadsworth Parkway Interceptor, City of Westminster, Colorado.* Senior Construction Observer for 220 LF of 30" diameter boring and casing and the relocation and improvement to 350 LF of an existing 10" sanitation sewer line.
- *Cherry Creek Diversion Dam, Parker Water and Sanitation District, Parker, Colorado.* Senior Construction Observer/Inspector for a 300' inflatable diversion dam to divert raw water into a pump station to provide water to the Rueter-Hess Reservoir. Construction consisted of subgrade improvements by vibratory installed stone columns, sheet piles, a 30' x 300' concrete apron for the inflatable dam, a 20' retaining and wing walls, a bypass sluice area, grouted rip rap armor, and site restoration in compliance with the Army Corp. of Engineers, with special environmental conditions present. Main duties included the observation and inspection.

#### TRANSPORTATION – PAVING – STREET MAINTENANCE

- *2018 Birch-Stockton Intersection Project, Gilcrest, Colorado.* One of the designers, reviewers, and construction managers for street, curb and gutter rehabilitation.
- *2016 Town Square Park, Jamestown, Colorado.* Construction management and observation for a central park in the town. Work included observations on concrete foundations and features along with timber retaining walls, trimming, fencing and a timber pavilion.
- *2016 Jamestown Roadway Rehabilitation, Jamestown, Colorado.* Construction management and inspection for roadway rehabilitation after the waterline replacement project. Processed change orders and payment applications.
- *2013 Flood Damage Repair, Town of Estes Park, Colorado. 2013-2015.* Design and Contract Reviewer and on call Senior Construction Observer of the repairs to the structural retaining walls, boulder features in streams, pavement repairs and road construction.
- *City and County of Broomfield, Broomfield Colorado, 2013-2015.* Senior Construction Observer of all public improvements in 9 developments within the City and County ROWs, including sanitary sewer, water, storm sewer, services, curb-gutter, trails, concrete structures and asphalt pavement.
- *Hamilton Place Bridge Feasibility and Construction Cost Study, City of Sheridan, Colorado. 2012 & 2014.* Engineer on the research and cost analysis for the feasibility of rehabilitation of a 2-100' span precast girder bridge constructed in 1965 crossing the S. Platte River.
- *River Point at Sheridan Subdivision, City of Sheridan, Colorado and Sheridan Redevelopment Agency, 2008-2013, Bi Annual Inspections.* Senior Construction Observer and representative of the City and SRA for the inspection of the maintenance and repairs by the Developer of storm and sanitary sewers, roadways, ROW features, detention ponds and drainage swales for Initial and Final Acceptance of a Commercial Development over the former Arapahoe County Landfill.
- *Bear Creek Pedestrian Bridge Replacement, City of Sheridan, Colorado, 2012-2013.* Researcher, Designer, Construction Manager and Senior Construction Observer for the removal and replacement of a 38 years old double tee pedestrian/fork lift loaded bridge with a pre-engineered/fabricated 10' x 70' steel truss bridge with vehicle loading. The deficient bridge was identified and grant money was obtained. Coordinated the temporary relocation of utilities in two phases while the piles were driven and abutments were poured. Final bridge placement and concrete work occurred during the winter and special concrete practices were recommend by RGA and implemented for the completion in the end of January 2013.

- *88<sup>th</sup> Street and Rock Creek Parkway Roundabout, Town of Superior, Colorado.* Construction Manager and Senior Construction Observer for the removal of a four (4) and 2-lane signalized intersection with a 130' inner circle, 2-lane roundabout with a truck apron, retaining wall, drainage improvements, pattern pavement cross walks, curb, gutters, bike ramps, striping and signage, landscaping, and street lights.
- *Stonegate Market Roads, Phase 3 and Phase 4, Parker, Colorado.* Construction Manager and Senior Construction Observer for subgrade preparations, over excavation, curb gutter and sidewalk concrete paving, asphalt paving, striping and signage, and site restoration for 2,100 LF of District roadways.
- *Stonegate Filing 14A & B Curb and Sidewalk Replacement and Pavement Repairs, NewLand Communities, Parker, Colorado.* Construction Manager and Senior Construction Observer for 800 LF of mountable curb-sidewalk removal and replacement and 1,200 SF of pavement patching and repair and crack sealing to obtain Douglas County final acceptance/full term maintenance.
- *West Interceptor Line, Parker Water & Sanitation District, Parker, Colorado.* Senior Construction Observer for 20,600-LF of 36" and 24" Contech A2000 and 18" PVC pipe for a sanitary sewer interceptor constructed within a 30' easement to the Army Corp. of Engineers Nation Wide Permit #12, with special environmental conditions present. Miscellaneous items included a 245' Steadfast pedestrian steel truss bridge with two (2) 42" steel casings below, 110 LF of 48" diameter boring, a 12" effluent force main relocation, 15" sanitary sewer laterals, and wetland and site restoration.
- *State Highway 52 and Glen Creighton Drive Roadway Improvements, City of Dacono, Colorado.* Senior Construction Observer for subgrade replacement and paving for acceleration and deceleration lanes at the intersection at Glen Creighton Drive. Construction management for CDOT local agency.
- *Sharpe Subdivision Filing 2, City of Dacono, Colorado.* Senior Construction Observer for 3,500 LF of 8" PVC water and sanitary sewer lines, street curbing, subgrade replacement and paving. Miscellaneous items included water and sanitary services and 500 LF of storm sewer and signage and striping.

#### **DEVELOPMENT REVIEW**

- *Clear Creek Crossing, Applewood Sanitation District, Jefferson County, Colorado.* Review engineer for all submittals and construction observer for 2,000 LF of 2-21" sanitary sewer infrastructure within the Clear Creek Crossing development. Monitored Denver Water 84" conduit crossing.
- *Midtown Filings 1 through 12, Crestview Water and Sanitation District, Adams County.* Review Engineer for the District on water and sanitary sewer lines construction drawings in a development.
- *2018 Pomponio Terrace, Filing 3&4, Crestview Water and Sanitation District, Adams County, Colorado.* Review Engineer for the District on water and sanitary sewer lines construction drawings in a development. Water line upgrade also reviewed and observed waterline upgrades along Federal Boulevard. Work included asbestos cement pipe plan review and replacement.
- *2018 Trailside Academy, Crestview Water and Sanitation District, Adams County, Colorado.* Review Engineer for the District on water and sanitary sewer line connection and services into the academy buildings. Review FD Plans, plats and easements, and architecture and landscape plans for District compliance.

## **GAIMÉ ESPARZA**

### CONSTRUCTION MANAGER



#### **EDUCATION**

**Architectural Design Program**  
Texas Tech. University

**Architectural Technology Program**  
Arapahoe Community College

#### **TRAINING**

- Hot plant/ batch plant operations inspection.
- Plant aggregate and mix sampling.
- Field paving equipment inspection, operation and calibration.
- Field sampling, monitoring and inspection according to CDOT specifications.
- Rolling pattern design, monitoring and adjustments
- Training (AASHTO T 310-01)

#### **CERTIFICATIONS**

WAQTC – Western Alliance for Quality Transportation construction  
All Materials field certifications including concrete (ACI), asphalt (CAPA) and soils testing.  
Certified Asphalt Technician I & II (CAT-1 & CAT II)  
Certified Aggregate Technician (CAgT)  
Certified Embankment Technician (CEBT / WAQTC)  
CDOT Asphalt Inspector Certification  
CDOT Safety and Nuclear Gage Certification  
**CDOT / CAPA : Asphalt Certifications:**

- Level A – Laydown
- Level B – Asphalt Plant Materials Control

#### **PROFESSIONAL EXPERIENCE**

Mr. Esparza has 35 years of design, construction and project administration and observation experience, including bridge, roadway, general infrastructure, drainage, utility and building design & construction. Mr. Esparza also has experience with ArcGIS and AutoCAD. Mr. Esparza's duties have included supervision of design, building and infrastructure inspection, testing and construction. This includes management of associated personnel, conducting pre-construction conferences, bid coordination, contract and specifications preparation, pay estimate preparation, site coordination and inspection, contract management, project management, and program management.

**CONSTRUCTION MANAGEMENT/CONSTRUCTION ADMINISTRATION**

- *Observer and Inspector*; Performed construction and site observations/inspections for buildings, site layout, driveways and sanitary sewer for the following clients:
  - *Applewood Sanitation District*
  - *City of Littleton*
  - *City of Sheridan*
  - *City of Wheat Ridge*
  - *Clear Creek County*
  - *East Alamosa Water and Sanitation District*
  - *Paint Brush Hills Metropolitan District*
  - *Town of Superior*
  - *Town of Creede*
  - *Town of Silverthorne*
  - *Town of Mountain View*
  - *Town of Center*
  - *Town of Minturn*
  - *Westridge Sanitation District*
  
- *160 and SH 17 Intersection Project, East Alamosa Water and Sanitation District, Alamosa, Colorado*; Performed construction management services for the replacement of 675 LF of 8" sanitary sewer and four manholes. This work included partnership and coordination with CDOT.
  
- *Construction Manager and Inspector, City of Littleton*; Performed construction management services and erosion control review for all new construction for several new subdivisions which included new and new addition of buildings, sanitary sewer mains and sanitary services, associated manholes, including installation of new storm sewer systems and settling ponds. The work also included the installation of new infrastructure including new sidewalks, ramps, curb & gutter, crosspans and complete installation of new streets from grading to final striping and signage.
  
- *Construction Manager and Inspector, Town of Lochbuie*; Performed construction management services for all new construction for several new subdivisions which included new water and sanitary sewer mains, water and sanitary services, associated manholes and fire hydrants, including installation of new storm sewer systems. The work also included the installation of new infrastructure including new sidewalks, ramps, curb & gutter, crosspans and complete installation of new streets from grading to final striping and signage.
  
- *Construction Manager and Inspector, Town of Jamestown*; Performed construction management services which included, inspections, conducting meetings, reviewing submissions, materials, traffic control and roadway restoration for the new water main and services in the town
  
- *Senior Public Improvement Inspector, City of Aurora, Colorado*; Responsible for inspection of city capital improvement projects and inspection, observation and technical assistance for private and public improvement projects and general infrastructure for the city.
  
- *Roadway Asphalt & Concrete Paving and Structural Inspector, PSI, Inc (E470 and Northwest Parkway)*; Asphalt, bridge, roadway, concrete and structural construction inspection, observation, reporting and quality control assurance. Responsible for monitoring hot plant operations and engineering technician testing, lab results and associated construction management responsibilities.
  
- *Co-Owner and Manager, Colorado Territory Log Homes, Inc*; Responsible for all the company's operations including architectural design of homes and commercial buildings, generation of Auto CAD construction plans, building design, sales, marketing and management of employees, projects and subcontractors. I was also the main source of customer sales and relations.
  
- *Senior Engineering and Environmental Technician, Entech Engineering, Inc*; Project Manager; Main duties included quality control and construction inspection of construction methods, adherence

to engineers' specifications, drafting, maintaining building plans, geo-technical lab & field work and responsible for all environmental site assessments.

- *Project Representative, GMS Associates; Project Management including monitoring and coordinating financial, scheduling and engineering compliance of several civic infrastructure and public improvement projects in various towns throughout Colorado.*
- *Engineering Technician, ATEC Associates, Inc. (Denver International Airport); Construction inspection, observation, reporting and quality control and geo-technical lab & field work. Drafting of engineering, environmental and geo-technical plans and graphics for engineering reports.*

**UTILITY LOCATES**

- Fields Colorado 811 (CO811) locate emails via WebTMS, determines out-of-district locate requests and responds to CO811, reviews utility mapping and as-builts prior to site visit, performs locate markings and refresh markings, sends positive response to CO811 and documents each locate.
  - *Applewood Sanitation District*
  - *Deer Creek Metropolitan District*
  - *Highland Park Metropolitan District*
  - *TrailMark HOA*
  - *Westridge Sanitation District*



## **SARA CONSTANTINE, E.I.T.**

DESIGN ENGINEER



### **EDUCATION**

**M.S. Civil Engineering**  
University of Colorado, Denver, CO

### **PROFESSIONAL EXPERIENCE**

Ms. Constantine has three years of design engineering experience. She is proficient in ArcGIS, SQL, Coordinate GPS systems, Spatial analysis, Database Management and Microsoft Office.

### **KEY PROJECT EXPERIENCE**

- *2022 DCIP Water Main Replacement, Platte Canyon Water and Sanitation District, Jefferson County, Colorado.* Design/Project Engineer. Drafted the contract documents, performed bid tabs comparison, set up bid openings and preconstruction meetings, finalized contract bonds with the contractor's lawyer.
- *Valley Sanitation for West Oxford Avenue Sewer Relocation, The Town of Sheridan, Colorado.* Design Engineer. Corresponded with the utility contractor to plan potholes along the intended relocation route. Coordinated with the CAD designer to produce a quality base map and proposed alignment.
- *Applewood Sanitation District, Development Review, Jefferson County, Colorado.* Reviewal of various plan sets for compliance with district engineering standards. Plan sets included, but are not limited to Lifetime Fitness, Dutch Bros. Coffee, and general site wide sanitary sewer infrastructure.
- *Colorado Parks and Wildlife, Lake Pueblo State Park, Pueblo County, Colorado.* Design Engineer. Assisted in the preparation of site application, sizing requirements, and area research in order to replace the current lift station and wastewater treatment equipment.

### **PREVIOUS EXPERIENCE**

- *Jefferson County Transportation and Engineering, Associate Civil Engineer, Golden, CO.* Project management for small to medium sized roadway improvement projects, weekly reviews of contractor submittals, daily construction efforts, reviewal of project plan sets, utility coordination for various permits throughout the County. Weekly coordination with various design engineers and companies.
- *Staff Engineer, Miner and Company, Lakewood, CO.* Helped with the construction administration and management functions for a residential development project. Supported the implementation of a 9-year program plan to improve the town of Bow Mar's roadway infrastructure and assist with the drainage, erosion control plans and construction drawings for the annual improvements. Assisted in analysis, engineering, planning, and project management assignments related to horizontal, sitework, and land development engineering and construction initiatives.



**ALEX WILDE, E.I.T.**  
**DESIGN ENGINEER**



**EDUCATION**

**B.S. Civil Engineering**

University of Minnesota Duluth, Duluth, MN

**PROFESSIONAL EXPERIENCE**

Mr. Wilde has three years of design engineering experience, including project administration, review of reports and plan sets, basic design calculations, and sanitary sewer inspections. He has knowledge of soils, materials, and testing standards. He is proficient in the use of ArcGIS and Microsoft Office Suite.

**KEY PROJECT EXPERIENCE**

- *Applewood Sanitation District, Jefferson County, Colorado.* Provides design engineering services for the annual system inspection and maintenance of the District. This includes manhole inspections, review of sanitary sewer video inspections, and the production of the annual Line System Status Report.
- *2022 Lift Station Analysis, East Alamosa Water and Sanitation District, Alamosa, Colorado.* Design Engineer. Assisted with the preparation of the Lift Station Analysis Report, which analyzed and recommended improvements for each of the District's Lift Stations (excluding Lift Stations No. 1 and 2, which had been recently rebuilt). This work included calculations of the overall flows within the system and the capacities of each of the lift stations.

**PREVIOUS EXPERIENCE**

- *Estimator & Project Manager Intern, Fehn Companies.* Duties included the examination of plans/specifications for accurate cost analysis, coordination with contractors on projects in bidding and construction phases, completion of take-offs on Agtek software to assist Project Managers with time-sensitive bids, calculation of quantities for various materials (including cut/fill and import/export), entering of bids into Bid-2-Win program to analyze and interpret costs of bidding projects, and visitation of job sites to review typical construction techniques on infrastructure projects.
- *Engineering Technician Aide, Hennepin County Public Works.* Assisted the Transportation Planning Department. Work included the weekly deployment of six (6) traffic counting equipment sets throughout the County, processing of traffic videos for turning movement and pedestrian counts, creation and maintenance of Excel templates, creation and presentation of memos and observations to the Safety Operations Committee, and the development of maps using GIS software (including data entry and data management).
- *University of Minnesota Duluth:* Civil engineering coursework included an emphasis on Water Resources, including Watershed Engineering, Hydraulic Design, Open Channel Hydraulics, and Water Resources Engineering.

## KRYSTAL WELP

DEVELOPMENT REVIEW COORDINATOR/ENGINEERING AND PLANNING TECHNICIAN



### EDUCATION

**BS, University of Colorado at Denver**  
Denver, Colorado

**AS, Red Rocks Community College**  
Lakewood, Colorado

### PROFESSIONAL REGISTRATION

Adobe Certified Associate  
Notary Public

### PROFESSIONAL EXPERIENCE

Ms. Welp has extensive experience providing technician review services through review of municipal codes and criteria manuals and has assisted several municipalities with the creation of standards and specifications. Additionally, she provides graphic support for all aspects of community plans, ranging from the creation of project outreach websites, design of community outreach materials, to the design of the final document. She has 11 years of experience in administrative support, marketing, project coordination, printing and photography services for the planning, engineering, and construction management fields.

- *Development Review Coordinator.* Provides administrative support for a wide spectrum of development review projects. Support includes organization of submittals and review due-date calendars, input of review comments, finalization of review comments, redlines and/or letters, and coordination with client and referral agencies. Additionally, provides technician review services through review of submittals to municipal codes and criteria manuals. She has or is currently assisting with development review for the following municipalities:
  - Clear Creek County
  - City of Brighton
  - City of Brush!
  - City of Sheridan
  - City of Littleton
  - City of Leadville
  - Paintbrush Hills Metropolitan District
  - Rio Grande County
  - Town of Buena Vista
  - Town of Gilcrest
  - Town of Grand Lake
  - Town of Lochbuie
  - Town of Hayden
  - Town of Poncha Springs
  - Lincoln Park Metropolitan District
  - Westridge Sanitation District
- *Code Revision Assistance.* Provides administrative and technician support for code revisions.
  - *Development Handbook*, Town of Buena Vista, Colorado (ongoing)
  - Short-Term Rental and Accessory Dwelling Units Code Amendments, City of Leadville, Colorado (2020)
  - *Land Use Development Code Update*, Rio Grande County, Colorado (2019)
  - *Site Development and Grading Standards*, Clear Creek County, Colorado (2019)
  - *Land Use Code Assessment*, Rio Grande County, Colorado (2017)
  - Mixed-Use Zoning District Creation, City of Sheridan, Colorado (2017)

- *Comprehensive and Master Planning.* Provide graphic support for all aspects of community plans, ranging from design of the document to the design of community outreach materials. Create and maintain project websites with a blog section and a community review section for drafts of the Plan, along with surveys and a general comment section. Projects include:
  - *Parachute Design Guidelines, Town of Parachute, Colorado (2019)*
  - *Comprehensive Plan Update, Town of Bayfield, Colorado (2018)*
  - *Comprehensive Plan Update, Town of Kersey, Colorado (2016)*
  - *Joint Master Plan, Rio Grande County, Colorado (2016)*
  - *Comprehensive Plan Update, City of Sheridan, Colorado (2015)*
  - *Parks, Recreation and Open Space Master Plan, Town of Hot Sulphur Springs, Colorado (2015)*
  - *Housing Needs Assessment, Town of Milliken, Colorado (2014)*
- *District Engineer, Westridge Sanitation District, Jefferson County, Colorado.* Engineering technician and administrative support for the design, bidding, and construction administration of annual improvement projects. Assists with the administration and review of the annual maintenance and videoing.
- *Annual District Maintenance, Deer Creek Metropolitan District, Jefferson County, Colorado.* Engineering technician for the evaluation, bidding, and management of annual repairs to the district's facilities.
- *Asset Inventory Report, Town of Center, Colorado.* Engineering technician for the creation of an asset inventory for the town. This report summarized the inventory, overall age, and condition of each of the capital assets owned and operated by then town. Provided prioritization of improvements and/or replacements of any aging, damaged or otherwise insufficient assets.
- *2019 Roadway Repairs Project, Lincoln Park Metropolitan District, Douglas County, Colorado.* Engineering technician for the transfer of ownership for all district roadways to Douglas County. This project included contract document creation and bidding, and construction administration for all improvements to the roadways, sidewalks, cross pans, and curb and gutter.
- *Marketing Materials.* Completed the design and production of marketing collateral and promotional materials, website, social media, and other graphic work for RGA. Prepared and submitted Statements of Qualifications and Proposals in response to RFPs/RFQs, including editing, writing, and graphic layout. Completed redesign of RGA's website in 2015 and 2020.
- *General Administrative Duties.* Answering phones, processing invoices, coordinate shipments, process mail, monitor and maintain office supply inventory, and coordinate company events and meetings.
- *Event Coordination.* Manage all site selection, coordination, and budget for public and private company events. This includes annual private holiday party and annual public receptions at local conferences.

## SKILLS

Adobe Acrobat, InDesign, Illustrator, Lightroom, Photoshop, and Premiere Pro; Wordpress; Wix; Weebly; Microsoft Word, Excel, PowerPoint, Publisher, Project, OneNote, Outlook, OneDrive, and Teams; Google Docs, Sheets, and Drive; Windows Operating Systems (Vista – 10); and TRAKiT and eTRAKiT software.



## Timothy J. DeMasters

### Principal / Senior Ecologist

Tim joined CORVUS in 2018 as a seasoned senior ecologist with 15 years of experience working on projects ranging from large hard rock mines in AK, coal mines in WY, pipelines in IL and TX, to many trail, road, solar, stream, reservoir, and other water related projects in CO over the last 7 years.

Tim provides expertise in compliance with federal and state environmental regulations related to biological resources, including wetlands, threatened and endangered species, and wildlife. Tim’s experience includes working on numerous local agency projects in compliance with federal and local regulations as well as Colorado Parks and Wildlife (CPW) compliance statewide for various sectors. Tim has established strong working relationships with federal and state regulators and wildlife district managers and brings a creative solution-based approach to projects from a high-level down to the specifics.

#### Key Skills

- ✓ Wetland Delineations and Functional Assessments
- ✓ State Listed Species
- ✓ Federally Listed Species
- ✓ CPW SB 40 Certification
- ✓ CWA Section 404 Compliance
- ✓ Black-tailed Prairie Dog Management Plans
- ✓ Noxious Weed Plans
- ✓ Migratory Bird Treaty Act Compliance

#### Education

B.S. Environmental Sciences, Trinity Western University, Langley, British Columbia, Canada, 2004.

EMT-Basic, Arapahoe Community College, Littleton, Colorado, 2004

40-Hour Wetland Delineation Course



**CORVUS**  
Environmental Consulting LLC

#### Select Project Experience

##### US 36 Wetland Mitigation Construction – CDOT, Boulder County

**Ecologist.** Owner’s representative for CDOT on the oversight team for the construction, planting, and corrective actions for the 20-acre wetland mitigation project required as compensatory mitigation for impacts related to US 36 widening and improvements. Of the 20 total acres, 15 acres are regulated wetlands per a USACE permit. The project complies with USACE and City of Boulder permitting criteria.

##### Upper Four Mile Canyon Stream Restoration, Boulder County Transportation (Emergency Watershed Protection [EWP] Funded) – Boulder County

**Ecologist.** Delineated wetlands and other waters of the US as well as noted likely restoration areas along the stream corridor in support of the mirrored stream repairs along the road repair project segments. Conducted Pre-Construction Notification/Nationwide Permit Concurrence request.

##### Lower Four Mile Canyon Stream Restoration, Fourmile Watershed Coalition (EWP Funded) – Boulder County

**Ecologist.** Delineated wetland and other waters of the US as well as noted likely restoration areas along the stream corridor in support of the mirrored stream repairs along the road repair project segments. Conducted Pre-Construction Notification/Nationwide Permit Concurrence request.

**Affiliations**

Society of Wetland Scientists (SWS)

GIS Colorado (GISCO)

Society for Conservation GIS

Colorado Association of Stormwater and Floodplain Managers (CASFM)

*“Tim is an excellent biologist with a strong technical knowledge of botany, wetland ecology, and wildlife biology. He can navigate environmental regulations deftly. Working on the US36 Wetland Mitigation site gave me an opportunity to observe his problem solving skills of ecological restoration, not to mention his communication skills and promptness in product delivery. I highly recommend Tim for any project that needs strong biological or ecological talent.”*

-Brian Fauver

NEPA Specialist; Section 4(f) and Section 6(f) Program Manager at Colorado Department of Transportation

**East Boulder Ditch at Baseline Road Culvert Replacement – Boulder County Transportation - Boulder County**

**Ecologist.** Delineated wetlands and other waters of the US, assessed habitat for Federally-listed threatened and endangered species, coordinated Section 106 cultural resources. Lead the agency coordination, including submitted Pre-Construction Notification/Nationwide Permit Concurrence request.

**Airport Road Design/Build Bridge Replacement over Plum Creek – Douglas County**

**Lead Biologist.** This project was permitted through National Environmental Policy Act (NEPA) as a Categorical Exclusion, under FHWA, administered by CDOT. Tim worked closely with project members to complete all environmental tasks for the bridge replacement project, including onsite project agency meetings and scheduled project coordination phone calls. Tim was the lead biologist responsible for Colorado Parks and Wildlife (CPW) Senate Bill 40 data collection; US Army Corps of Engineers (USACE) (Section 404) wetlands and other waters of the US delineation, impact analysis, reporting, and permitting; threatened and endangered species presence or absence surveys, reporting, and Section 7 consultation; noxious weed mapping and reporting; and Geographic Information Systems (GIS) data preparation, data collection, and management.

**South Boulder Canal Siphon 4 Replacement Project, Denver Water - Boulder County**

**Lead biologist.** Performed USACE wetland and other Waters of US delineation under Section 404 of the CWA as well as Threatened or Endangered Species (TES) Surveys for Colorado Butterfly Plant (CBP) and Ute Ladies Tresses orchid (ULTO) to facilitate in the client’s Section 7 ESA Consultation.

**Natural Resource Strategy Team – Denver International Airport (DEN), Denver Real Estate – City and County of Denver**

**Senior Ecologist / Principal.** Providing ecological consulting and high-level strategy for the 25 square-mile commercial real estate portion of Denver International Airport (DEN). Acting member of a multi-disciplinary team responsible for existing conditions assessment and analysis. Sitewide challenges addressed include compliance with Federal Aviation Administration (FAA) DEN wildlife hazard mitigation plan while developing and improving operational recommendations such as mowing and soil restoration, as well as recommending a native prairie plant palette for restoration and resiliency throughout planned development districts.

## TOM WILLIS, PLS

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### SUMMARY OF QUALIFICATIONS

**Registered Land Surveyor** with more than 34 years of professional experience in Surveying, Mapping and GPS/GIS. Also serves as Director of Operations and Chief Estimator for Flatirons Surveying, Inc. *Specific areas of expertise include:*

- Management of projects for timely & cost effective completion
- Project cost estimating
- Colorado PLS 34991
- South Carolina PLS 11078
- Extensive CAD, office and field experience
- Individual, Commercial and Government client projects
- AutoCAD and other industry software
- North Carolina PLS L-3079
- Texas PLS 4903
- Experience in State, City and County roadway projects

### PROFESSIONAL EXPERIENCE

**Flatirons, Inc., Surveying, Engineering and Geomatics** 2000 – Present  
Boulder, CO

*President*

Extensive experience in conducting surveys for **highway projects (including CDOT, County and City), bike paths and multi-use trails**, local parks and open space lands. Supervises field and office personnel; prepare project estimates/project scope documents; performs boundary analysis; proof and review survey work for quality control; ensure effective communication with clients and timely completion of projects.

*A partial list of specific Flatirons, Inc. projects:*

- **Valmont Road**, East of 75<sup>th</sup>, (Land Survey Plat, design survey, topography), Baseline Road from Lawn to Platt Middle School (Topography), Cherryvale Road, Land Survey Plat, for Boulder County Transportation Department;
- **Highway 66 and Hover Street - Right of Way mapping** for CDOT;
- **Interstate 25 north of 20<sup>th</sup> Street in Denver**, 3D Laser scanning and design survey for CDOT, All completed with no disruptions to traffic;
- **City Limits Trailhead** - Improvement Survey Plat with topo at one end of the Hwy. 93 project area, for the City of Boulder Open Space and Mountain Parks Department;
- **CDOT ROW map, section of the Peak to Peak Highway**;
- **St. Vrain Greenway, Boulder and Weld Counties** - Topographic surveys and construction staking for this 5-mile bike path project, for Loris & Associates.
- A variety of numerous other projects of varying size and scope, in multiple states.

### Education

Clemson University, BS in Forestry Management, 1981  
Ongoing Continuing Education courses for surveying and mapping



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 Boulder, CO 80301  
 303-443-7001  
 zgowan@flatironsinc.com

**JAMES Z. GOWAN, PLS, CFEDS**



**SUMMARY OF QUALIFICATIONS**

**Registered Land Surveyor** with more than 31 years of professional experience in Surveying, Mapping and GPS/GIS. CFedS Certified for work on Federal lands. ALTAs, subdivisions, annexations, topographic mapping, aerial mapping, Hazwoper sites, flood repair sites, construction layout, office and field, rural and urban. Also held leadership roles ranging from Project Manager to Vice President. *Specific areas of expertise include:*

- Management of projects for timely & cost effective completion
- High Definition Surveying
- Colorado PLS 29038
- Idaho PLS 12548
- **CFedS** Certified, 2011 No. 1477
- OSHA 40 hr qualified (CFR 1910.120)
- Real Time Kinematic (RTK) Global Positioning Systems (GPS)
- Trimble Robotic Total Station
- Utah PLS 6403366-2201
- Washington PLS 44342
- North Dakota PLS LS-6263
- Cost Estimating

**PROFESSIONAL EXPERIENCE**

**Flatirons, Inc., Surveying, Engineering and Geomatics** 1986 – Present  
 Boulder, CO  
*Vice President and co-owner of Flatirons, Inc.*

Supervise field and office personnel, prepare estimates/project scope documents, boundary analysis, proof and review survey work, ensure effective communication and timely completion of projects for municipalities, governments, and private clients.

- Bureau of Reclamation, Range line surveys on the Rio Grande in New Mexico;
- National Park Service topographic surveys in CO, UT, NM, WY, AZ, OK and TX;
- National Forest Service, central and eastern Colorado;
- Rocky Flats Environmental Technology Site, Jefferson County, Colorado;
- U.S. Fish & Wildlife Service surveys in Montana, Colorado;
- Boulder County, repair/restoration surveys after 2013 flood.
- Office, commercial development projects;
- Water and sanitation projects;
- Wind farm and commercial solar projects.

**Education**

Associate Arts & Sciences Degree, Suffolk Community College  
 Certified Federal Surveyor (CFedS)  
 OSHA 40 Hour Certification



3825 Iris Avenue, Ste 595  
Boulder, CO 80301  
303-443-7001  
jhannahoe@flatsurv.com

**JASON HANNAHOE**



**SUMMARY OF QUALIFICATIONS**

**Land Surveyor** with over 9 years of varied experience in surveying and mapping. Work environments include: public and private sector projects, construction layout, subdivision infrastructure, office and field, rural and urban. *Specific areas of expertise include:*

- Boundary & topographic surveys
- Forest land surveys/mineral claims
- Management of field surveyor teams
- Construction stake-out services
- Colorado PLS #38498
- Real Time Kinematic (RTK) and Static GPS surveying
- Trimble Robotic Total Station
- Efficient and timely completion of assigned projects

**PROFESSIONAL EXPERIENCE**

**Flatirons, Inc., Surveying, Engineering and Geomatics** 2003 – present  
Boulder, CO  
*Survey Party Chief*

Manages multiple teams of surveyors in Colorado and surrounding states. Field surveys, primarily boundary and topographic projects and construction stake-out projects, but includes all phases of surveying in private and public sectors.

**Representative projects:**

- USDA Forest Service Region II surveying projects, including Mineral Surveys;
- Surveying of range lines along the Rio Grande for the Bureau of Reclamation in New Mexico;

**Glorso Murray Surveys LLC.** 2002-2003  
Aurora, CO  
*Land Surveyor*

- Responsible for various survey tasks including boundary and topographic surveys, and construction stake-out services.

**Education**

Pennsylvania Institute of Taxidermy (accredited school), Ebensburg, PA, 1997

James A. Parker,  
P.E., P.G.  
Senior Engineer  
Geotechnical



#### Education

Arizona State University  
B.S., Geology, 2001

#### Professional Registration

Registered Professional Engineer:  
Colorado, Arizona, Oregon

Registered Professional Geologist  
Colorado

#### Qualifications Summary

Mr. Parker has over **22 years of experience** in geotechnical and geological engineering, geological hazards assessment and materials testing and inspection in Colorado, Arizona and Oregon. He is responsible for planning, management and review of geotechnical and geologic assessments, and project management and engineering review of materials testing and special inspection on private and public projects throughout western and central Colorado.

#### Professional Experience

- **Three Lakes Wastewater Treatment Plant Expansion** (Granby, CO): Geotechnical engineering study for wastewater treatment plant building expansion. Recommendations provided for foundation design, support of utilities, retaining walls, and site grading.
- **Proposed Bridge Replacement Grand County Road 667** (Grand Lake, CO): Geotechnical engineering study for a new bridge along a Grand County Road to replace an outdated bridge.
- **Lake County Road 11 and Lake Fork Creek Bridge Replacement Project** (Leadville, CO): Geotechnical engineering study for foundation design of a box culvert bridge crossing. The new box culvert replaced an existing outdated crossing.
- **Miners Creek Pedestrian Bridge Replacement** (Frisco, CO): geotechnical engineering study for a new pedestrian bridge to replace the existing outdated bridge at Miners Creek and Summit Blvd.
- **Lake County Road 9 and Arkansas Creek Bridge Replacement Project** (Leadville, CO): Geotechnical engineering study for foundation design of a box culvert bridge crossing. The new box culvert replaced an existing outdated CMP crossing
- **Summit County Transit Center** (Frisco, CO): Geotechnical engineering study for a new Transit Center building at the Summit County Light Industrial Commons Campus.
- **Summit County Sand Storage Building and Peak One Drive Relocation** (Frisco, CO): Geotechnical engineering study for foundation design of a new sand storage building retaining wall recommendations and pavement section design for the relocation of Peak One Drive.
- **East Peak 8 Development** (Breckenridge, CO): Geotechnical engineering study for an 8-story hotel over a parking garage, including foundation recommendations, retaining wall and shoring recommendations, and pavement design.
- **CDOT Vehicle Storage Facility Improvements** (Silverthorne, CO): Geotechnical consultation on subgrade stabilization for retaining wall, foundation, pavement, and building pad areas.
- **Village at Wintergreen Affordable Housing** (Keystone, CO): Geotechnical engineering study for a multi-family employee housing project. Study included foundation design recommendations, pavement design and grading recommendations.
- **Town of Frisco Maintenance Building Addition** (Frisco, CO): Geotechnical engineering study for an addition to the existing Frisco Maintenance Building. Recommendations provided for foundations, retaining walls, site grading and pavement.
- **Frisco Marina Building** (Frisco, CO): Geotechnical engineering study for a new marina building at the Frisco Marina. Recommendations provided for foundation design, drainage, site grading, retaining walls, and utilities.
- **Slifer Square Improvements** (Vail, CO): Geotechnical engineering study for utility improvements at Slifer Square in Vail. Recommendations also provided for pavement and site grading



April 24<sup>th</sup>, 2023

To: Mayor Kudron and Town Trustees  
From: Kimberly White, Community Development Department

RE: Resolution 12-2023; A Resolution Granting A License For The Encroachment Into The Public Right-Of-Way Of Certain Improvements Located Adjacent To Parcel 4, Daven Haven Cottages Of The Town Of Grand Lake

**Purpose**

During the Planned Development Review of the Daven Haven Planned Development Third Amendment on March 5<sup>th</sup>, 2023, the Board of Trustees instructed the Carey Barnes (“Owner”) to obtain an encroachment permit for the concrete slab, dumpster, grease bin existing on the Cairns right of way and to add a fence to obstruct the view of the encroachment from Cairns Ave. Major encroachments, such as permanent concrete drives, require Board of Trustee Approval.

**Background Information**

Encroachment agreements are for the purpose of allowing items of a more permanent nature to be placed in the Town Right of Way with the understanding that the owner will retain public liability insurance on said encroachment, and, upon proper notification by the Town, the Owner shall remove said encroachment within 45 days. The Owner’s have recently finalized the Third amendment plat for the Daven Haven Cottages PD and the existing concrete slab for the trash was surveyed and found to be located 3.8’ x 7’ into the Cairns right of way.

**Municipal Code**

Section 11-6-1: Public Property Encroachments

*A. Encroachment Defined - An encroachment is any item that is placed, erected or built on the public right-of-way by a private property owner. A property owner shall seek permission from the Town to encroach onto Rights of Ways or municipal property prior to the encroachment occurring. Where an encroachment exists without Town approval, the owner shall be required to remove the encroachment at his own expense or seek permission from the Town for the encroachment to remain.*

*B. Types of Encroachments*

*1. Major Encroachments are considered encroachments that are more permanent in nature. Examples include, but are not limited to: buildings or structures, driveways, fences and retaining walls, decks and patios, some components of public utilities, as well as other immovable objects other than minor landscaping.*

*C. When Encroachments Will Not Be Granted*

*The following encroachment license or agreement requests will not be granted:*

- 1. Additions to existing buildings or other structures that would encroach or do encroach onto municipal property or road Rights of Ways, or*
- 2. The encroachment poses a danger to the public, or*

*D. When Encroachments May Not Be Granted*

*The following encroachment license or agreement requests may not be granted, as determined by the Town Board of Trustees:*

- 1. The proposed encroachment is in conflict with applicable Town Departments and/or applicable utility companies, or*
- 2. When construction has commenced prior to the issuance of a required permit from the Town.*

*E. Application*

- 1. A Narrative Request; and*
- 2. A Site Plan indicating exact measurements of the proposed encroachment and its position to the property boundaries; and*



3. *Applicable Deposits and/or Fees, as set by Town of Grand Lake Board of Trustees Resolution; and*
4. *Any other information determined by Town staff applicable to the review of the request.*

**F. Review and Approval Process**

*1. Major Encroachments shall be reviewed by the Town Board of Trustees.*

*The item will be placed on the Town Board of Trustees agenda. The Board shall approve, approve with conditions, or deny the application at a public meeting. No later than 14 days prior to the meeting, Town staff shall cause certified mailings to be sent, return receipt requested, to all utility companies.*

*The Board may continue the application review to a later date (not to exceed 45 days) in order to obtain more information about the request or to conduct site inspections. If approved, an Encroachment License will be issued.*

**G. Indemnification and Insurance Requirements**

*The property owner is required to indemnify and save harmless The Town of Grand Lake against any and all damages which may result from the encroachment. Insurance may be required. The certificate of insurance shall be submitted to the Town prior to the execution or issuance of the Encroachment License or Agreement.*

**Additional Information**

The Municipal Code requires the Town to contact all utility companies informing them of encroachment requests. Staff sent certified letters to each utility company. Staff has received one letter of concern from the gas company, due to the screening fence to be added. Xcel gas has requested gas line locates to be called in by the Owner before they can give their consent. *"Hopefully the locates don't find the gas main as close as it appears. If it is then it may hinder the installment of a fence. Fences should be 5' away from any gas line or the edge of any pad or structure/foundation."* All other utilities do not have concern with this existing encroachment.

The Public Works Director and the Water Superintendent have reviewed the application and have indicated that it does not interfere with the Town utilities at this time. The Planning Commission and the Board of Trustees require the entire concrete slab and trash area to be screened from the Cairns Avenue right of way.

**Staff Recommendation**

Staff recommends if the Board grants the encroachment license for the existing improvements, they should adopt the resolution as presented which contains the following conditions:

1. That all affected utilities are found to not interfere with the proposed fencing.
2. The License is limited to the Existing Improvements as shown on the site plan (hereinafter the "Encroachment"); and,
3. The Licensee must maintain the Encroachment at its sole expense; and,
4. This License shall remain in full force and effect for the benefit of the Licensee, their heirs, successors and assigns, until such time as the Town, in its sole determination, determines that this license should end. At such time, within 45 days of the Town providing notice to the Licensee, Licensee shall remove the Encroachment and restore that portion of the Town right of way to pre-existing condition or better at Licensee's expense. The Licensee may perform normal maintenance and repairs to the Encroachment, but may not expand the Encroachment further into or enlarge the Encroachment above the public right-of-way; and,
5. The granting of this License shall not be considered a precedent for any future encroachments; and
6. The granting of this License does not limit any public use of the Cairns Drive right of way; and
7. The Licensee agrees to pay the License fee to the Town in the amount of One Hundred Dollars (\$100.00); and,
8. To maintain public liability insurance in an amount not less than \$300,000 per person and \$900,000 per accident to protect Licensee and the Town from any liability to the public as a result of the encroachment onto the Town's right-of-way and to furnish the Town proof of such insurance upon request. Said insurance shall be maintained at all times during the term of this easement.



9. The Licensee delivers the Town a fully executed Encroachment License and Agreement.

**Board Discussion**

The Board should discuss the public property encroachment request.

**Board Action**

The Board has several options to consider including:

1. Granting the encroachment request by adopting the resolution; or
2. Grant the request with other conditions; or
3. Continue the request until May 22<sup>nd</sup>, 2023.

Suggested Motions for 604 Marina Dr.:

**1. I move to adopt Resolution 12-2023, as written**

**Or**

**2. I move to adopt Resolution 12-2023, with the following conditions**

\_\_\_\_\_.

**Or**

**3. I move to continue the encroachment request until more information from the gas company is received and reviewed.**

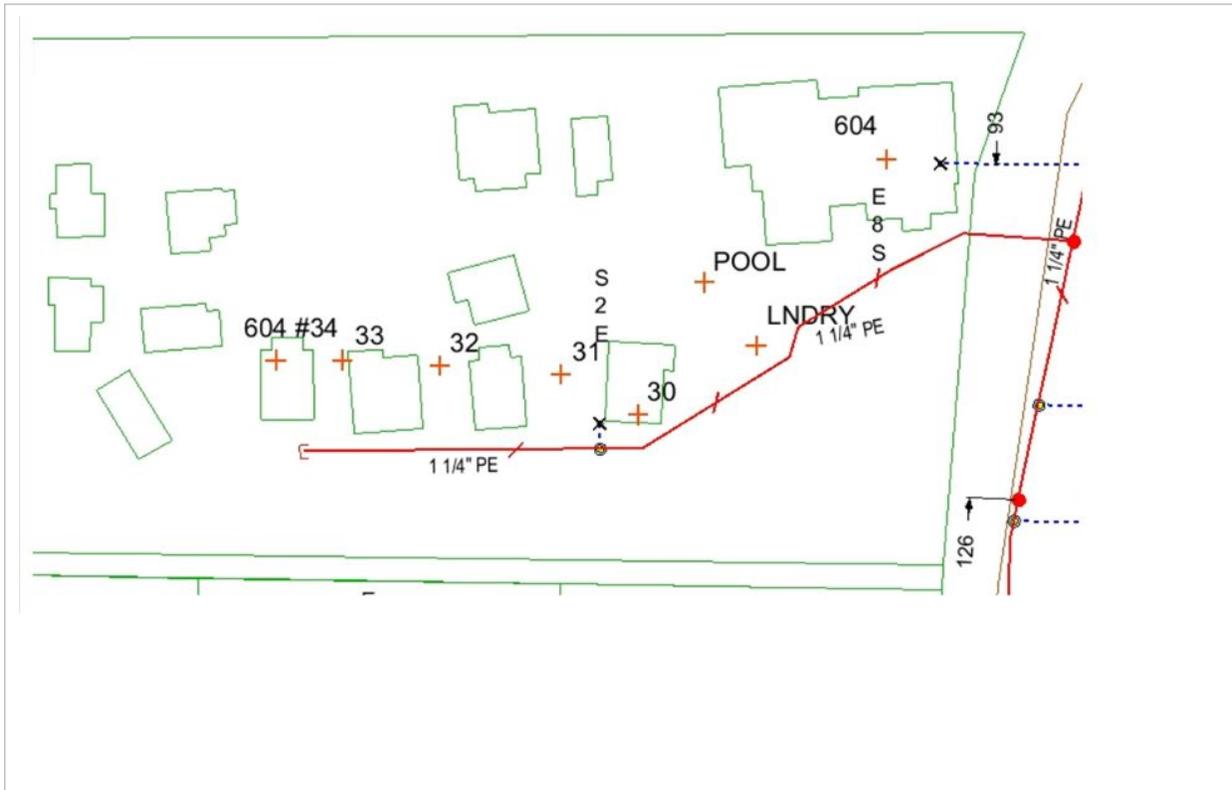
**From:** [Gittins, Julie K](#)  
**To:** [Kim White](#)  
**Cc:** [Jean Johnston](#)  
**Subject:** RE: NOTICE OF ENCROACHMENT APPLICATION - 604 Marina Dr. Grand Lake  
**Date:** Tuesday, April 4, 2023 4:05:40 PM  
**Attachments:** [image001.jpg](#)  
[image002.png](#)

Caution! This message was sent from outside your organization. [Allow sender](#) | [Block sender](#)

Kim,

Good afternoon!

I have compared the document provided with our mapping and it appears that the existing pad, dumpster and proposed enclosure may be sitting on top of a gas main or very close to it. Locates will need to be done to determine the exact location of the gas main and service. Xcel would request a survey in order to provide any further feed back.



Please let me know if you have any questions.

Have a great day!

**Julie Gittins**  
**Xcel Energy**  
Design Planner, Mountain Division  
583 E. Jasper Ct., PO Box 528 Granby, CO 80446  
P: 970-262-4014 C: 970-409-7613  
E: [Julie.K.Gittins@xcelenergy.com](mailto:Julie.K.Gittins@xcelenergy.com)  
Direct Supervisor: [Kyle.C.Alsup@xcelenergy.com](mailto:Kyle.C.Alsup@xcelenergy.com)  
My Office Hours: Tuesday thru Friday, 6:00 – 4:30 pm

**From:** Kim White <[kwhite@toglco.com](mailto:kwhite@toglco.com)>  
**Sent:** Tuesday, April 4, 2023 11:24 AM  
**Subject:** NOTICE OF ENCROACHMENT APPLICATION - 604 Marina Dr. Grand Lake

**EXTERNAL - STOP & THINK** before opening links and attachments.

---

Hello,

This is a notice for an encroachment application. If you prefer to receive a certified letter by the USPS, please respond with your address and company name and I will update your information in my file.

Thank you,

Kim

Please see attachment for letter of notice for an encroachment hearing scheduled for Monday, April 24<sup>th</sup>, 2023 at 6:00 PM, at 1026 Park Avenue, Town Hall, to review a major encroachment permit application for an existing concrete slab, dumpster, grease bin with proposed fenced enclosure. The encroachment is located about 4' x 7' into the Cairns Ave. ROW (adjacent to Daven Haven Lodge) and has been located there since around 2010.

Per Town of Grand Lake municipal code (11-6-1), notice must be given to all utilities 14 days prior to the Board of Trustees meeting.

Additional information is available for public inspection by request at [planner@toglco.com](mailto:planner@toglco.com). Public comments and participation are both encouraged and welcome, either at the public meeting or in writing to the Town of Grand Lake, P.O. Box 99, Grand Lake, CO 80447 or by e-mail to [planner@toglco.com](mailto:planner@toglco.com).

**Kimberly G. White**  
Community Development Director  
Town of Grand Lake - Planning Dept.  
O 970-627-3435  
C 970-673-3486  
[townofgrandlake.com](http://townofgrandlake.com)



**TOWN OF GRAND LAKE  
BOARD OF TRUSTEES  
RESOLUTION 12-2023**

**A RESOLUTION GRANTING A LICENSE FOR THE ENCROACHMENT INTO THE PUBLIC RIGHT-OF-WAY OF CERTAIN IMPROVEMENTS LOCATED ADJACENT TO PARCEL 4, DAVEN HAVEN COTTAGES OF THE TOWN OF GRAND LAKE**

**WHEREAS**, the Town of Grand Lake (the “Town”) received an application requesting an encroachment license into a public right-of-way for certain improvements (the “Application”) located adjacent to parcel 4, Daven Haven Cottages into Cairns Avenue as depicted on Exhibit A, attached hereto and incorporated herein; and

**WHEREAS**, Town Staff has reviewed the Application and the Grand Lake Board of Trustees (the “Board”), based on the Application and staff’s recommendation, is in support of granting the encroachment license subject to the conditions contained below.

**BE IT RESOLVED BY THE GRAND LAKE BOARD OF TRUSTEES THAT:**

Section 1. A license is hereby granted to Greg and Carey Barnes, as owner (hereinafter the “Grantee”) of Parcel 4, Daven Haven Cottages, Town of Grand Lake, for the purpose of allowing an encroachment into the public right-of-way of Cairns Avenue for preexisting improvements as depicted in Exhibit A.

Section 2. In granting said license, the Town of Grand Lake expressly reserves to itself the right to construct, reconstruct and maintain all municipal utilities and permanent improvements, and further reserves the same right to all utility companies operating under a Town franchise or paying utility occupation tax to the Town.

Section 3. The preexisting improvements being permitted by this Resolution is a 14’x 8’ concrete pad, a dumpster, and a grease clean-out facility; the pre-existing improvements will be screened on all four sides. The preexisting improvements are depicted on Exhibit A. The encroachment is granted to allow the improvements to encroach no more than five feet into the Cairns Avenue right-of-way.

Section 4. This license shall remain in full force and effect for the benefit of the Grantee, their heirs, successors and assigns, until such time as the Town, in its sole determination, determines that this license should end. At such time, within 45 days of the Town providing notice to the Grantee, Grantee shall remove the improvement and restore that portion of the Town right-of-way to pre-existing condition or better at Grantee’s expense. The Grantee may perform normal maintenance and repairs to the improvement, but may not enlarge it further into or above the public right-of-way.

Section 5. This Resolution is adopted with the considerations, among others, that it must be maintained solely by the Owners. Granting of this license shall not be considered a precedent for any future encroachments.

Section 6. In consideration of this license, the Grantee hereby agrees to pay the Town the amount of One Hundred Dollars (\$100.00) in consideration for the granting of this license.

Section 7. This license is expressly conditioned on the Grantee delivering a fully executed Indemnification Agreement attached hereto as Exhibit B and incorporated herein.

**DULY MOVED, SECONDED, AND ADOPTED BY THE BOARD OF TRUSTEES OF THE TOWN OF GRAND LAKE, COLORADO, THIS 24TH DAY OF APRIL, 2023.**

Votes Approving:  
Votes Opposing:  
Absent:  
Abstained:

ATTEST:

TOWN OF GRAND LAKE

Section 11, Item C.

\_\_\_\_\_  
Alayna Carrell,  
Town Clerk

\_\_\_\_\_  
Stephan Kudron  
Mayor

619 Marina Dr.  
Existing Trash Encroachment

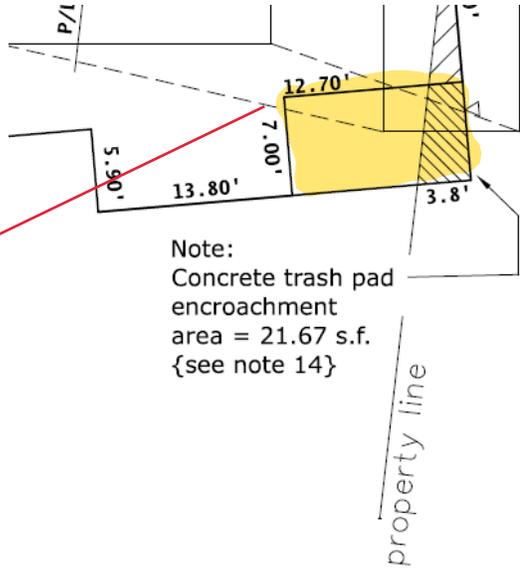
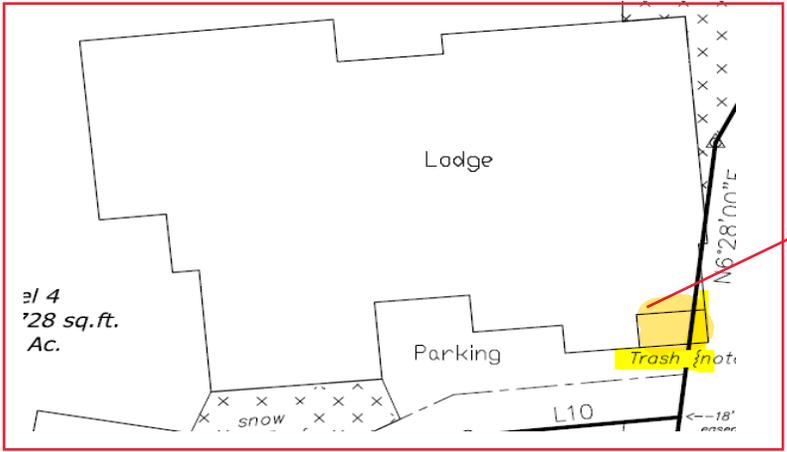


Exhibit "B"  
Indemnification Agreement

This Agreement is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by and between Greg and Carey Barnes (hereinafter referred to as the "Grantee") and the Town of Grand Lake, (hereinafter referred to as "the Town".)

The Grantee, for themselves, their heirs and successors and assigns, pursuant to the provisions of Resolution No. 12-2023, Town of Grand Lake, hereby agree to indemnify the Town against all liability, loss, cost, damage or expense sustained by the Town, including reasonable attorneys' fees and other expenses of litigation, whether prosecuted to judgment or not, arising out of, due to, or directly or indirectly relating in any manner to the easement granted to Grantee by Resolution No. 12-2023.

Grantee shall also, at all times such license shall remain in existence, indemnify the Town against all liens established against the property included within the license or any improvements thereon or any part thereof.

In case any action or proceeding is brought against the Town, Grantee shall, on notice from the Town resist and defend such action or proceeding by legal counsel approved by the Town, which approval shall not be unreasonably withheld.

Grantee shall reimburse the Town for all reasonable attorneys' fees and costs and other expenses of litigation as provided for in this Agreement within thirty (30) days of billing for such charges. The failure or refusal of Grantee to pay such charges within said thirty (30) days shall result in the immediate termination of the license provided for in Resolution No. 12-2023.

Grantee acknowledges that is acquires no right, title, or interest in the licensed property and that such license shall not form the basis for any claim against the Town on the basis of estoppel or adverse possession or any other grounds.

Nothing contained in this Indemnification Agreement shall waive any of the Town's rights or protection under the provisions of the Colorado Governmental Immunity Act, Sections 24-10-101, et seq., Colorado Revised Statutes, as such Act currently exists and as it may be amended from time to time in the future.

\_\_\_\_\_

\_\_\_\_\_

Greg Barnes, Owner

Carey Barnes, Owner

STATE OF \_\_\_\_\_ )  
 )ss.  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by \_\_\_\_\_ . Witness my hand and official seal.

My commission expires:

\_\_\_\_\_  
Notary Public



## Grand Lake Board of Trustees

**Public Hearing (Quasi-Judicial)** Resolution 13-2023; A Resolution Regarding Substantial Compliance Of A Petition For Annexation Filed By The Genette Simpkins Revocable Living Trust Regarding An 8.98 Acre Parcel Known As The “Love Tract” And Setting The Matter For A Public Hearing

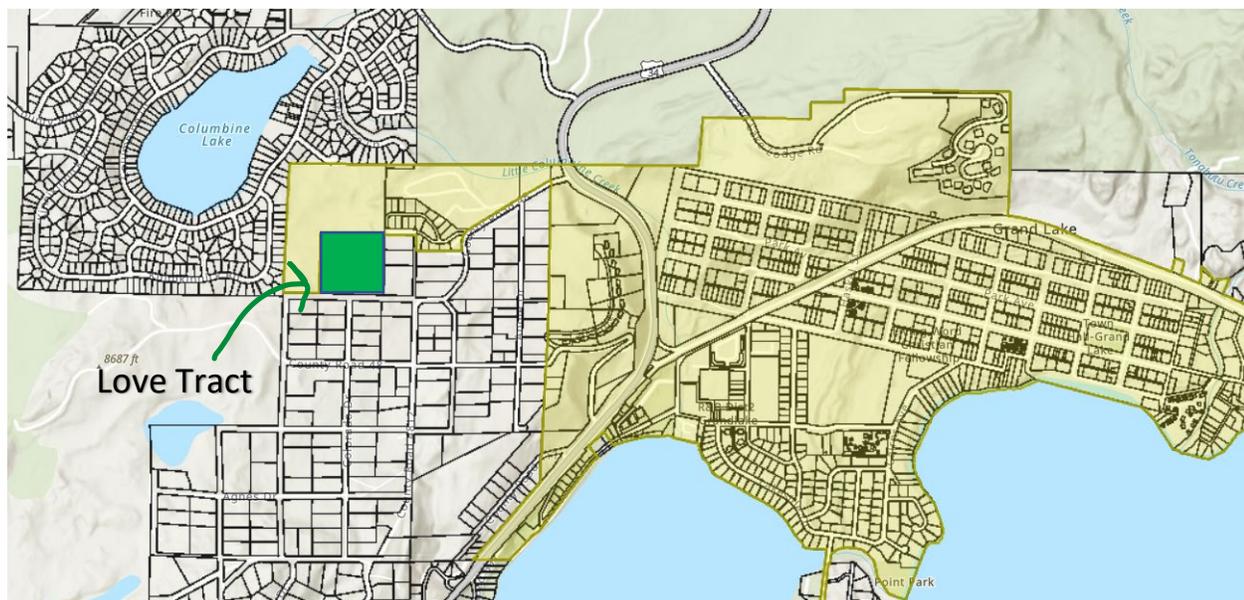
TO: Mayor Kudron and the Trustees  
FROM: Kimberly White, Community Development Department  
DATE: 04/24/2023

RE: Public Hearing (Quasi-Judicial) Resolution 13-2023; A Resolution Regarding Substantial Compliance Of A Petition For Annexation Filed By The Genette Simpkins Revocable Living Trust Regarding An 8.98 Acre Parcel Known As The “Love Tract” And Setting The Matter For A Public Hearing

### Public Hearing Process:

The public hearing should be conducted as follows:

1. Open the Public Hearing.
2. Allow staff to present the matter.
3. Allow the applicant to address the Trustees.
4. Take all public comment.
5. Close the Public Hearing.
6. Have Trustees discuss amongst themselves.
7. Trustees makes a motion.



### Purpose:

For the Board of Trustees to perform Step 1 of the annexation process discussed below. Specifically, the Board will receive and review a petition for annexation from the owner of the 8.98 Acre parcel known as the “Love” Tract and set the matter for what is referred to as an “eligibility hearing”, which is Step 2 discussed below. The Board’s function on Monday April 24, 2023 is largely administrative to

simply set the matter for the eligibility hearing. This will be accomplished by approving Resolution 13-2023.

**Background:**

Annexation generally involves three steps.

**Step 1 – Receipt of petition and setting of eligibility hearing.**

In this step, the Town receives the petition for annexation from the property owner and sets the matter for what is typically referred to as an “eligibility hearing” where the Board considers whether the property meets the requirements of the statutes C.R.S. §31-12-107. Step 1, adopting Resolution 13-2023 setting the eligibility hearing date is what the Board will be doing Monday, April 24, 2023.

Specifically, the Town received a petition for annexation from Genette Simpkins, Revocable Living Trust (the “Applicant”) for property located adjacent to the 21-acre Matthews parcel, known as the “Love Tract” Parcel **Exhibit A** (“the Property”).

**Step 2 – Eligibility hearing and resolution**

This is the step the Board will be undertaking at the eligibility hearing that it will set through Resolution 13-2023 for June 12th, 2023. In order for the Property to be deemed to be eligible for annexation, the Board must consider and make findings regarding the criteria set forth in **Colorado Revised Statute 31-12-105**, such as whether the Property is 1/6 contiguous to the existing Town boundaries, whether there is a commonality of interests between the Town and the Property, etc.

**Step 3 – Annexation and zoning of the Property**

If, at the eligibility hearing that will be held on June 12th, 2023 the Board finds the Property is eligible to be annexed and confirms that finding by adopting an eligibility resolution, then the matter will be set for hearing at which the Board will undertake the third step of the annexation process. Simply because a parcel of property is eligible to be annexed does not obligate the Board to annex the property. Annexation is a purely discretionary matter that is up to the Board to decide. Therefore the third step, which will be taken up at what is typically referred to as the “annexation hearing” is for the Board to decide (1) whether it wants to annex the Property, (2) if it does, what is the appropriate zoning for the Property (you will have received a recommendation as to zoning from the Planning Commission) and (3) what other terms and conditions does the Board wish to impose on the annexation (this is usually reflected in an annexation agreement that has been negotiated between the Town and the property owner prior to the annexation hearing).

If, at the annexation hearing, the Board decides it wishes to annex the property, then the Board will usually adopt an annexation ordinance that (1) approves annexation of the property into the Town, (2) zones the property, and (3) approves the annexation agreement. If all the necessary work has been done in advance, Steps 2 and 3 can be combined into a single hearing.

**Motion:**

The Board of Trustees moves to adopt Resolution 13-2023; Regarding A Petition For Annexation for the 8.98 Acres Parcel Known as the "Love Tract" and setting the matter for an eligibility hearing.

Or

Move to Deny the Resolution 13-2023 due to the following deficiencies\_\_\_\_\_

## Petition and Map Content Requirements

### C.R.S. § 31-12-107

The **Petition** shall contain the following:

- An allegation that it is desirable and necessary that such area be annexed to the municipality;
- An allegation that the requirements of sections 31-12-104 and 31-12-105 exist or have been met;
- An allegation that the signers of the petition comprise more than fifty percent of the landowners in the area and own more than fifty percent of the area proposed to be annexed, excluding public streets and alleys and any land owned by the annexing municipality;
- A request that the annexing municipality approve the annexation of the area proposed to be annexed;
- The signatures of such landowners;
- The mailing address of each such signer;
- The legal description of the land owned by such signer;
- The date of signing of each signature; and
- The affidavit of each circulator of such petition, whether consisting of one or more sheets, that each signature therein is the signature of the person whose name it purports to be.

Accompanying the **Petition** shall be four copies of an annexation **Map** containing the following information:

- A written legal description of the boundaries of the area proposed to be annexed;
- A map showing the boundary of the area proposed to be annexed;
- Within the annexation boundary map, a showing of the location of each ownership tract in unplatted land and, if part or all of the area is platted, the boundaries and the plat numbers of plots or of lots and blocks;
- Next to the boundary of the area proposed to be annexed, a drawing of the contiguous boundary of the annexing municipality and the contiguous boundary of any other municipality abutting the area proposed to be annexed.

# ANNEXATION MAP

An Annexation Map is required.

The Town Administrator and Community Development Director should assist in making the determination on the limits of abutting ROW that will be included with the Annexation. When ROW is included in the annexation it must be the full ROW (not to centerline).

The actual approval of the annexation of land is completed through approval of an Ordinance. The zoning shall be approved by separate ordinance, but can occur at the same hearing.

### TECHNICAL FORMAT FOR ANNEXATION MAP

1. The size of each sheet should conform to Grand County standards: 24" x 36"
2. Each sheet should be numbered consecutively.
3. The drawing should be to engineering scale and show a ratio and bar scale.
4. An appropriate title block
  - Clearly state "ANNEXATION MAP" at the top of the page. Below that should be lines describing the quarter section, section, township, range, meridian, county, and state.
5. The land description is provided in a metes and bounds format. The area of the property boundaries should be noted in square feet and acres (containing x sf or x acres more or less). The calculation should also break down the area of the annexation that is public right of way.
6. A closure sheet on the boundary indicating it closes within 1': 10,000'. This information needs to match any abutting annexation data.
7. Add a legible vicinity map that shows the contiguous boundary with the Town with north arrow and scale.
8. Add to the Town signature and date block, as follows:

---

Mayor	Date
-------	------

---

Town Clerk	Date
------------	------

---

Town Attorney	Date
---------------	------

---

Ordinance No.	Effective Date
---------------	----------------

10. Surveyor's Certificate is required (suggest the following).
  - I, *name of surveyor*, a Professional Land Surveyor registered in the State of Colorado do hereby certify that not less than one-sixth (1/6) of the perimeter of the area proposed to be annexed to the Town of Center, Colorado, is contiguous with the boundaries of the annexing municipality, and that this annexation plat substantially complies with the Colorado Revised Statutes and the Town of Grand Lake, Colorado Codes appertaining thereto.
11. The current Town limit lines are labeled with the legend key, The proposed town limits are shown with diagonally-hatching (\\\\\\\\\\\\\\\\) abutting the exterior perimeter of the area to be annexed.

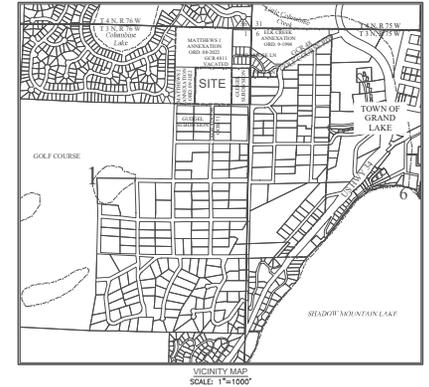
# ANNEXATION MAP

12. Show the annexation ordinance numbers for all abutting parcels within the Town limits.
13. Add to the 1/6 Contiguous Perimeter Calculation the following data:  
Total area \_\_\_\_\_
14. Label the contiguous boundaries of the municipality, the county, or districts.
15. Show the name and widths of existing perimeter public roads and the recording information that created them.
16. Provide County Recorder's Certificate.
17. Within the area being annexed, show ownership lines and owner's names of the individual ownerships within areas of unplatted land. If part or all of the area is platted, also show the plat boundary, lot and block numbers, and subdivision plat name and filing no.
18. Label abutting Townships and Ranges (if applicable).
19. Submit copies of any recorded subdivision plats and documents within or abutting the proposed annexation area.
20. When mylars are requested, all sheets should be stamped and signed by the surveyor. The stamp may be of the rubber stamp; crimp; or electronic type. Upon approval provide mylars of the annexation map(s).

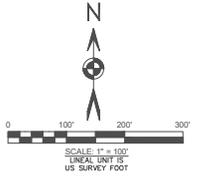
# LOVE TRACT ANNEXATION MAP

## A METES AND BOUNDS TRACT OF LAND DESCRIBED AT RECEPTION 2015-000641

A TRACT OF LAND IN THE NE1/4E1/4 (LOT 1) OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 76 WEST OF THE 6th PRINCIPAL MERIDIAN,  
COUNTY OF GRAND, STATE OF COLORADO  
(VACANT LAND)



- SURVEY NOTES:**
1. THIS ANNEXATION MAP IS NOT A BOUNDARY SURVEY OR SHALL IT BE CONSTRUED AS A BOUNDARY DETERMINATION OF OWNERSHIP AND/OR OCCUPATION. THIS ANNEXATION IS 8.98 ACRES PER DEED RECORDED AT RECEPTION 2005-000641 HAVING A DEED CLOSURE # 1:2033137.
  2. THE FOLLOWING DOCUMENTS WERE UTILIZED IN THE PREPARATION OF THIS ANNEXATION MAP.
    - a. GRAND COUNTY CLERKS RECORDS
    - b. BOOK 152 PAGE 366, WARRANTY DEED, MATTHEWS TO MATTHEWS, FILED JANUARY 19, 1966.
    - c. BOOK 152 PAGE 368, WARRANTY DEED, MATTHEWS TO MEYER, FILED OCTOBER 4, 1964.
    - d. RECEPTION 1987, PLAT OF GUGLIGL SUBDIVISION, RECORDED NOVEMBER 5, 1994.
    - e. BOOK 92 PAGE 125, RIGHT OF WAY DEED, CLIFTON B. HOWARD TO THE BOARD OF COUNTY COMMISSIONERS, FILED SEPTEMBER 24, 1965.
    - f. BOOK 116 PAGE 354, WARRANTY DEED, ESTATE OF CLIFTON B. HOWARD TO MATTHEWS, RECORDED MAY 4, 1960.
    - g. RECEPTION 1991A, PLAT OF AMENDED PLAT TO GUGLIGL SUBDIVISION, RECORDED FEBRUARY 24, 1994.
    - h. RECEPTION 101070, PLAT OF COLUMBINE LAKE, RECORDED MAY 21, 1969.
    - i. RECEPTION 2001-00178, WARRANTY DEED, RECORDED MARCH 10, 2001. SUBJECT VESTING DEED WITH PROPERTY DESCRIPTION USING CALLS TO THE COLUMBINE LAKE MONUMENTS DONE JUNIOR AND WRITTEN BY LST1415 BY LAND SURVEY DEPOSIT L5415.
    - j. RECEPTION 2002-008429, COUNTY RESOLUTION TO VACATE A PORTION OF THE 60' WIDE RIGHT-OF-WAY DESCRIBED ON RIGHT-OF-WAY DEED BOOK 92 PAGE 150.
    - k. RECEPTION 2002-008430, QUIT CLAIM DEED TO THE TOWN OF GRAND LAKE FOR A PORTION A OF THE 60' WIDE RIGHT-OF-WAY DESCRIBED ON RIGHT-OF-WAY DEED BOOK 96 PAGE 150.
    - l. RECEPTION 110970, PLAT OF COLUMBINE LAKE, RECORDED MAY 21, 1969.
    - m. GRAND COUNTY SURVEY DEPOSIT L5415.
    - n. L5461, DEPOSIT DATE DECEMBER 12, 1995, IMPROVEMENT SURVEY PLAT BY PLS 11415 DATED 12/5/1995.
    - o. L52418, DEPOSIT DATE OF JULY 14, 2021, IMPROVEMENT SURVEY PLAT BY PLS 30663 DATED 11/16/2021. TITLE COMMITMENT.
    - p. COMMITMENT No. 1118915-C ISSUED BY TITLE COMPANY OF THE ROCKIES AS AGENTS FOR WESTCO LAND TITLE INSURANCE COMPANY WITH AN EFFECTIVE DATE OF FEBRUARY 27, 2023.
  3. THE BASIS OF BEARING FOR THIS ANNEXATION MAP IS ALONG THE NORTH LINE OF THE LOVE TRACT, BETWEEN FOUND #5 BEARS WITH 1.5" DIA. ALUMINUM CAPS STAMPED "PLS 11415" AS SHOWN HEREON HAVING A BEARING OF N 89°07' W, AS MEASURED BY RTN/GPS METHOD ON NOVEMBER 6, 2020. LINEAR UNITS SHOWN ARE U.S. SURVEY FOOT.
  4. REFERENCED IS HEREBY MADE TO THE LAND SURVEY DEPOSIT L52418, FOR MATHEW BOUNDARY INFORMATION.
  5. THE STIPULATION AND CONSENT AGREEMENT AT RECEPTION 2009-001100 AND 2009-001101 RESPECTIVELY, DETAILS ACCESS FROM AND TO THE STANLEY PROPERTY. BULLET ITEM 12 STATES, THERE SHALL BE NO ROAD OR DRIVEWAY FROM THE STANLEY PROPERTY ONTO THE 30' WIDE STRIP IMMEDIATELY TO THE NORTH OF TRACTS 32 AND 17, GUGLIGL SUBDIVISION.



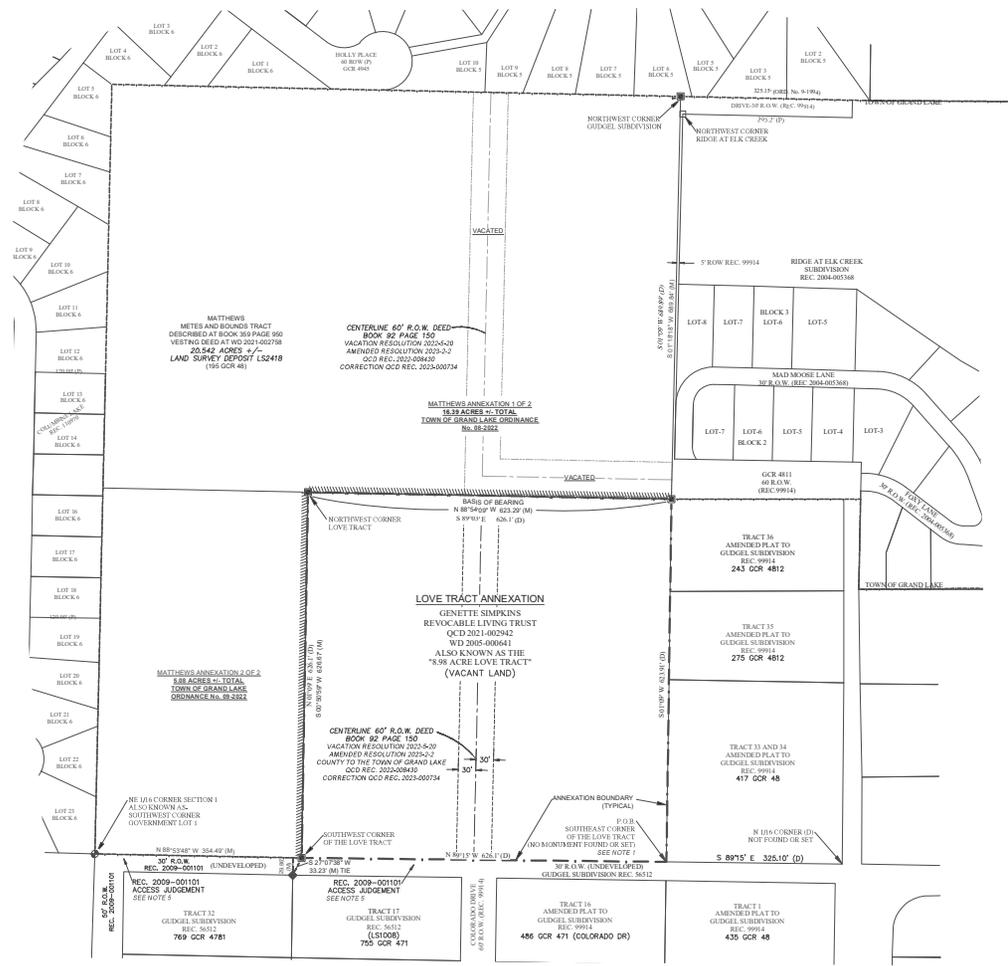
- LEGEND**
- FOUND 30" LONG #5 BEAR WITH 3.20" DIA. ALUMINUM CAP STAMPED PLS 30663, AS DESCRIBED
  - FOUND SECTION CORNER AS DESCRIBED
  - FOUND #5 BEAR WITH 1.5" DIA. ALUMINUM CAP STAMPED PLS 11415, AS SHOWN ON L5461
  - FOUND #5 BEAR WITH YELLOW PLASTIC CAP STAMPED "DES PLS 26289", AT GRADE
  - POINT AS DESCRIBED
  - (P) - PLAT REC. 110970 BEARING AND DISTANCES
  - (M) - FIELD MEASURED
  - (D) - DEED INFORMATION
  - DIA. - DIAMETER
  - GCR - GRAND COUNTY ROAD
  - REC - RECEPTION
  - R.O.W. - RIGHT-OF-WAY
  - Q.C.D. - QUITCLAIM DEED
  - WD - WARRANTY DEED
  - EXISTING TOWN LIMITS
  - ||||| CONTIGUOUS BOUNDARY

**SURVEYORS CERTIFICATE**

I, KEITH E. LUTTRELL, A PROFESSIONAL LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT NOT LESS THAN ONE-SIXTH (1/6) OF THE PERIMETER OF THE AREA PROPOSED TO BE ANNEXED TO THE TOWN OF GRAND LAKE, IS CONTIGUOUS WITH THE BOUNDARIES OF THE ANNEXING MUNICIPALITY AND THAT THIS ANNEXATION MAP SUBSTANTIALLY COMPLIES WITH THE COLORADO REVISED STATUTES AND THE TOWN OF GRAND LAKE, COLORADO CODES APPLICABLE THERE TO, AND THAT THIS ANNEXATION MAP WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, IT IS BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF, IT IS IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND THAT IT IS NOT A GUARANTEE OR WARRANTY EITHER EXPRESSED OR IMPLIED.

KEITH E. LUTTRELL, PLS 36063  
FOR AND ON BEHALF OF  
PEAK TO PEAK LAND  
SURVEYING & MAPPING, INC.

FOR REVIEW



**LOVE TRACT ANNEXATION CALCULATION**

TOTAL PERIMETER TO ANNEX = 2,500.2'
18' PERIMETER REQUIRED = 417.0'
CONTIGUITY LENGTH = 1,252.2'
TOTAL AREA = 88.98 ACRES

**PROPERTY DESCRIPTION:** (PER BOOK WARRANTY DEED REC. 2015-000641)

A TRACT OF LAND IN THE NE1/4E1/4 (LOT 1) OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 76 WEST OF THE 6TH P.M., BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SE CORNER OF THIS TRACT WHENCE THE N1/16 CORNER BETWEEN SAID SECTION 1, TOWNSHIP 3 NORTH, RANGE 76 WEST OF THE 6TH P.M., AND SECTION 6, TOWNSHIP 3 NORTH, RANGE 76 WEST OF THE 6TH P.M., BEARS SOUTH 89°15' EAST, FOR A DISTANCE OF 326.1 FEET;

THENCE RUNNING ALONG THE N1/16TH LINE OF SECTION 1, NORTH 89°15' WEST FOR A DISTANCE OF 626.1 FEET TO THE SW CORNER OF THIS TRACT;

THENCE NORTH 1°09' EAST, FOR A DISTANCE OF 626.1 FEET TO THE NW CORNER OF THIS TRACT;

THENCE S 89°15' EAST, FOR A DISTANCE OF 626.1 FEET TO THE NE CORNER OF THIS TRACT AND THE INTERSECTION WITH THE WEST LINE OF GUGLIGL SUBDIVISION;

THENCE ALONG SAID WEST LINE OF GUGLIGL SUBDIVISION SOUTH 01°00' WEST, FOR A DISTANCE OF 623.91 FEET, MORE OR LESS TO THE POINT OF BEGINNING.

EXCEPT THAT PORTION CONVEYED TO THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF GRAND AND STATE OF COLORADO BY INSTRUMENT RECORDED SEPTEMBER 20, 1944 IN BOOK 92 AT PAGE 150.

**GRAND COUNTY ASSESSOR DATA:**

PARCEL NUMBER 1191-011-00-002  
VACANT LAND  
ZONED GRAND COUNTY RESIDENTIAL  
INCLUDED IN THE THREE LAKES DESIGN AND REVIEW AREA AND THE GRAND COUNTY URBAN GROWTH AREA 2

**TRUSTEES STATEMENT:**

APPROVED FOR ANNEXATION BY ORDINANCE No. \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

APPROVED BY THE TOWN OF GRAND LAKE BOARD OF TRUSTEES ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

BY THE BOARD OF TRUSTEES OF THE TOWN OF GRAND LAKE

MAYOR \_\_\_\_\_ DATE \_\_\_\_\_

TOWN CLERK \_\_\_\_\_ DATE \_\_\_\_\_

TOWN ATTORNEY \_\_\_\_\_ DATE \_\_\_\_\_

ORDINANCE No. \_\_\_\_\_ EFFECTIVE DATE \_\_\_\_\_

SHEET 1 OF 1

NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL

Peak to Peak Land Surveying & Mapping, Inc.

P.O. Box 100  
Kennington, Colorado 80450  
970-224-0124

**LOVE TRACT ANNEXATION MAP**

A METES AND BOUNDS TRACT OF LAND DESCRIBED AT RECEPTION 2015-000641

A TRACT OF LAND IN THE NE1/4E1/4 (LOT 1) OF SECTION 1, TOWNSHIP 3 NORTH, RANGE 76 WEST OF THE 6TH P.M., COUNTY OF GRAND, STATE OF COLORADO (VACANT LAND)

Draftsman: JL Checked by: KL Date: 03/09/2023 Job no.:22-0161STANLEY

NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.

PETITION FOR ANNEXATION  
TO  
CITY/TOWN OF Grand Lake, COLORADO

TO: THE CITY/TOWN CLERK AND THE CITY/TOWN COUNCIL OF THE CITY/TOWN OF Grand Lake, COLORADO

RE: ANNEXATION OF LAND COMMONLY KNOWN AS The Love Tract

THE UNDERSIGNED PETITIONER(S) in accordance with Title 31, Article 12, Part 1, of the Colorado Revised Statutes, as amended (commonly known as the Municipal Annexation Act of 1965), hereby petitions the City/Town of Grand Lake, Colorado, for annexation to the City/Town of Grand Lake of the unincorporated area more particularly described hereafter, and in support of this Petition, the undersigned Petitioner(s) allege(s) and state(s) the following:

1. That it is desirable and necessary that such area described in **Exhibit 1**, attached hereto and incorporated herein by reference, be annexed to the City/Town of Grand Lake.

2. That the area sought to be annexed to the City/Town of Grand Lake meets all the requirements of Sections 31-12-104 and 31-12-105, C.R.S., as amended, of the Municipal Annexation Act of 1965, in that:

- (a) Not less than one-sixth (1/6th) of the perimeter of the area proposed to be annexed is contiguous with the City/Town of Grand Lake.
- (b) A community of interest exists between the area proposed to be annexed and the City/Town of Grand Lake.
- (c) The area proposed to be annexed is urban or will be urbanized in the near future.
- (d) The area proposed to be annexed is integrated with, or is capable of being integrated with the City/Town of Grand Lake.
- (e) No land within the area proposed to be annexed and which is held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate, meets either of the following:
  - (1) Such separate tract or parcel is being divided by the requested annexation without the written consent of the landowner or landowners thereof, unless such tracts or parcels are separated by a dedicated street, road or other public way, and to the extent a tract or parcel is so divided, this petition is intended to evidence such consent; or
  - (2) If such a separate tract or parcel comprises twenty (20) acres or more and which, together with the buildings and improvements situated thereon, such tract or parcel has an assessed value in excess of Two Hundred Thousand Dollars (\$200,000.00) for ad valorem tax purposes for the year next preceding the annexation, is included within the area proposed to be annexed without the written consent of the landowner or landowners thereof.
- (f) The annexation of the area proposed to be annexed will not result in the detachment of area from any school district and the attachment of such area to another school district.
- (g) No annexation proceedings have been commenced for the annexation to another municipality of any part or all of the area proposed to be annexed to the City/Town hereunder nor is any part of said area presently a part of any incorporated city, town or city and county.
- (h) The requirements of Sections 31-12-104 and 31-12-105, C.R.S., as amended, exist or have been met.
- (i) The annexation of the area proposed to be annexed will not have the effect of extending the boundary of the City/Town of Grand Lake more than three miles in any direction from any point of the City's/Town's boundary in any one year.

- (j) In establishing the boundaries of the area proposed to be annexed, where a portion of a platted street or alley is annexed, the entire width of said street or alley is included with the area annexed.
- (k) Reasonable access shall not be denied to landowners, owners of easements, or the owners of franchises adjoining a platted street or alley to be annexed by the City/Town but is not bounded on both sides by the City/Town.

**(l) [Please Check the Appropriate Line:]**

The area proposed to be annexed comprises **more than ten (10) acres** and, therefore, the City's/Town's preparation of an Impact Report as provided for in Section 31-12-108.5, C.R.S., as amended, is required unless waived by the board of county commissioners for \_\_\_\_\_ County, Colorado in accordance with Section 31-12-108.5, C.R.S.

OR

The area proposed to be annexed comprises **ten (10) acres or less** and, therefore, the City's/Town's preparation of an Impact Report as provided for in Section 31-12-108.5, C.R.S., as amended, is not required

3. That accompanying this Petition are four (4) copies of the annexation map containing the following information:

- (a) a written legal description of the boundaries of the area proposed to be annexed;
- (b) a map showing the boundary of the area proposed to be annexed, prepared by and containing the seal of a land surveyor;
- (c) with the annexation boundary map there is shown the location of each ownership tract in unplatted land, and if part or all of the area is platted, then the boundaries and the plat numbers of plots or of lots and blocks are shown; and
- (d) next to the boundary of the area proposed to be annexed is drawn the contiguous boundary of the City/Town, and the contiguous boundary of any other municipality abutting the area proposed to be annexed and the dimensions thereof.

4. That the Petitioner(s) signed this Petition for Annexation not more than 180 days prior to the date of the filing of this Petition for Annexation with the City/Town Clerk.

5. That the undersigned Petitioner(s) comprises at least fifty percent (50%) of all of the landowners of the area to be proposed to be annexed, exclusive of streets and alleys.

6. That upon the Annexation Ordinance becoming effective, all lands within the area sought to be annexed shall become subject to all ordinances, resolutions, rules and regulations of the City/Town of Grand Lake, except for general property taxes of the City/Town of Grand Lake which shall become effective on January 1 of the next succeeding year following passage of the Annexation Ordinance.

7. That this Petition for Annexation includes the signature(s) of all Petitioner(s) proposing the annexation, the mailing address of each Petitioner, the legal description of the land owned by each Petitioner, and the date of signing of each signature. The legal description of land owned by each undersigned Petitioner is identified in **Exhibit 1**.

THEREFORE, THE PETITIONER(S), as the owner(s) of the property described in Exhibit 1, respectfully requests that the City/Town Council of the City/Town of Grand Lake, Colorado, approve the annexation of the area proposed to be annexed, and the Petitioner(s) do(es) hereby consent to the annexation of the property described in Exhibit 1.

PETITIONER:

Genette Simpkins Revocable Living Trust  
RLT, a (type of entity)

By:

*Genette Simpkins*  
Name: Genette Simpkins

Title: Trustee

Date of Signature: 01/31, 2023

As the Owner of Property Described in Exhibit 1.

Mailing Address:

45-238 Kokokahi Pl  
Kaneohe, HI 96744

AFFIDAVIT OF CIRCULATOR

The undersigned, being of lawful age, who being first fully sworn upon oath, deposes and says that the undersigned was a circulator of the foregoing Petition for Annexation of lands to the City/Town of Grand Lake, Colorado, and that the signature immediately above this Affidavit was witnessed by affiant and is the true signature of the person whose it purports to be.

By:

*Genette Simpkins*  
Circulator

STATE OF Hawaii )  
COUNTY OF Honolulu ) ss.

City of

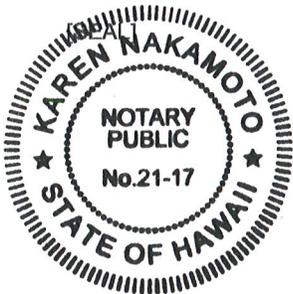
The foregoing Affidavit of Circulator was subscribed and sworn to before me this 31st day of January, 2023 by Genette Simpkins.

Witness my hand and official seal.

My commission expires: 4/11/2025

By:

*Karen Nakamoto*  
Notary Public



Doc. Date: NA # Pages: 3  
Karen Nakamoto First Circuit  
Doc. Description: Petition for Annexation To city/Town of Grand Lake, Colorado  
Karen Nakamoto 1/31/2023  
Notary Signature Date

NOTARY CERTIFICATION

## Petition and Map Content Requirements

### C.R.S. § 31-12-107

The **Petition** shall contain the following:

- An allegation that it is desirable and necessary that such area be annexed to the municipality;
- An allegation that the requirements of sections 31-12-104 and 31-12-105 exist or have been met;
- An allegation that the signers of the petition comprise more than fifty percent of the landowners in the area and own more than fifty percent of the area proposed to be annexed, excluding public streets and alleys and any land owned by the annexing municipality;
- A request that the annexing municipality approve the annexation of the area proposed to be annexed;
- The signatures of such landowners;
- The mailing address of each such signer;
- The legal description of the land owned by such signer;
- The date of signing of each signature; and
- The affidavit of each circulator of such petition, whether consisting of one or more sheets, that each signature therein is the signature of the person whose name it purports to be.

Accompanying the **Petition** shall be four copies of an annexation **Map** containing the following information:

- A written legal description of the boundaries of the area proposed to be annexed;
- A map showing the boundary of the area proposed to be annexed;
- Within the annexation boundary map, a showing of the location of each ownership tract in unplatted land and, if part or all of the area is platted, the boundaries and the plat numbers of plots or of lots and blocks;
- Next to the boundary of the area proposed to be annexed, a drawing of the contiguous boundary of the annexing municipality and the contiguous boundary of any other municipality abutting the area proposed to be annexed.

# ANNEXATION MAP

An Annexation Map is required.

The Town Administrator and Community Development Director should assist in making the determination on the limits of abutting ROW that will be included with the Annexation. When ROW is included in the annexation it must be the full ROW (not to centerline).

The actual approval of the annexation of land is completed through approval of an Ordinance. The zoning shall be approved by separate ordinance, but can occur at the same hearing.

### TECHNICAL FORMAT FOR ANNEXATION MAP

1. The size of each sheet should conform to Grand County standards: 24" x 36"
2. Each sheet should be numbered consecutively.
3. The drawing should be to engineering scale and show a ratio and bar scale.
4. An appropriate title block
  - Clearly state "ANNEXATION MAP" at the top of the page. Below that should be lines describing the quarter section, section, township, range, meridian, county, and state.
5. The land description is provided in a metes and bounds format. The area of the property boundaries should be noted in square feet and acres (containing x sf or x acres more or less). The calculation should also break down the area of the annexation that is public right of way.
6. A closure sheet on the boundary indicating it closes within 1': 10,000'. This information needs to match any abutting annexation data.
7. Add a legible vicinity map that shows the contiguous boundary with the Town with north arrow and scale.
8. Add to the Town signature and date block, as follows:

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Mayor	Date
-------	------

---

Town Clerk	Date
------------	------

---

Town Attorney	Date
---------------	------

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Ordinance No.	Effective Date
---------------	----------------

10. Surveyor's Certificate is required (suggest the following).
  - I, *name of surveyor*, a Professional Land Surveyor registered in the State of Colorado do hereby certify that not less than one-sixth (1/6) of the perimeter of the area proposed to be annexed to the Town of Center, Colorado, is contiguous with the boundaries of the annexing municipality, and that this annexation plat substantially complies with the Colorado Revised Statutes and the Town of Grand Lake, Colorado Codes appertaining thereto.
11. The current Town limit lines are labeled with the legend key, The proposed town limits are shown with diagonally-hatching (\\\\\\\\\\\\\\\\) abutting the exterior perimeter of the area to be annexed.

# ANNEXATION MAP

12. Show the annexation ordinance numbers for all abutting parcels within the Town limits.
13. Add to the 1/6 Contiguous Perimeter Calculation the following data:  
Total area \_\_\_\_\_
14. Label the contiguous boundaries of the municipality, the county, or districts.
15. Show the name and widths of existing perimeter public roads and the recording information that created them.
16. Provide County Recorder's Certificate.
17. Within the area being annexed, show ownership lines and owner's names of the individual ownerships within areas of unplatted land. If part or all of the area is platted, also show the plat boundary, lot and block numbers, and subdivision plat name and filing no.
18. Label abutting Townships and Ranges (if applicable).
19. Submit copies of any recorded subdivision plats and documents within or abutting the proposed annexation area.
20. When mylars are requested, all sheets should be stamped and signed by the surveyor. The stamp may be of the rubber stamp; crimp; or electronic type. Upon approval provide mylars of the annexation map(s).

# NOTICE OF PUBLIC HEARING

NOTICE is hereby given that the Grand Lake Board of Trustees will hold a Public Hearing on Monday, April 24th, 2023 at 7:00 AM at 1026 Park Ave. Grand Lake, CO. The subject of the hearing is a finding of substantial damage to the property. The property is 8.98 acres of land located in Section 11, Item D, T3N R7E Desc B/203 P/256 All 8.98 Ac In Lot 1 Sec 11 T3N R7E Desc B/203 P/256 also known as "Love Tract"

*Section 11, Item D.*

Additional information is available for public inspection at Town Hall during normal business hours. Meeting link will be available on [www.townofgrandlake.com](http://www.townofgrandlake.com) under agenda items 305 minutes. Public comments and participation are encouraged and welcome, in person or by writing to the Town of Grand Lake, P.O. Box 100, Grand Lake, CO 80447 or by e-mail to [planner@toglco.com](mailto:planner@toglco.com).

**PUBLISHED IN THE MIDDLE PARK TIMES ON THURSDAY, APRIL 6, 2023.**

**TOWN OF GRAND LAKE  
BOARD OF TRUSTEES**

**RESOLUTION NO. 13-2023**

**A RESOLUTION REGARDING SUBSTANTIAL COMPLIANCE OF A  
PETITION FOR ANNEXATION FILED BY THE GENETTE SIMPKINS  
REVOCABLE LIVING TRUST REGARDING AN 8.98 ACRE PARCEL KNOWN  
AS THE “LOVE TRACT” AND SETTING THE MATTER FOR A PUBLIC  
HEARING**

**WHEREAS**, the Genette Simpkins Revocable Living Trust (“the Petitioner”), filed with the Town Clerk a Petition For Annexation dated January 31, 2023 (“the Petition”); and

**WHEREAS**, the Board of Trustees of the Town of Grand Lake reviewed such Petition at its meeting held on April 24, 2023;

**FINDINGS**

The Board of Trustees hereby finds and concludes that the Petition substantially complies with Section 31-12-107(1), C.R.S., and that a public hearing should be held to determine if the proposed annexation complies with Section 31-12-104 and Section 31-12-105, C.R.S., or such parts thereof as may be required to establish eligibility under the terms of Section 31-12-101, C.R.S., et seq.

**NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES  
OF THE TOWN OF GRANBY, COLORADO, AS FOLLOWS:**

That a public hearing shall be set for June 12th, 2023 beginning at 6:00 P.M. or as soon thereafter as the matter may be heard, with such hearing to be conducted at the Grand Lake Town Hall, 1026 Park Ave., Grand Lake, Colorado. The purpose of such hearing shall be to consider the Petition for Annexation and to determine whether the statutes referred to above have been complied with, whether the property is eligible for annexation, and whether the area proposed to be annexed meets the requirements of Section 31-12-104 and 31-12-105, C.R.S.

**MOVED, SECONDED AND ADOPTED BY THE BOARD OF TRUSTEES  
OF THE TOWN OF GRAND LAKE, COLORADO THIS 24<sup>TH</sup> DAY OF APRIL,  
2023.**

( S E A L )

Votes Approving: \_\_\_\_\_  
Votes Opposed: \_\_\_\_\_  
Absent: \_\_\_\_\_  
Abstained: \_\_\_\_\_

**THE TOWN OF GRAND LAKE**

\_\_\_\_\_  
Alayna Carrell  
Town Clerk

By: \_\_\_\_\_  
Steve Kudron  
Mayor



1026 Park Ave · PO Box 99  
Grand Lake, CO 80447  
970-627-3435  
www.townofgrandlake.com

To: Grand Lake Board of Trustees  
From: John Crone, Town Manager  
Re: Resignation of Trustee Daryn Packer  
Date: April 24, 2023

**Trustee Packer**

Effective Tuesday, April 11, 2023, Daryn Packer has resigned his position as a Trustee for the Town of Grand Lake. Trustee Packer’s resignation was necessitated by a change in his residence.

Trustee Packer has been a valuable member of the Board and a valuable contributor to our community. Her efforts on behalf of the Town will be sorely missed.

**Filling the Vacancy**

When a vacancy occurs on the Board of Trustees, the next steps are dictated by both Colorado Revised Statute § 31-4-205 and Municipal Code § 2-3-5. The language of the state statute dictates a timeline for filling a vacancy:

- (2) Within sixty days after a vacancy occurs in the city council, the council shall:
  - (a) Appoint a person possessed of all statutory qualifications to fill the vacancy until the term of office of a successor elected at the next regular election has commenced as provided in section 31-4-105; or
  - (b) Order an election, subject to the municipal election code, to be held as soon as practicable to fill the vacancy until the term of office of a successor elected at the next regular election has commenced as provided in section 31-4-105.
- C.R.S. § 31-4-205(2)

The language governing the process is largely mirrored in the Grands Lake Municipal Code:

**Filling Vacancies in Elective Offices**

The Board of Trustees shall have power, by appointment, to fill all vacancies in the Board or in any other elected office, and the person so appointed shall hold office until the next regular election and until his successor is elected and qualified. If the term of the person creating the vacancy was to extend beyond the next regular election, the person elected to fill the vacancy shall be elected for the unexpired term. Where a vacancy or vacancies exist in the office of trustee and a successor or successors to be elected at the next election to fill the unexpired term or terms, the three candidates for trustee receiving the highest number of votes shall be elected to four-year terms and the candidate or candidates receiving the next highest number of votes, in descending order, shall be elected to fill the unexpired term or terms. (C.R.S. 31-4-301(5), 1973, 1979 Supp.)

- Grand Lake Municipal Code § 2-3-5.



1026 Park Ave · PO Box 99  
Grand Lake, CO 80447  
970-627-3435  
www.townofgrandlake.com

These requirements establish Saturday, June 10, 2023, as the final date in which the Board of Trustees must appoint someone to fill the vacancy or schedule a special election. There is no requirement that the Town advertises the vacancy or solicits applications; although, traditionally, the Town has taken those actions.

Whoever is selected to fill the vacancy will only fill the vacancy until a successor is elected in the April 8, 2024, election.

The Town's Municipal Code requires that all Trustees meet certain qualifications: Trustees shall be qualified electors who have resided within the limits of the Town for a period of at least twelve (12) consecutive months immediately preceding the date of the election; provided that in case of annexation, any person who has resided within the annexed territory for the time prescribed shall be deemed to have met the residence requirements for the Town to which the territory was annexed. (C.R.S. 31-4-301(1), 1973)

- Grand Lake Municipal Code § 2-4-1.

### Next Steps

Due to the burdens associated with a special election, staff recommends that the Board of Trustees take steps to appoint someone to fill the vacancy caused by Trustee Packer's resignation. To accomplish this the Board of Trustees should select a due date for applications to fill the vacancy and instruct staff to post notice of the vacancy in the local newspaper and at the Post Office and Town Hall. The Board of Trustees should also set the requirements for applications (i.e. letter of interest, proof of eligibility).

The Board will also need to decide when it wants to make the appointment. In order to give applicants time to respond, staff recommends that the Board set a deadline of Wednesday, May 17, 2023, at 4:30 pm for the return of applications. Staff also recommends that the Board interviews any selected candidates and makes the appointment at the regularly scheduled Board of Trustees' Meeting on May 22, 2023.

### Motion

Staff recommends the adoption of the following motion with any changes as directed by the Board.

*I move to have the Mayor instruct the Town Manager to post the attached Notice of Vacancy and Request for Applicants in the local newspaper, at Town Hall, the Grand Lake Post Office, and anywhere else that staff determines is appropriate; and, that the Board of Trustees adopt the timelines therein for the appointment of a Trustee to fill the current vacancy on the Grand Lake Board of Trustees.*



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Notice of Vacancy and Request for Applicants

The Town of Grand Lake currently has one vacancy on the Board of Trustees to be filled by appointment at the May 22, 2023, Board of Trustees Meeting. The term expires in April 2024.

Interested parties must be a registered elector of the Town of Grand Lake, at least 18 years of age, and have resided in the Town of Grand Lake for a period of at least 12 consecutive months immediately preceding the date of appointment.

Qualified individuals must submit a letter of interest and proof of qualification by May 17, 2023, no later than 4:30 P.M. to the Town Clerk at Town Hall located at 1026 Park Avenue, P.O. Box 99, Grand Lake, CO 80447. The letter of interest may be emailed to [clerk@toglco.com](mailto:clerk@toglco.com).

Questions may be directed to the Town Manager at [manager@toglco.com](mailto:manager@toglco.com) or at 970-531-8900.