# CITY COUNCIL MEETING

Tuesday, June 17, 2025
Regular Meeting - 6:00 PM
City Hall – City Council Chambers
425 Webster Street, Colusa, CA 95932

## AGENDA

**Zoom Information:**

https://us06web.zoom.us/j/85200701051
Meeting ID: 852 0070 1051 Passcode: 086453
Mobile: 669-444-9171, ID 85200701051

Mayor – Ryan Codorniz
Mayor Pro Tem – Denise Conrado
Council Member – Daniel Vaca
Council Member – Greg Ponciano
Council Member – Dave Markss

**CALL TO ORDER**

**ROLL CALL**

**PLEDGE OF ALLEGIANCE**

**APPROVAL OF AGENDA**

**PUBLIC COMMENTS** *(The public to address any item of City business NOT appearing on this Agenda. Speakers must limit their comments to three (3) minutes each. Please note that per Government Code Section 54954.3(a), the City Council cannot take action or express a consensus of approval or disapproval on any public comments regarding matters which do not appear on the printed agenda)*

**CONSENT CALENDAR** *- All items listed on the Consent Calendar are considered by the Council to be routine in nature and will be enacted by one motion unless an audience member or Council member requests otherwise, in which case, the item will be removed for separate consideration.*

1. Receive and File - Code Enforcement May report

2. Adopt - Resolution approving the updated local Hazard Mitigation Plan (LHMP)

3. Adopt - Resolution to authorize the City Manager to enter into a professional services agreement with Endemic Architecture, for preliminary design and planning services for a new police department facility, in an amount not to exceed $50,000

4. Adopt - Resolution approving the Lease Agreement between the City of Colusa and the County Office of Education for storage of records

**COUNCIL MEMBER /CITY MANAGER REPORTS AND STAFF COMMENTS**

**COUNCIL CONSIDERATION**

5. Consideration of a Resolution approving the proposed budget and GANN Limit, as City Manager and City Staff recommended.

   **Recommendation:** Council to adopt the Resolution approving the proposed Fiscal Year 2025-26 budget and Council to adopt the Resolution approving the appropriation Limit for the Fiscal Year 2025-26.

## FUTURE AGENDA ITEMS

## ADJOURNED TO CLOSED SESSION

PUBLIC COMMENTS (The public may comment on the item scheduled to be heard during the Closed Session)

1. Public Employee Performance Evaluation (§ 54957) Title: City Manager

## REPORT ON CLOSED SESSION

SHELLY KITTLE, CITY CLERK

**Notice of Meetings and Agendas**

The Regular Colusa City Council meetings are held the first and third Tuesdays of each month at 6:00 pm in the Colusa City Council Chambers located at 425 Webster Street, Colusa California unless otherwise noted above. Copies of open session agenda packets, which are distributed to the City Council, are on file at the front desk of the City at 425 Webster Street, Colusa, California, and are available for public inspection beginning 72 hours in advance, during normal business hours (7:00 am – 5:00 pm., Monday through Thursday except for City holidays). Additionally, if any reports or documents, which are public records, are distributed to the City Council less than 72 hours before the meeting, those reports and documents will also be available for public inspection at the front desk of the City and on the day of the meeting in the Council Chambers.

**Americans with Disabilities Act**

In compliance with the Americans with Disabilities Act, persons requiring accommodations for a disability at a public meeting should notify the City Clerk at least 48 hours prior to the meeting at (530) 458-4941 in order to allow the City sufficient time to make reasonable arrangements to accommodate participation in this meeting.

"This institution is an equal opportunity employer and provider"

# Code Enforcement Monthly Report

## 05/01/2025 to 05/31/2025

**Total Alleged Violations: 5**

**Active: 4**

**Pending: 2**

**Compliance / Closed: 2 (resolved in the field)**

**Complaints Received: 3** (via landline) / 2 (email portal) / 0 (In Person)

**To Be Noted**: Numbers do not reflect proactive in the field findings

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**Letters Sent: 7**

**In the field findings:**

***Shopping Carts: (0)*** *(Sav Mor / (**0**) Rite Aid **(0)** Dollar General*

***Note:*** *Business(es) advised to pick up carts as needed*

*Tagged Vehicle(s)* ***15 – Towed (9) Vehicle(s)***

*Continuous Parking 11-8(z), Wrong Side Parking 11-8 (e) & Expired Vehicles*

**Types of Violations:**

Vehicle / Nuisance Junk -Overgrown Weeds

**Continuous Follow Ups Conducted Daily – *Compliance in Progress***

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**Training / Education**

Continue Community & Resource Relations / Translating Codes & Ordinance(s) into Spanish while interacting with Hispanic Community / Active Shooter Training with Local Law Enforcement and Fire Agencies

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**Notes:**

Daily drive-bys / Walkthrough of Cannabis Locations (odor inspections) - Equipment Inspections / Cannabis Facility Walk Through's / Cannabis Partner relations / Continuous Research of relevant trainings / Attended Staff Meetings

# City of Colusa California

## STAFF REPORT

**DATE:** June 15, 2025

**TO:** Mayor and Members of the City Council

**FROM:** Jesse Cain, City Manager

**AGENDA ITEM:**

Consideration of the Resolution approving the updated local Hazard Mitigation Plan (LHMP)

**Recommendation:** City Council to adopt the updated Local Hazard Mitigation Plan (LHMP) as it pertains to the City of Colusa, in compliance with FEMA and AB 2140 requirements.

**BACKGROUND ANALYSIS:**

The City of Colusa, in collaboration with the County of Colusa and other local jurisdictions, participated in a comprehensive update of the County's Local Hazard Mitigation Plan (LHMP). This update was conducted in coordination with Colusa County's Office of Emergency Services and with the support of a consulting firm experienced in hazard mitigation planning.

The LHMP is a critical document that identifies potential natural and human-caused hazards that could affect our community, evaluates the risks, and outlines strategies to reduce future impacts. Participation in this planning process ensures the City remains eligible for federal mitigation grant funding through FEMA.

The updated LHMP meets the requirements set forth by the **Federal Emergency Management Agency (FEMA)** under the Disaster Mitigation Act of 2000. Additionally, it aligns with the objectives of **Assembly Bill 2140 (AB 2140)**, which encourages local jurisdictions to integrate hazard mitigation planning into their General Plans. Adoption of the LHMP allows the City of Colusa to be eligible for increased post-disaster funding opportunities through the California Disaster Assistance Act (CDAA).

The planning process included public outreach, risk assessments, and the development of mitigation strategies specific to the City of Colusa. City staff worked closely with County officials and stakeholders to ensure the City's unique risks and needs were adequately addressed in the plan.

Only the portions of the LHMP that directly pertain to the City of Colusa have been included in the meeting attachments for Council consideration. This includes the City's hazard profiles, vulnerability assessments, and mitigation strategies. The complete LHMP document is available to the public and can be accessed on the **County of Colusa's official website**:

Having an approved and adopted LHMP positions the city to access state and federal funding for future mitigation projects.

Normally the County receives a grant to create and update the LHMP document this last year that was not the case, and we were against a timeline to get it completed. The County split the cost between all the jurisdictions throughout the county with each of us paying our fair share. The City of Colusa's portion was split between the general fund and water and sewer.

**BUDGET IMPACT:**

$17,051.00

**STAFF RECOMMENDATION:** Adopt Resolution 25-

**ATTACHMENT:**

- Chapter 1 Introduction
- Chapter 2 What's new
- Annex A City of Colusa
- Chapter 7 Plan Implementation and Maintenance

# RESOLUTION NO. 25-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLUSA
ADOPTING THE LOCAL HAZARD MITIGATION PLAN UPDATE

**WHEREAS** the City of Colusa City Council recognizes the threat that natural hazards pose to people and property within City of Colusa; and

**WHEREAS** the City of Colusa and the County of Colusa has prepared a multi-hazard mitigation plan, hereby known as 2024 Colusa County LHMP Update in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

**WHEREAS** The 2024 Colusa County LHMP Update identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Colusa from the impacts of future hazards and disasters; and

**WHEREAS** adoption by City of Colusa City Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the Colusa County LHMP Update.

**WHEREAS**, the City of Colusa seeking FEMA approval of hazard mitigation plan desires to comply with the requirements of the Disaster Mitigation Act and to augment its emergency planning efforts by formally adopting the 2024 Colusa County LHMP Update by reference into the Safety Element of the General Plan in accordance with the requirements of AB 2140; and

**NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF COLUSA DOES HEREBY RESOLVE**:

In accordance with (local rule for adopting resolutions), the City of Colusa adopts the Colusa County LHMP Update. *While content related to (local government) may require revisions to meet the plan approval requirements, changes occurring after adoption will not require (local government) to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.*

**BE IT RESOLVED**, that the City of Colusa seeking FEMA approval of hazard mitigation plan) adopts the Colusa County LHMP Update by reference into the safety element of their general plan in accordance with the requirements of AB 2140; and

**BE IT FURTHER RESOLVED,** the City of Colusa will submit this adoption resolution to the California Office of Emergency Services and FEMA Region IX officials to enable the plan's final approval in accordance with the requirements of the Disaster Mitigation Act of 2000 and to establish conformance with the requirement of AB 2140.

This Resolution shall be effective immediately.

Passed and adopted this 17th day of June 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
RYAN CODORNIZ, MAYOR

Attest:

_____
Shelly Kittle, City Clerk

# Chapter 1 Introduction

## 1.1 Purpose

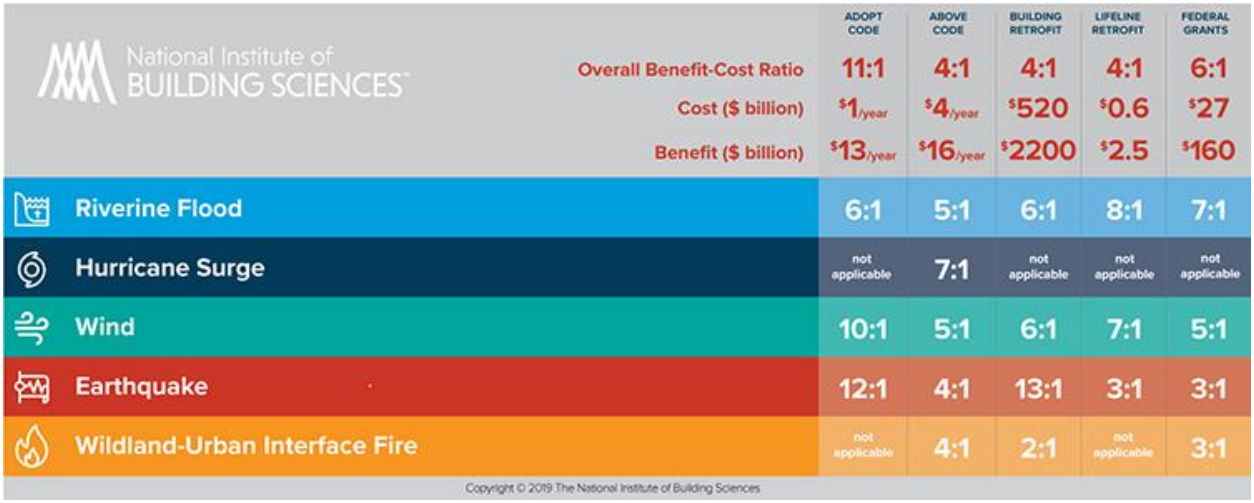
Colusa County, two incorporated communities, and six special districts prepared this Local Hazard Mitigation Plan (LHMP) Update to the Federal Emergency Management Agency (FEMA) approved 2018 Colusa County LHMP. The purpose of this LHMP Update is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events and natural disasters. This LHMP Update demonstrates the communities' commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This LHMP Update was also developed, among other things, to ensure Colusa County and participating jurisdictions' continued eligibility for certain federal disaster assistance: specifically, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, Building Resilient Infrastructure and Communities (BRIC) program, and the Flood Mitigation Assistance (FMA) program.

## 1.2 Background and Scope

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because most expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Although the timing of natural disasters is unpredictable, their occurrence is largely predictable over time, and much of the damage caused by these events can be significantly reduced.

Hazard mitigation is defined by FEMA as "any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." The results of a three-year, congressionally mandated independent study to assess future savings from mitigation activities provide evidence that, overall, mitigation activities are highly cost-effective investments. On average, each dollar spent on mitigation saves society an average of $6 in avoided future losses in addition to saving lives and preventing injuries (National Institute of Building Science Multi-Hazard Mitigation Council 2019 Interim Report) (see Figure 1-1).

*Figure 1-1 Natural Hazard Mitigation Savings by Hazard Type and Mitigation Type*




Source: National Institute of Building Science Multi-Hazard Mitigation Council 2019 Interim Report

Hazard mitigation planning is the process through which hazards are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented. This plan documents Colusa County's hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the County and participating jurisdictions will use to decrease vulnerability and increase resiliency and sustainability in the community.

This Colusa County LHMP is a multi-jurisdictional plan that geographically covers the entire area within Colusa County's jurisdictional boundaries (hereinafter referred to as the Planning Area). The following jurisdictions participated in the planning process and are seeking FEMA approval of the LHMP Update:

- Colusa County*
- City of Colusa*
- City of Williams*
- Colusa County RCD
- Cortina Community Services District
- Kletsel Dehe Wintun Nation
- Reclamation District 108*
- RD 479
- Sacramento River West Side Levee District*

* Participated in 2018 Colusa County LHMP

All plan participants from the 2018 Colusa County Plan are participating in this LHMP Update.

This LHMP Update was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. (Hereafter, these requirements and regulations will be referred to collectively as the Disaster Mitigation Act (DMA) or DMA 2000.) This planning effort also follows FEMA's most current effective LHMP Preparation and Review Guidance, LHMP Policy Guide FP 206-21-0002 effective April 19, 2023. While DMA 2000 emphasized the need for mitigation plans and more coordinated mitigation planning and implementation

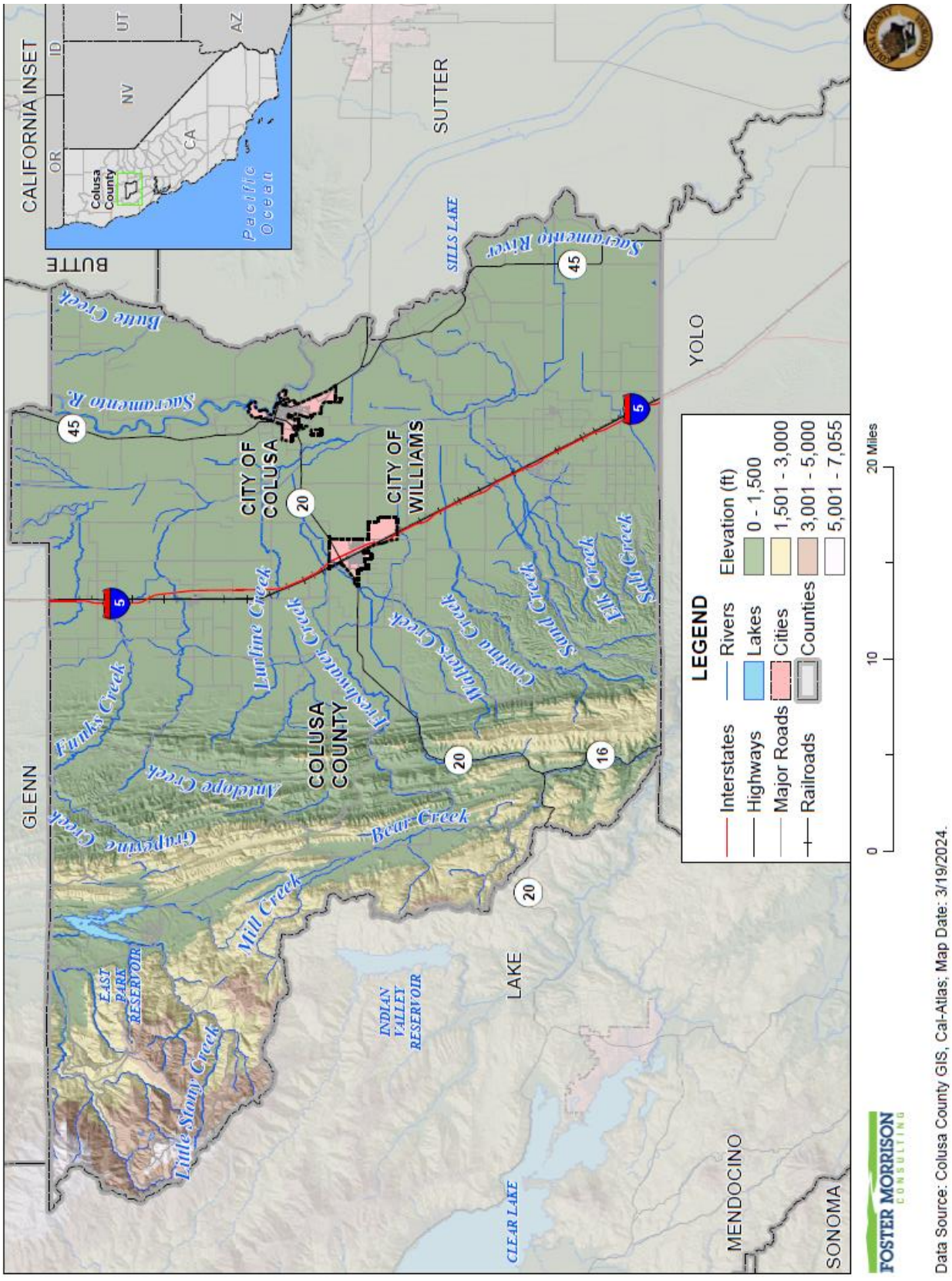
efforts, the regulations establish the requirements that local hazard mitigation plans must meet in order for a local jurisdiction to be eligible for certain federal disaster assistance and hazard mitigation funding under the Robert T. Stafford Disaster Relief and Emergency Act (Public Law 93-288). Because the Colusa County Planning Area is subject to many kinds of hazards, access to these programs is vital.

Information in this LHMP Update will be used to help guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce the cost of disaster response and recovery to communities and their residents by protecting public health and safety and critical community facilities; reducing liability exposure; and minimizing overall community impacts and disruptions. In the past, the Colusa County Planning Area has been affected by numerous hazards on multiple occasions. The participating jurisdictions are thus committed to reducing future impacts from hazard events and maintaining eligibility for mitigation-related federal funding.

## 1.3 Colusa County Profile

Colusa County is located along the western side of the Sacramento Valley and comprises an area of 1,152 square miles. There are two incorporated communities – the City of Colusa, and the City of Williams. The primary transportation route is Interstate Highway 5 (I-5), which runs north to south through the approximate center of Colusa County, serving Williams, Maxwell, and Arbuckle. State Highway 45, located approximately 20 miles to the west of l-5, follows the Sacramento River through Grimes, Colusa, and Princeton. State Highway 20 (SH 20) crosses the County from west to east, passing through the Cities of Williams and Colusa. A main line of the Southern Pacific Railroad crosses the middle of the County from north to south. Shallow draft boats can use the Sacramento River channel. There are small General aviation airports in the cities of Colusa and Williams. Figure 1-2 shows the Colusa County Planning Area.

*Figure 1-2 Colusa County Planning Area*



### 1.3.1. History

The history of Colusa County is rich in tradition, dating back to the first settler in 1846, William Bryant. This was after the first exploration of the area by white men in 1843 as authenticated by General Bidwell.

The first house built in Colusa County was on the banks of the Sacramento River in 1847 near the present site of Princeton. These were the first permanent inhabitants of Colusa.

The topography of the Sacramento Valley was depicted as a gentle slope of the land from the low mountains to a natural trough running through it. Some described it as plains. Seasonal changes had a marked effect on the appearance of the countryside in the early days. Luxurious vegetation was found in the spring and early summer. The timberlands that edged the river and the western boundary were called "tule lands," with a profusion of wildfowers in the foothills and alkali lands on the valley floor which were called "goose lands." An abundance of wildlife flourished in the area before the settlers inhabited it.

There were three settlements within the current boundaries of Colusa County when the first of the Forty - Niners arrived. Boundaries were made and properties transferred between Colusa, Glenn and Tehama Counties until Colusa and Glenn County were permanently divided in 1891.

According to the Colusa County website, Colusa County was established in 1850 as one of the original 27 counties created by the first state legislature. It once encompassed all of what is now Glenn County and a portion of Tehama County. In 1891, the counties of Glenn and Colusa were split. The County was named after the 1844 Rancho Colus Mexican land grant to John Bidwell. The name of the County in the original state legislative act of 1850 was spelled Colusi, and often in newspapers was spelled Coluse. The word is derived from the name of a Native American tribe living on the west side of the Sacramento River. The name was changed to Colusa shortly after. This, however, is disputed. The actual origin of the name is unknown.

### 1.3.2. Geography and Climate

Colusa County is bordered by Lake, Glenn, Butte, Sutter, and Yolo Counties to the west, north, east, and south, respectively. The County seat is located in the City of Colusa, which is located approximately 70 miles north of the State Capitol in the City of Sacramento.

The 2024 FEMA Flood Insurance Study (FIS) notes that elevations range from approximately 30 feet along the Sacramento River at the southeast comer of the County to a maximum of approximately 7,040 feet in the coastal ranges in the northwestern portion of the County. A large number of streams drain the County, including Elk Creek, Salt Creek, Stony Creek and Bear Creek. The County's eastern boundary is formed, in part, by the Sacramento River.

The climate in the region is characterized by hot, dry summers and cool winters. Temperatures in the City of Colusa average 45°F and 77°F in January and July, respectively. Peak high temperature in the County was 113°F. The average growing season is approximately 270 days. Annual precipitation averages approximately 16 inches in the City of Colusa. Flood-producing rainstorms normally occur between November and April. Peak flows in the streams, originating in the coastal ranges on the west side of the

County and in the Colusa Basin Drain (the primary north-to-south drainage channel), will result from winter rainstorms. Peak flow in the Sacramento River can result from winter rainstorms and winter and spring snowmelt.

### 1.3.3. Population and Demographics

The California Department of Finance 2024 estimates for population of Colusa County and its jurisdictions are shown in Table 1-1.

*Table 1-1 Colusa County Population by Jurisdiction, 2024*

| Jurisdiction | Total Population |
|---|---|
| City of Colusa | 6,447 |
| City of Williams | 5,528 |
| Unincorporated County | 9,768 |
| **Total** | **21,743** |

Source: California Department of Finance, 2024 E-1 Report

Select social and economic information for the unincorporated Colusa County are shown in Table 1-2.

*Table 1-2 Unincorporated Colusa County – Select Social and Economic Statistics*

| Statistic | Number |
|---|---|
| **Populations** | |
| Population under 5 | 6.8% |
| Population over 65 | 15.1% |
| Median Age | 36.0 |
| | |
| White | 42.9% |
| Black or African American | 0.9% |
| American Indian or Alaska Native | 2.3% |
| Asian | 1.3% |
| Native Hawaiian or Pacific Islander | 0.4% |
| Some Other Race | 32.7% |
| Two or more races | 19.5% |
| | |
| Median income | $69,619 |
| Mean Income | $91,248 |
| Poverty rate – All families | 9.5% |
| Poverty rate – All people | 10.9% |
| Unemployment Rate (February 2024) | 20.1% |

Source: 2020 US Census, 2021 US Census Bureau American Community Survey, California Employment Development Department

### 1.3.4. Economy and Tax Base

Colusa County has a diverse economy. US Census estimate show economic characteristics for the unincorporated County. These are shown in Table 1-3 and Table 1-4.

***Table 1-3 Unincorporated Colusa County Civilian Employed Population 16 years and Over by Industry***

| Industry | Estimated Employment | Percent |
|---|---|---|
| Agriculture, forestry, fishing and hunting, and mining | 2,144 | 22.0% |
| Construction | 461 | 4.7% |
| Manufacturing | 1,202 | 12.4% |
| Wholesale trade | 212 | 2.2% |
| Retail trade | 852 | 8.8% |
| Transportation and warehousing, and utilities | 754 | 7.8% |
| Information | 41 | 0.4% |
| Finance and insurance, and real estate and rental and leasing | 166 | 1.7% |
| Professional, scientific, and management, and administrative and waste management services | 400 | 4.1% |
| Educational services, and health care and social assistance | 1,541 | 15.8% |
| Arts, entertainment, and recreation, and accommodation and food services | 827 | 8.5% |
| Other services, except public administration | 449 | 4.6% |
| Public administration | 679 | 7.0% |

Source: US Census Bureau American Community Survey 2021 Estimates

***Table 1-4 Unincorporated Colusa County – Income and Benefits***

| Income Bracket | Percent |
|---|---|
| <$10,000 | 2.5% |
| $10,000 – $14,999 | 0.6% |
| $15,000 - $24,9999 | 4.9% |
| $25,000 – $34,999 | 8.1% |
| $35,000 – $49,999 | 11.5% |
| $50,000 – $74,999 | 15.3% |
| $75,000 – $99,999 | 17.8% |
| $100,000 – $149,999 | 17.7% |
| $150,000 – $199,999 | 11.0% |
| $200,000 or more | 9.6% |

Source: US Census Bureau American Community Survey 2021 Estimates

Major employers in the County are shown in Table 1-5.

### *Table 1-5 Major Employers in Colusa County Planning Area*

| Employer Name | Location | Industry |
|---|---|---|
| Adams Grain Co | Arbuckle | Grain Brokers |
| Adams Vegetable Oils Inc | Arbuckle | Oils-Vegetable |
| ADM Milling Co | Arbuckle | Flour Mills |
| Alsco-Geyer Irrigation Inc | Arbuckle | Irrigation Systems & Equipment |
| Arbuckle Elementary School | Arbuckle | Schools |
| Colusa Casino Resort | Colusa | Casinos |
| Colusa County Coroner | Colusa | Government Offices-County |
| Colusa County Health & Human | Colusa | Government Offices-County |
| Colusa County Sheriff Dept | Colusa | Government Offices-County |
| De Pue Warehouse Co | Williams | Warehouses-Merchandise & Self Storage |
| De Pue Warehouse Co Inc | Maxwell | Rice-Wholesale |
| Enid Prine Continuation Hs | Maxwell | Schools |
| George T Egling Middle School | Colusa | Schools |
| Granzella's | Williams | Restaurants |
| James Burchfield Primary Sch | Colusa | Schools |
| Myers & Charter Inc | Arbuckle | Rice Mills |
| Pierce Joint Unified School | Arbuckle | Schools |
| Premier Mushrooms | Colusa | Fruits & Vegetables-Wholesale |
| Princeton Elementary | Princeton | Schools |
| Social Services-Eligibility | Colusa | Human Services Organizations |
| Sun VALLEY Rice Co LLC | Arbuckle | Investments |
| Sunsweet Dryers | Colusa | Fruits & Vegetables-Growers & Shippers |
| Valley West Care Ctr | Williams | Health Services |
| Williams Elementary School | Williams | Schools |

Source: America's Labor Market Information System (ALMIS) Employer Database, 2021 1st Edition.

Colusa County has a wide and varied tax base. Tax base information is tracked and maintained by the Colusa County Assessor's Office. The following tables show the tax base for the unincorporated County as well as for the incorporated jurisdictions. Table 1-6 shows the secured real property value by property use for the entire Colusa County Planning Area. Table 1-7 shows the secured real property value by jurisdiction.

### *Table 1-6 2023 Colusa County Planning Area Distribution of Value by Property Use**

| Property Use | 2023 Value ($) | Percent of Current Roll |
|---|---|---|
| Agricultural | $1,827,249,503 | 46.76% |
| Commercial | $327,309,074 | 8.38% |
| Government | $154,674,257 | 3.96% |

| Property Use | 2023 Value ($) | Percent of Current Roll |
|---|---|---|
| Industrial | $284,737,477 | 7.29% |
| Institutional | $33,076,413 | 0.85% |
| Miscellaneous | $57,015,223 | 1.46% |
| Residential | $1,223,367,221 | 31.31% |
| **Totals** | **$3,907,429,168** | **100.00%** |

Source: 2023 Colusa County Assessor's Office data
*includes land, structure, and other values

***Table 1-7 Colusa County Planning Area Local Assessment Roll Totals by Jurisdiction****

| Jurisdiction | 2023 Value ($) | Percent of Current Roll |
|---|---|---|
| City of Colusa | $637,299,874 | 16.31% |
| City of Williams | $586,538,497 | 15.01% |
| Unincorporated Area | $2,683,590,797 | 68.68% |
| **Total Value** | **$3,907,429,168** | **100.0%** |

Source: 2023 Colusa County Assessor's Office data
*includes land, structure, and other values

## 1.4 Plan Organization

The 2024 Colusa County LHMP Update is organized as follows:

- Chapters
  - ✓ Chapter 1: Introduction
  - ✓ Chapter 2: Community Profile
  - ✓ Chapter 3: Planning Process
  - ✓ Chapter 4: Risk Assessment
  - ✓ Chapter 5: Mitigation Strategy
  - ✓ Chapter 6: Plan Adoption
  - ✓ Chapter 7: Plan Implementation and Maintenance

- Annexes
  - ✓ Annex A: City of Colusa
  - ✓ Annex B: City of Williams
  - ✓ Annex C: Colusa County RCD
  - ✓ Annex D: Cortina Community Services District
  - ✓ Annex E: Kletsel Wintun Dehe Nation
  - ✓ Annex F: RD 108
  - ✓ Annex G: RD 479
  - ✓ Annex H: Sacramento Westside Levee District

- Appendices
  - ✓ Appendix A: Planning Process
  - ✓ Appendix B: References
  - ✓ Appendix C: Mitigation Strategy
  - ✓ Appendix D: Adoption Resolution

- ✓ Appendix E: Threatened and Endangered Species
- ✓ Appendix F: Critical Facilities

# Chapter 2 What's New

**44 CFR §201.6(d)(3) and §201.7(d)(3): A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.**

The previous 2018 Local Hazard Mitigation Plans (LHMP), being updated as part of this 2024 Colusa County LHMP Update, contained descriptions of planning processes, the risk assessments of identified hazards, and mitigation strategies for reducing the risk and vulnerability from these hazards. Since approval of the 2018 LHMP by FEMA, progress has been made on implementation of the 2018 mitigation strategies, as applicable to the respective participating jurisdictions. As part of this LHMP Update, a thorough review and update of the 2018 LHMP was conducted to ensure that this 2024 Colusa County LHMP Update reflects current conditions and priorities in order to realign the updated mitigation strategy for the forthcoming five-year planning period. This section of this LHMP Update includes the following:

- **What's New in the LHMP Update**. Section 2.1 provides an overview of the approach to updating the previous LHMPs and identifies new analyses, data and information included in this LHMP Update to reflect current community conditions. This includes a summary of new hazard and risk assessment data as it relates to the Colusa County Planning Area and participating jurisdictions as well as information on current and future development trends affecting hazard vulnerability and related issues. The actual updated data, discussions, and associated analyses are contained in their respective sections within this LHMP Update.
- **Summary of Significant Changes to Current Conditions, Planning Area Vulnerability, and Hazard Mitigation Program Priorities**. Section 2.2 provides a summary of significant changes in current conditions, changes in hazard vulnerability, and resulting modifications to the Colusa County hazard mitigation program priorities.
- **2018 Mitigation Strategy Status and Successes**. Section 2.3.2 provides a description of the status of mitigation actions from the 2018 LHMP and also indicates whether a project is no longer relevant or is recommended for inclusion in the updated mitigation strategy. This section also highlights key mitigation success stories since the 2018 LHMP.

This What's New section provides documentation of Colusa County Planning Area's progress or changes in risk and vulnerability to hazards and overall hazard mitigation programs. Completion of this LHMP Update further provides documentation of the participating jurisdictions to this Colusa County Planning Area's continued commitment and engagement in the hazard mitigation planning process.

## 2.1 What's New in the Plan Update

Preparing the 2024 LHMP Update involved a comprehensive review and update of each section of the 2018 LHMP and includes an assessment of the success of the participating jurisdictions in evaluating, monitoring, and implementing the mitigation strategy outlined in the 2018 LHMP. Only the information and data still valid from the 2018 LHMP was carried forward as applicable into this LHMP Update.

Also to be noted, Chapter 7 Implementation and Maintenance of this LHMP Update identifies key requirements for updating future plans:

- Consider changes in vulnerability due to action implementation of mitigation actions;
- Document success stories where mitigation actions have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Incorporate new data or studies on hazards and risks;
- Incorporate new capabilities or changes in capabilities;
- Incorporate growth and development-related changes to inventories; and
- Incorporate new recommended mitigation actions or changes in the prioritization of mitigation actions.

These requirements and others as detailed throughout this Plan were addressed during this LHMP Update process.

As part of the comprehensive review and update of each section of the LHMP Update, the participating jurisdictions recognized that updated data, if available, would enhance the analysis presented in the risk assessment and utilized in the development of the updated mitigation strategy. Highlights of new data used for this LHMP Update are identified below and also sourced in context within both the Chapter 4 Risk Assessment and the jurisdictional annexes. Sources of specific data used are also provided throughout this LHMP Update and included in Appendix D References. This new data and associated analysis contributed to the development of the updated risk assessment and mitigation strategy presented in Chapter 4 and Chapter 5 of this LHMP Update, as well as within the jurisdictional annexes to this Plan.

Highlights of new information and analyses contained in this LHMP Update includes the following:

- Disaster declarations were updated, including federal, state, and USDA disaster declarations. NCDC Storm Events and past historic hazard occurrences since the previous plans were added for each jurisdiction.
- A Local Concerns section was added to each jurisdiction's vulnerability assessment to capture local issues and to support the resulting mitigation strategy.
- Incorporation and analysis of the updated California Department of Finance population data was utilized for this LHMP Update.
- A detailed discussion of socially vulnerable and underserved populations were added to the Base Plan and to each jurisdictional annex.
- An updated critical facility GIS layer was provided by the County for the Colusa County Planning Area. This allowed for an updated analysis of critical facilities for each mapped hazard in the Colusa County Planning Area.
- Community lifelines were added to all hazard discussions.
- Development since the last plan was analyzed in detail for each jurisdiction.
- Future development was gathered from each jurisdiction and analyzed using the most recent hazard data. This was included in each participating jurisdiction's annex.
- A new section on Power Shortage/Failure was added. Public Safety Power Shutoff events were also added.

- Each section of the hazard profiles and vulnerability assessment looked at how at risk, underserved, and socially vulnerable populations could be affected by each hazard.
- Impacts of climate change, changes in population patterns, and changes in land use and development was reviewed and discussed for each hazard.
- Cal-Adapt and other state and local climate change data was added to the climate change section, as well as to other hazards that are exacerbated by climate change.
- New dam data provided by Cal OES and CA DSOD was used for the dam inventory and analysis. This data included an updated hazard classification for identified dams and updated inundation mapping. Assets at risk to dam inundation was analyzed. Critical facilities at risk to dams were tabulated.
- Additional Hazus runs were performed on two separate earthquake shake scenarios for the Colusa County Planning Area.
- New DFIRM data was used as it became available during this LHMP Update. The decertification of the levees put many additional residents and values into the 1% annual chance floodplain.
- Deep seated landslide data was added to the landslide hazard profile and vulnerability analysis. An analysis was performed on values at risk (including populations, structures, critical facilities, and future development).
- Levee failure was analyzed based on new data. All levees in the County were decertified. The County utilized Levee Flood Protection Zone (LFPZ) data for analysis. An analysis was performed on assets at risk (including populations, structures, critical facilities and community lifelines, and future development) in the LFPZs.
- Economic assets and community activities of value discussions were added to the vulnerability assessment of all hazards.
- To better meet the revised FEMA plan review tool, a more extensive analysis of the extents to identified hazards was conducted and included in this LHMP Update.
- A greater study of all jurisdiction's mitigation capabilities was added.
- Public outreach efforts were expanded to include an enhanced focus on education and outreach to vulnerable and underserved populations, including holding an additional Public Meeting on the LHMP Public Review Draft geared specifically towards local and regional providers of vulnerable populations.
- All previous mitigation actions were updated, and many new actions were added to this LHMP Update, including mitigation actions to address issues related to mitigation planning for vulnerable and underserved populations.

## 2.2 Summary of Significant Changes to Current Conditions, Planning Area Vulnerability, and Hazard Mitigation Priorities

This section provides a summary by hazard of significant changes in current conditions, Colusa County Planning Area vulnerabilities, and resulting modifications to the Colusa County participating jurisdictions' mitigation program priorities since the 2018 LHMP. As a result of this analysis of factors resulting in changes in community vulnerability since the last Plan, mitigation planning priorities were modified by participating jurisdictions as reflected in each jurisdictions updated lists of priority hazards of concern, updated LHMP goals and objectives, and an updated list and prioritization of mitigation actions and projects for this 2024 LHMP Update.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Agricultural Hazards: Severe Weather/Invasive Species (Pests/Plants) | | | X |

- Recent drought conditions have stressed local crops and grazing lands making them more susceptible to insect infestation, severe weather events and other issues.
- Noxious weeds can be more drought tolerant – better able to compete for water over local crops and vegetation and also increases wildfire risk.
- Access and availability of water due to recent drought conditions impacts water supply for all uses, including agriculture.
- Successful crop production relies on predictable weather patterns. For example, walnuts are affected by extreme heat occurring at differing times; almonds are likewise affected by rain occurring at the wrong times.
- Transition from rice to trees has impacted the County's agricultural industry. Trees are susceptible to new problems, such as squirrels, which create a public health issue. Trees, compared to rice, also increases the fire risk and can be an issue during periods of drought as they require more water.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Climate Change | | | X |

- NWS data indicates temperatures are increasing resulting in more extreme heat days. Recent years (2021, 2022, 2023, 2024) have been some of the hottest years on record.
- Snowpack levels have been occurring at higher elevations in recent years.
- Weather extremes, including precipitation, have been increasing and becoming much more variable – the Colusa County Planning Area is seeing increased precipitation and intensity as well as abnormally dry conditions. Other examples of weather extremes include the numerous atmospheric river events that have occurred over the last several years.
- Changing climate conditions influence multiple hazards, such as heat, flooding, wildfire and others, identified in the Planning Area as described in this LHMP Update.
- Increased temperatures associated with climate change increases the use and costs of energy leaving critical systems and infrastructures more vulnerable.
- Other ongoing impacts include impacts to food sources and food-related diseases, eco-system changes, impacts to cultural resources, public health issues, etc.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Dam Failure | | X | |

- With more people moving into dam inundation areas, the vulnerability increases due to an increase in potentially affected populations, but not due to an increased risk of dam failure. However, population

growth in the last five years has been limited in Colusa County, thus not notably affecting dam vulnerability in the Planning Area.

- The risk of dam failure increases over the years due to aging dam infrastructure. However, dams are more regulated than ever, with requirements for Emergency Action Plans, inspections, and maintenance.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Drought and Water Shortage | | | X |

- Recent drought conditions, including water supply issues, have had an impact on the Colusa County Planning Area and California. As a result, the drought hazard has become a significant priority for mitigation planning.
- State drought mandates, including conservations measures, to protect water supply throughout California have been implemented and continue within the Planning Area.
- Drought conditions have impacted the water supply to the Planning Area, as evidenced by the number of wells going dry.
- Drought conditions have contributed to an increase in tree mortality issues and a general increase in dry fuels and wildfire conditions.
- Noxious weeds are more drought tolerant – better able to compete for water over local vegetation
- Water quality issues have been more of an issue with less flows in streams, combined with drawing down of water tables. Further, dry wells are now dirty, sandy water; there is not as much ground water available to act as a filter to these water supply sources.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Earthquake | | X | |

- Overall, Colusa County is in a relatively low to moderate seismically active area.
- The primary factor that might change the earthquake vulnerability is additional development and more people moving to the area. However, adherence to California building codes should ensure sound development in new development areas.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Flood: 1%/0.2% events | | | X |

- Overall, the net increase or decrease in vulnerability depends on the location within the Planning Area.
- The risk and vulnerability of 1% and 0.2% flood events remain somewhat constant, but are unpredictable, changing from year to year based on weather and new development in the Planning Area.
- Recent years of heavy rains, including atmospheric river events, resulted in full reservoirs and high rivers. This contributed to flooding around the County, including within identified FEMA floodplains.

- Land use planning, flood control measures, and adherence to development requirements in identified floodplains have minimized additional exposure to this hazard in the Planning Area, even in years of heavy storms.
- With the new DFIRMs effective in 2024, the levees in the Planning Area have all been decertified. This resulted in additional development and residents subject to the 1% annual chance flood and to NFIP insurance requirements.
- Flood insurance is becoming much more difficult to obtain with many insurance companies pulling out of California Communities.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Flood: Localized Stormwater Flooding | | | X |

- Climate change issues may result in more localized flooding as the climate warms and more frequent, wetter, and greater intensity storms create more runoff.
- New development in unmapped flood hazard areas could result in a net increase in vulnerability should these areas experience increased stormwater/localized flooding. However, development requirements that require mitigation of stormwater runoff work to mitigate this hazard.
- Several years of heavy rains and atmospheric river events resulted in more localized flooding throughout the Planning Area. Generally, damage occurred in low lying areas around the rivers. Road damage and closures continue to occur during heavy storm events.
- During large storm events, power issues occur and pumps go out resulting in greater localized flooding.
- Outdated drainage systems also contribute to a greater vulnerability to localized, stormwater flooding.
- The changing of crops from rice fields to trees have also increased the localized flooding issue in the Planning Area. The trees don't have the capacity to absorb flood waters like the rice fields.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Landslides, Mudslides, and Debris Flows | | | X |

- Over the last couple of years, with the severe drought, much of the vegetation along sloped areas is failing to thrive, thus there is a lack of vegetation to hold soil contributing to the landslide/mudslide potential.
- Combined with recent heavy rains and atmospheric river events contributing to saturated soils, the landslide potential increased in the Planning Area, especially in post fire areas.
- Climate change brings renewed concern moving forward for heavy and more intense rains, storms and associated issues to the Colusa County Planning Area, which include a greater potential for landslides and mudslides.
- Although as further noted, these landslide areas often occur in remote, undeveloped areas that would have limited damages during a landslide.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Levee Failure | | | X |

- An increase in seepage issues further away from the levees has caused additional concern.
- The new, 2024 DFIRMs reflect the decertification of all Planning Area levees. Thus, more people are located in the 1% annual chance floodplain subject to NFIP flood insurance requirements. However, even though the floodplains may change due to the levee certification issue, the fact remains that the levees still provide a significant level of protection to Planning Area communities.
- Similar to other hazards, increased development in areas protected by levees could result in an increase in vulnerability.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Severe Weather: Extreme Cold and Freeze | | X | |

- Similar to other weather hazards, the overall vulnerability of the Planning Area changes from year to year depending on the season.
- The HMPC further noted, that extreme cold and freeze and their impacts are mostly an agricultural issue.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Severe Weather: Extreme Heat | | | X |

- According to the NWS, there has been an increase in severe heat days in recent years. 2021, 2022, 2023, and 2024 were some of the hottest years on record.
- Climate change issues will continue to increase heat related impacts and vulnerabilities. Air quality issues increase with more extreme heat days.
- Vulnerable populations are at the greatest risk to this hazard. Low income residents may not be able to afford air conditioning. Seniors, the very young, medically vulnerable, and unhoused are not as resilient to this hazard.
- Extreme heat events are resulting in more power outages and related issues. This has resulted in well pumps going out and people not having access to water for extended periods of time.
- The heat, combined with drought (tree die back) conditions, has increased the potential for wildfires and contributes to fire weather conditions triggering a PSPS.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Severe Weather: Heavy Rains and Storms | | | X |

- Similar to other weather hazards, the overall vulnerability of the Planning Area changes from year to year depending on the season. Recent years have seen significant and heavy rains, and an increase in atmospheric river events causing flooding and other adverse impacts to the County. Storms continue to be more intense and more frequent than in years proceeding this last drought.
- During large storm events, power issues occur and pumps go out resulting in greater localized flooding.
- Climate change brings renewed concern moving forward for heavy rains, storms and associated issues to the County.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Severe Weather: High Winds and Tornadoes | | | X |

- Severe wind events have had greater impact in recent years following several years of drought combined with a year of heavy rains. With trees getting older in the Planning Area, drought has a greater impact on their stability, with compromised trees often falling over during high wind events.
- Stream and levee banks see more wave action and erosion during high wind events.
- Severe wind events exacerbate the wildfire hazard and contribute to an increase in PSPS events.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Streambank Erosion | | | X |

- Recent years have seen significant and heavy rains, and an increase in atmospheric river events causing flooding and other adverse impacts to the County. Storms continue to be more intense and more frequent. This contributes to flooding and an increase in streambank erosion.
- Climate change brings renewed concern moving forward for heavy rains, storms and streambank erosion in the County.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Subsidence | | | X |

- This hazard has seen some change since the last plan, with subsidence issues related to groundwater pumping during years of drought.
- Some wells in certain areas such as Arbuckle have starting pumping sand. Heavy rain years do help to recharge water. These types of occurrences show that something is moving.
- Groundwater recharge programs can limit future subsidence issues related to groundwater pumping and drawdown.

| 2024 LHMP Update Hazards | Decrease in Vulnerability | No Change in Vulnerability | Increase in Vulnerability |
|---|---|---|---|
| Wildfire | | | X |

- Compounded by current drought conditions (increasing tree mortality and overall wildfire conditions), the wildfire hazard has substantially increased and is no longer just a seasonal issue. The wildfire season, including the potential for a catastrophic wildfire, is now a year around concern.
- While still limited, the increased development in WUI areas within the County also contributes to an increase in vulnerability.
- With large wildfires occurring throughout California, the Planning Area has seen a significant change in air quality from smoke resulting in more recorded bad air days.
- Colusa County also experienced significant wildfire activity within the County since the 2018 LHMP.
- Wind has been a major contributor to the potential for a catastrophic wildfire.
- Catastrophic wildfires in northern counties has created an issue in Colusa as evacuees flee the fires and look to nearby communities, such as Colusa, for shelter. As well, many of the shelter and other areas set up for evacuees, Cal Fire uses these areas as staging areas for nearby fires.

## 2.3 2018 LHMP Mitigation Strategy Successes and Status

The participating jurisdictions successfully implemented numerous mitigation actions identified in the 2018 LHMP mitigation strategies, thus working diligently towards meeting their 2018 goals and objectives, as follows:

### *Goal 1: Minimize risk and vulnerability of Colusa County to hazards and protect lives and prevent losses to property, public health, economy, and the environment*

- Provide protection for existing and future development
- Provide protection for critical facilities, infrastructure, and services and minimize disruption
- Prevent repetitive losses and reoccurring damages from happening

### *Goal 2: Increase community/public outreach, education, and awareness for all hazards to minimize hazard-related losses*

- Improve the understanding of Colusa County residents, business owners, and visitors to hazards of concern and how to effectively be prepared and take action to mitigate the impacts of future hazard events

### *Goal 3: Improve communities' capabilities to prevent/mitigate hazard-related losses and to be prepared for, respond to, and recover from a disaster event*

- Continued improvements to emergency services and public safety capabilities
- Increase participation by all County entities and agencies operating in Colusa County in disaster planning activities to improve hazard awareness, intra-and inter-agency communications, mitigation action implementation, and coordinated response and recovery efforts

### *Goal 4: Improve community resiliency to flooding in Colusa County*

- Reduce the flood risk and vulnerability in Colusa County
- Reduce life safety issues, property loss, and damages associated with flooding
- Minimize impact of heavy rains and localized flooding
- Maintain/improve flood protection and control measures, including maintenance and improvements to the levee systems, to minimize future flood related impacts and damages

### *Goal 5: Continue to protect and promote Colusa County agriculture by ensuring safe and effective farming practices that protect the citizens and environment and that minimize future hazard related losses*

- Support water projects that increase available agricultural water during critical times of need for local crops while ensuring a consistent water supply and distribution to County residents.
- Educate County citizens as to how they can help protect Colusa's agriculture from noxious weeds and pests

## 2.3.1. Success Stories

Since the 2018 LHMP, progress has been made on the implementation of the mitigation strategies contained within the previous Plan. Beyond the mitigation strategy implementation from the 2018 LHMP, the participating jurisdictions also continue to implement additional hazard mitigation measures not contained within the previous Plan. This section highlights key mitigation success since the 2018 LHMP.

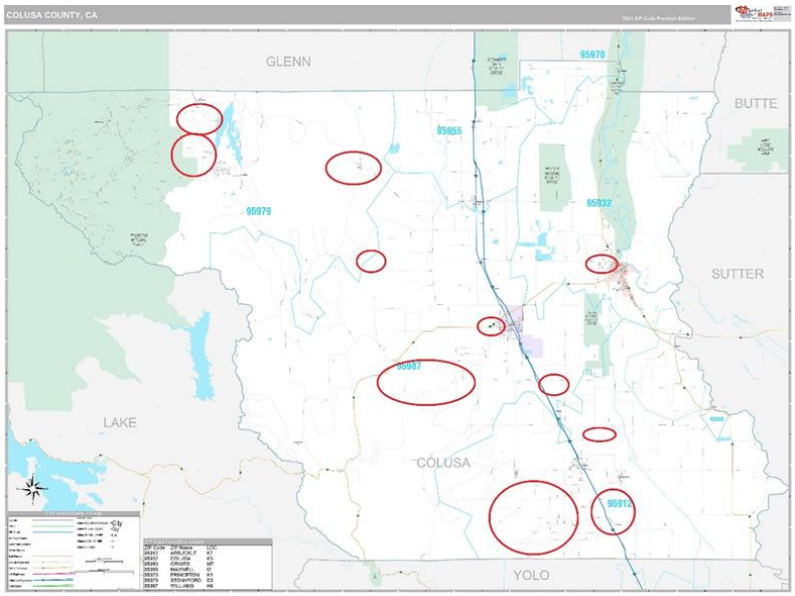
### *Drought Water Tank and Hauling Program*

As a result of recent Drought conditions, in November 2021, Colusa County through their Local Drought Emergency Proclamation, developed and implemented a Bottled and Hauled Water Project to provide temporary assistance to residents with failed domestic wells. The project comprised the purchase and installation of potable water tanks on the premises, connection to the household water delivery system, and water deliveries provided as needed based on a state average conservative consumption during drought. The project was funded by a California Department of Water Resources Grant.

The project was implemented in various areas of the County of Colusa at residences experiencing dry wells. These include mountainous areas, low-lying foothills, and flatlands in the south region of the county or anywhere else where groundwater levels have declined and left domestic wells dry. At its peak, this project served 31 homes. Throughout project a total of 1,222,500 gallons equivalent to 3.751715395 acre-feet of water was delivered.

Many homes' wells recharged during the 2022-2023 winter storms. In early 2024, it was determined that drought conditions no longer exist in most of these areas following two wet winters. The total budget for this project was $718,750.00, of which only 26% of budget was utilized over the duration of the project. The project was considered a success and was completed on March 31, 2024.

### *Figure 2-1 Locations of dry wells with participation in Emergency Water Tank & Hauling Program*




Source: Colusa County

### *Figure 2-2 Delivery of Potable Water and Storage Tanks*

Source: Colusa County

## *Flood Risk Reduction Project for the Unincorporated Town of Grimes*

As detailed in the 2018 LHMP, a Flood Risk Reduction Feasibility Study was undertaken and completed in February 2020, and a feasible alternative was identified for flood risk reduction. The Sacramento River West Side Levee District took the lead for the second phase of this project, and secured two additional grants: DWR Small Community Flood Risk Reduction – Phase II and FEMA Building Resilient Infrastructure Communities (BRIC Project EMF-2021-BR-089-0008: Grimes Floodplain Restoration and Levee Resiliency Project). The two grants will help advance permitting, design, and construction of the preferred risk reduction alternative.

## 2.3.2. 2018 Mitigation Strategy Update

The 2018 LHMP contained separate mitigation strategies for each participating jurisdiction. These have been combined below. The 2018 LHMP contained 68 separate mitigation actions for the jurisdictions. Of these, 6 are complete, 3 have portions that are complete and portions that are ongoing, 18 are ongoing, and 31 have not been started. 30 actions have been identified for inclusion in this LHMP Update and have been carried forward in Chapter 5. Table 2-1 provides a status summary of the mitigation action projects from the 2018 LHMP. Following the table is a description of the status of each project.

*Table 2-1 2018 LHMP: Mitigation Action Status Summary*

| Action Title | Complete | Ongoing | Not Yet Started | In 2024 Update* |
|---|---|---|---|---|
| Colusa County | | | | |
| **All Hazard Actions** | | | | |
| Action 1.Integrate Local Hazard Mitigation Plan into Safety Element of General Plan | | X | | Y |
| Action 2.Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness | | X | | Y |
| Action 3.Access to Locked Gate on Green Rd. | | | X | N |
| Action 4.Backup Generator | | X | | Y |
| Action 5.Alert and Warning System for Sheriff's Office | | X | | Y |
| Action 6.Generator Purchases to Enhance Project Power for Colusa County | | X | | Y |
| Action 7.Hard Road Closure Mechanisms, River Road | | | X | Y |
| Action 8.Conduct Evacuation and Shelter Planning for All Communities Countywide | | | X | Y |
| **Agricultural Hazards Actions** | | | | |
| Action 9.Domestic Pets and Livestock Plan review and update | X | | | N |
| **Climate Change Actions** | | | | |
| Action 10. Climate Change Mitigation Activities and Education | | X | | Y |
| **Dam Failure Actions** | | | | |
| Action 11. Ensure Communication about Dam Safety and Awareness Countywide | | X | | Y |
| **Drought & Water Shortage Actions** | | | | |
| Action 12. Drought Tolerance and Resilience Project County-wide, including Public Education | | X | | N |
| **Earthquake Actions** | | | | |
| Action 13. Earthquake Vulnerability Study and Retrofitting of County Assets | | | X | Y |
| **Flood, Localized Flood, Heavy Rain and Storms Actions** | | | | |
| Action 14. Corbin Road Repair | | | X | N |
| Action 15. Seepage Mitigation, East Clay Street, Colusa (between city and county) | | | X | N |

| Action Title | | Complete | Ongoing | Not Yet Started | In 2024 Update* |
|---|---|---|---|---|---|
| Action 16. | Highway 20 Flood Prevention | | | X | N |
| Action 17. | Repair and Enhance Banks at Indian Creek in Lodoga | | | X | N |
| Action 18. | Lone Star Road Flood-Prevention | | | X | N |
| Action 19. | Powell Slough Phase II | | | X | N |
| Action 20. | Repair and Enhance Banks at Salt Creek in Arbuckle | | | X | N |
| Action 21. | San Jose Road Elevation Project | | | X | N |
| Action 22. | Colusa County Storm Water Plan Update | | | X | N |
| Action 23. | Lurline Avenue Culvert Replacement Project | | | X | N |
| Action 24. | Lonestar Road Culvert Project | | | X | N |
| Action 25. | Sandbagging Training for county and city personnel; purchase Sandbagging Stations | | X | | N |
| Action 26. | Leesville Road elevation project, Williams | | | X | N |
| Action 27. | Princeton Drainage Assessment and Revision | | | X | N |
| **Flooding, Landslide, High Winds Actions** | | | | | |
| Action 28. | Goat Mountain Road Erosion Control Project | | | X | N |
| Action 29. | Fouts Springs Road Drainage Modification and Erosion Control Project | | | X | N |
| Action 30. | Brim Road Drainage Modification and Erosion Control Project | | | X | N |
| Action 31. | Cook Springs Road Drainage Modification and Erosion Control Project | | | X | N |
| Action 32. | Sites Lodoga Road Drainage Modification and Erosion Control Project | | | X | N |
| Action 33. | Lodoga Stonyford Road Drainage Modification and Erosion Control Project | | | X | N |
| Action 34. | Ground Surface Soil Stabilization, Western Colusa County in Burn Scar Areas | | | X | N |
| **Hazardous Materials Actions** | | | | | |
| Action 35. | Hazardous Materials Area Response Plan Evaluation and Update | X | | | N |
| **Levee Failure, Flood, Localized Flooding, and Streambank Erosion** | | | | | |
| Action 36. | Flood Risk Reduction Project for the Unincorporated Town of Princeton | | | X | Y** |
| Action 37. | Flood Risk Reduction Project for the City of Colusa | X | X | | Y** |
| Action 38. | Flood Risk Reduction Project for the Unincorporated Town of Grimes | | | X | Y** |
| Action 39. | Map and Assess County-wide Vulnerability to Riverbank Erosion | | X | | Y** |
| Action 40. | Seepage Mitigation Projects Countywide | | | X | N |
| Action 41. | Levee Repair- Rip Rap Maintenance | | X | | Y** |

| Action Title | Complete | Ongoing | Not Yet Started | In 2024 Update* |
|---|---|---|---|---|
| **Levee Failure and Agricultural Pests and Diseases Actions** | | | | |
| Action 42. Public Awareness Campaign and Weed Abatement Patrols for Squirrel Population Management | | X | | N |
| Action 43. Public Awareness Campaign and Weed Abatement Patrols for Soil Absorption Effectiveness | | X | | Y** |
| **Severe Weather: Extreme Cold and Freeze Actions** | | | | |
| Action 44. Evaluate Extreme Cold Plan (Including Damage Mitigation; Winter Storm, High Wind and Freeze Communication Actions) | | X | | N |
| **Subsidence (with Drought and Flood) Actions** | | | | |
| Action 45. Map and Assess Countywide Vulnerability to Subsidence | | X | | N |
| Action 46. Surface Water Storage Project Countywide | | | X | Y** |
| **Wildfire Actions** | | | | |
| Action 47. Maintain Defensive Space | X | | | N |
| Action 48. Fire Fuel Modification and Defensible Space Projects | X | | | N |
| Action 49. Wildfire Mitigation | | | X | Y |
| **Wildfire and Drought Actions** | | | | |
| Action 50. 50,000 Gallon Water Tank | | | X | N |
| City of Colusa Actions | | | | |
| **All Hazard Actions** | | | | |
| Integrate Local Hazard Mitigation Plan into Safety Element of General Plan | | X | | Y |
| **Earthquake Actions** | | | | |
| URM Mapping and Identification | | | X | Y |
| **Flood, Localized Flood, and Heavy Rain and Storms Actions** | | | | |
| Central City Flood Hazard Mitigation Project | X | X | | N |
| City of Williams Actions | | | | |
| **All Hazard Mitigation Actions** | | | | |
| Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan | X | | | Y |
| **Drought and Water Shortage Actions** | | | | |
| Action 2. Develop Drought Program Plan | | | X | N |
| **Earthquake Actions** | | | | |
| Action 3. EQ Vulnerability Study and Retrofit of City Assets | | | X | Y |
| **Flood: 100/200/500; Localized Flooding; Levee Failure; Stream Bank Erosion, Heavy Rains and Storms Actions** | | | | |
| Action 4. Levee Construction | | | X | N |
| Action 5. Hwy 99W and Hwy 20 Flood Wall or Similar Construction | | | X | N |
| Action 6. Detention Basin Construction | | | X | Y |
| Action 7.Improve Stormwater Management Planning | X | | | Y |

| Action Title | Complete | Ongoing | Not Yet Started | In 2024 Update* |
|---|---|---|---|---|
| **RD 108 Actions** | | | | |
| **All Hazard Actions** | | | | |
| Emergency Generator – District Office | X | X | | Y |
| **Drought and Water Shortage Actions** | | | | |
| Groundwater Wells | | X | | N |
| **Climate Change, Flood, Localized Flood, Dam Failure, Levee Failure, Streambank Erosion, Heavy Rains and Storms, Winds and Tornado Actions** | | | | |
| Emergency Generator – Pump Stations | | X | | Y |
| Stabilization of Colusa Basin Drain Levee | | X | | Y |
| Hardening of Colusa Basin Drain Levee | | X | | Y |
| Invasive Species Removal in Canals | | | | N |
| **Sacramento River West Side Levee District Actions** | | | | |
| **Climate Change, Flood, Localized Flood, Dam Failure, Levee Failure, Heavy Rains and Storms, High Winds, Stream Bank Erosion Actions** | | | | |
| Seepage Mitigation of Sacramento River Levee | | X | | Y |
| Hardening of Sacramento River Levee | | X | | Y |

* Actions not carried forward were determined by the jurisdictions to be no longer feasible, relevant, lacked funding and local resources to implement, and/or no longer considered a priority.

** These actions were combined into a single action in this LHMP Update. This action in Chapter 5 is titled Roadway Flood Protection.

## *Colusa County Mitigation Actions*

### All Hazard Actions

#### Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Expect to have LHMP integrated in plan before completion of LHMP 2024 update. Due to its ongoing nature, this project is being brought forward into this LHMP Update.

#### Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: As of 2023 OES has been participating in various community events to provide information related to Multi-Hazards preparedness. Due to its ongoing nature, this project is being brought forward into this LHMP Update.

### Action 3. Access to Locked Gate on Green Rd.

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not been started yet due to lack of resources and higher priority safety issues. It is being lumped in with other roads in order to create a larger project for ease of securing and managing funding and economy of scale of the larger project.

### Action 4. Action 4. Backup Generator

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: OES purchased generators through PSPS grants for OES, DHHS and continues to look for additional funding to purchase generators to provide assistance to facilities during major power outages.

### Action 5. Alert and Warning System for Sheriff's Office

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Working with DHHS in obtaining approval for use of IPAWS. Currently using RAVES located and budgeted by DHHS. Expect to conduct drills countywide verify system works properly and reaching majority of communities.

### Action 6. Generator Purchases to Enhance Project Power for Colusa County

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: OES has generators to deploy in the event of power outages. Will continue to purchase generators as funding becomes available.

### Action 7. Hard Road Closure Mechanisms, River Road

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not been started yet due to lack of resources and higher priority safety issues. It is being lumped in with other roads in order to create a larger project for ease of securing and managing funding and economy of scale of the larger project.

### Action 8. Conduct Evacuation and Shelter Planning for All Communities Countywide

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Project not started due to funding, expect to contract consultant to assist with plan.

## Agricultural Hazards Actions

### Action 9. Domestic Pets and Livestock Plan review and update

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Domestic Pets and Livestock Plan is complete.

Plan incorporated into the EOP Annexes-Appendices. To date there has not been the need to follow plan procedures.

## Climate Change Actions

### Action 10. Climate Change Mitigation Activities and Education

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Portions of this are complete, and portions are ongoing. The ongoing portions are being carried forward in this LHMP Update.

## Dam Failure Actions

### Action 11. Ensure Communication about Dam Safety and Awareness Countywide

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is not started.

## Drought & Water Shortage Actions

### Action 12. Drought Tolerance and Resilience Project County-wide, including Public Education

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing, but is not being carried forward in this Plan Update.

## Earthquake Actions

### Action 13. Earthquake Vulnerability Study and Retrofitting of County Assets

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing, and is not being carried forward in this Plan Update.

## Flood, Localized Flood, Heavy Rain and Storms Actions

### Action 14. Corbin Road Repair

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads.

### Action 15. Seepage Mitigation, East Clay Street, Colusa (between city and county)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not been started yet due to the

need to work with the adjacent private property owners in order to come to an agreement for a solution. This needs to be done prior to determining the details necessary to put together and estimate and project plans. With a lack of staffing resources, this discussion with the landowners has not been able to take place.

### Action 16. Highway 20 Flood Prevention

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project. The road is owned by Caltrans and there has not been a funding opportunity available to approach the State with for a partnered project. In addition the resources for a project this large, not only fiscally, but staff resources as well have not been available.

### Action 17. Repair and Enhance Banks at Indian Creek in Lodoga

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to oversee the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 18. Lone Star Road Flood-Prevention

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to oversee the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 19. Powell Slough Phase II

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No Progress has been made on this project as there are no resources currently available for the initiation of it and it is part of a larger future effort in working with Caltrans to address the overall flooding issues affecting State Route 20. This would be included in the Stater Route 20 flood prevention project.

### Action 20. Repair and Enhance Banks at Salt Creek in Arbuckle

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made to this point due to a lack of resources to complete the project. The environmental work is complicated and very costly, which the County does not currently have funding to complete. As the County looks to address streambed flooding at different locations and State or Federal funding becomes available for project development to address these issues, the County will pursue these funding opportunities and this project may be coupled with other locations for economy of scale.

### Action 21. San Jose Road Elevation Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to oversee the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 22. Colusa County Storm Water Plan Update

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing.

### Action 23. Lurline Avenue Culvert Replacement Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 24. Lonestar Road Culvert Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also a low priority for the County due to the low volume of traffic on this road. This project may be included with other projects for an economy of scale.

### Action 25. Sandbagging Training for county and city personnel; purchase Sandbagging Stations

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: For County personnel, on the job training is completed as needed as new employees are hired and as the flood season approaches. Further training could be done including and coordinated with other county agencies as time and resources allow.

### Action 26. Leesville Road elevation project, Williams

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 27. Princeton Drainage Assessment and Revision

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: The effort necessary to complete this work has not been able to be undertaken due to staffing constraints. Future efforts will likely be done through contracted services when funding is available.

## Flooding, Landslide, High Winds Actions

### Action 28. Goat Mountain Road Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: During the spring of 2023, some emergency work was done in coordination with OES and FEMA to repair an isolated area. However, work on the larger overall effort of the road in its entirety has not been initiated at this point. This is a larger effort which will require significant efforts and resources.

### Action 29. Fouts Springs Road Drainage Modification and Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 30. Brim Road Drainage Modification and Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 31. Cook Springs Road Drainage Modification and Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

### Action 32. Sites Lodoga Road Drainage Modification and Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high

of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

#### Action 33. Lodoga Stonyford Road Drainage Modification and Erosion Control Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No progress has been made on this project due to lack of resources, funding and personnel to see the process and acquisition of funding. It is also not as high of a priority for the County due to the low volume of traffic on this road compared to other County roads. This project may be included with other projects for an economy of scale.

#### Action 34. Ground Surface Soil Stabilization, Western Colusa County in Burn Scar Areas

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not yet been started due to funding issues.

### Hazardous Materials Actions

#### Action 35. Hazardous Materials Area Response Plan Evaluation and Update

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Hazardous Materials Area Plan has been completed see below link to county website for plan.

https://www.countyofcolusa.org/DocumentCenter/View/10374/HMAP-September-2018-Update?bidId

### Levee Failure, Flood, Localized Flooding, and Streambank Erosion

#### Action 36. Flood Risk Reduction Project for the Unincorporated Town of Princeton

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Not started due to funding. At this point no work has been done to improve the infrastructure within the town. Signs have been put up to warn of standing water, however this is the limit of work completed to this point. Further work will require additional resources the County does not currently have. This project could potentially be combined with flood protection efforts within the town of Grimes for economy of scale in design, environmental and other aspects of project development.

#### Action 37. Flood Risk Reduction Project for the City of Colusa

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: the Flood Risk Reduction Feasibility Study was completed in February 2020, and a feasible alternative was identified. Ongoing: looking for a project champion and funding source to assist design, permitting, and construction.

### Action 38. Flood Risk Reduction Project for the Unincorporated Town of Grimes

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: At this point no work has been done to improve the infrastructure within the town. Signs have been put up to warn of standing water, however this is the limit of work completed to this point. Further work will require additional resources the County does not currently have. This project could potentially be combined with flood protection efforts within the town of Princeton for economy of scale in design, environmental and other aspects of project development.

### Action 39. Map and Assess County-wide Vulnerability to Riverbank Erosion

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: In the past, this has been County OES, Sacramento River Westside Levee District. PW does not have the resources to complete this effort. As such, this project is ongoing.

### Action 40. Seepage Mitigation Projects Countywide

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: No work on this project has been done to date. This is a large project in which all areas of concern need to be identified through a study. Once identified, plans would need to be developed, environmental work done, and funding secured. Currently the County does not have the resources to start project development necessary for this project. Locations such as Clay street and others would be lumped into one larger effort within a study.

### Action 41. Levee Repair- Rip Rap Maintenance

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing, but it led by the reclamation districts. It will not be carried forward by the County in this Plan Update.

## Levee Failure and Agricultural Pests and Diseases Actions

### Action 42. Public Awareness Campaign and Weed Abatement Patrols for Squirrel Population Management

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: County Ag Commissioner provides the public various information on their website and office. Colusa County Department of Agriculture | Colusa County, CA - Official Website (countyofcolusa.org)

### Action 43. Public Awareness Campaign and Weed Abatement Patrols for Soil Absorption Effectiveness

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: County Ag Commissioner provides the public

various information on their website and office. Colusa County Department of Agriculture | Colusa County, CA - Official Website (countyofcolusa.org)

### Severe Weather: Extreme Cold and Freeze Actions

#### Action 44. Evaluate Extreme Cold Plan (Including Damage Mitigation; Winter Storm, High Wind and Freeze Communication Actions)

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Completed, have established procedures during severe weather. Agency collaboration is in place to provide assistance to vulnerable population and/or in general all within county.

### Subsidence (with Drought and Flood) Actions

#### Action 45. Map and Assess Countywide Vulnerability to Subsidence

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: 2021 Drought caused wells in the Arbuckle, Stonyford, Williams, Sites and Maxwell to dry. The county received CDAA and DWR assistance. Arbuckle and Stonyford were affected the most. Stonyford resident's wells recharged after the 2023 Winter Storms. The majority of Arbuckle residents had new wells installed due to the depth of their previous wells. During the time County was able to identify these areas and track where the recharge occurred and new wells installed. OES has documentation of these locations for future reference. Residents have been provided with Drought Preparedness information.

#### Action 46. Surface Water Storage Project Countywide

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Not Started, starting point will be to review process-based Senate Bill 122 which was subsequently passed which added Water Code section 1242.1 which sets out a process to divert floodwaters. It expires January 1, 2029.

### Wildfire Actions

#### Action 47. Maintain Defensive Space

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This has been completed. The Rancheria takes care of clearing brush and grass away on a yearly basis before fire season.

#### Action 48. Fire Fuel Modification and Defensible Space Projects

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Not started due to funding.

### Action 49. Wildfire Mitigation

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Not started due to funding.

## Wildfire and Drought Actions

### Action 50. 50,000 Gallon Water Tank

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: Not completed due to funding.

## *City of Colusa Actions*

### All Hazard Actions

#### Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: The project was implemented and has been ongoing due to insufficient staffing and time to promptly administer the general plan updates. We have gradually completed portions of the updates from our planning department. We do not have enough data collection to provide evidence of loss or avoidance due to a lack of staff time and financial resources.

### Earthquake Actions

#### URM Mapping and Identification

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project was not implemented due to a lack of staff hours, funding, and trained personnel to perform the mapping and identification. There is no evidence of loss or avoidance.

### Flood, Localized Flood, and Heavy Rain and Storms Actions

#### Central City Flood Hazard Mitigation Project

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: The city implemented this project with the county and districts and developed a flood response plan that maps out actions and trigger points for flood responses within the city and county. Though we have not had to activate the flood response plan since its creation, I believe it will reduce the loss of life and property if needed. This project should continue to be listed as in progress due to the updated FEMA flood mapping; the city has not yet fully evaluated the impact of this remapping and will most definitely need to update and improve on the flood response plans and actions given the new data.

## *City of Williams Actions*

### All Hazard Mitigation Actions

#### Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: The LHMP was integrated into the Safety Element of the General Plan in September of 2023. The City does not have data to support evidence of loss avoidance.

### Drought and Water Shortage Actions

#### Action 2. Develop Drought Program Plan

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not started yet. The City will need to investigate funding to develop a drought program plan.

### Earthquake Actions

#### Action 3. EQ Vulnerability Study and Retrofit of City Assets

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not started yet due to lack of funding availability for the project.

### Flood: 100/200/500; Localized Flooding; Levee Failure; Stream Bank Erosion, Heavy Rains and Storms Actions

#### Action 4. Levee Construction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not been implemented due to lack of funding.

#### Action 5. Hwy 99W and Hwy 20 Flood Wall or Similar Construction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not been implemented due to lack of funding.

#### Action 6. Detention Basin Construction

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: The detention basin for the Business Park section

of the City is currently in the engineering phase. The City expects to complete review of the plans and start construction within the next 2 years. Once construction is completed, any avoidance of loss will be evident.

### Action 7. Improve Stormwater Management Planning

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project has not yet started. The City will pursue grant funding to create a new Storm Water Master Plan as the previous plan has been deemed infeasible.

## *RD 108 Actions*

### All Hazard Actions

#### Emergency Generator – District Office

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is complete, but a maintenance portion of the project is being carried forward into this Plan Update.

### Drought and Water Shortage Actions

#### Groundwater Wells

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing, but is not being carried forward in this Plan Update.

### Climate Change, Flood, Localized Flood, Dam Failure, Levee Failure, Streambank Erosion, Heavy Rains and Storms, Winds and Tornado Actions

#### Emergency Generator – Pump Stations

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing. Waiting on funding. It is being carried forward into this Plan Update.

#### Stabilization of Colusa Basin Drain Levee

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing. Waiting on funding. It is being carried forward into this Plan Update.

#### Hardening of Colusa Basin Drain Levee

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing. Waiting on funding. It is being carried forward into this Plan Update.

#### Invasive Species Removal in Canals

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing, but is not being carried forward in this Plan Update.

## *Sacramento River West Side Levee District Actions*

### Climate Change, Flood, Localized Flood, Dam Failure, Levee Failure, Heavy Rains and Storms, High Winds, Stream Bank Erosion Actions

#### Seepage Mitigation of Sacramento River Levee

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing and is included in the LHMP Update.

#### Hardening of Sacramento River Levee

**Progress to Date (Consider: Was the project implemented – why or why not? Did the project reduce risks? Can you provide evidence of loss avoidance?)**: This project is ongoing and is included in the LHMP Update.

# Annex A City of Colusa

## A.1 Introduction

This Annex details the hazard mitigation planning elements specific to the City of Colusa, a previously participating jurisdiction to the 2018 Colusa County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the City. This Annex provides additional information specific to the City of Colusa, with a focus on providing additional details on the planning process, risk assessment, and mitigation strategy for this jurisdiction.

## A.2 Planning Process

As described above, the City of Colusa followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Colusa County Hazard Mitigation Planning Committee (HMPC), the City formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table A-1. Additional details on Plan participation and City representatives are included in Appendix A.

*Table A-1 City of Colusa – Planning Team*

| Name | Position/Title | How Participated |
|---|---|---|
| Bryan Stice | Previous City Planner | Attended workshops and provided details of the process the City of Colusa was going to take in relation to a mitigation strategy |
| Dave Swartz | City Engineer | Provided City input on hazard issues and mitigation strategies |
| Jesse Cain | City Manager | Oversaw the plan with the previous City Planner |
| Logan Conley | City Fire Chief | Attended HMPC meetings. Provided input on Hazard events and vulnerability concerns to the City |

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the City integrated the previously approved 2018 LHMP into existing planning mechanisms and programs. Specifically, the City incorporated into or implemented the 2018 LHMP through other plans and programs shown in Table A-2.

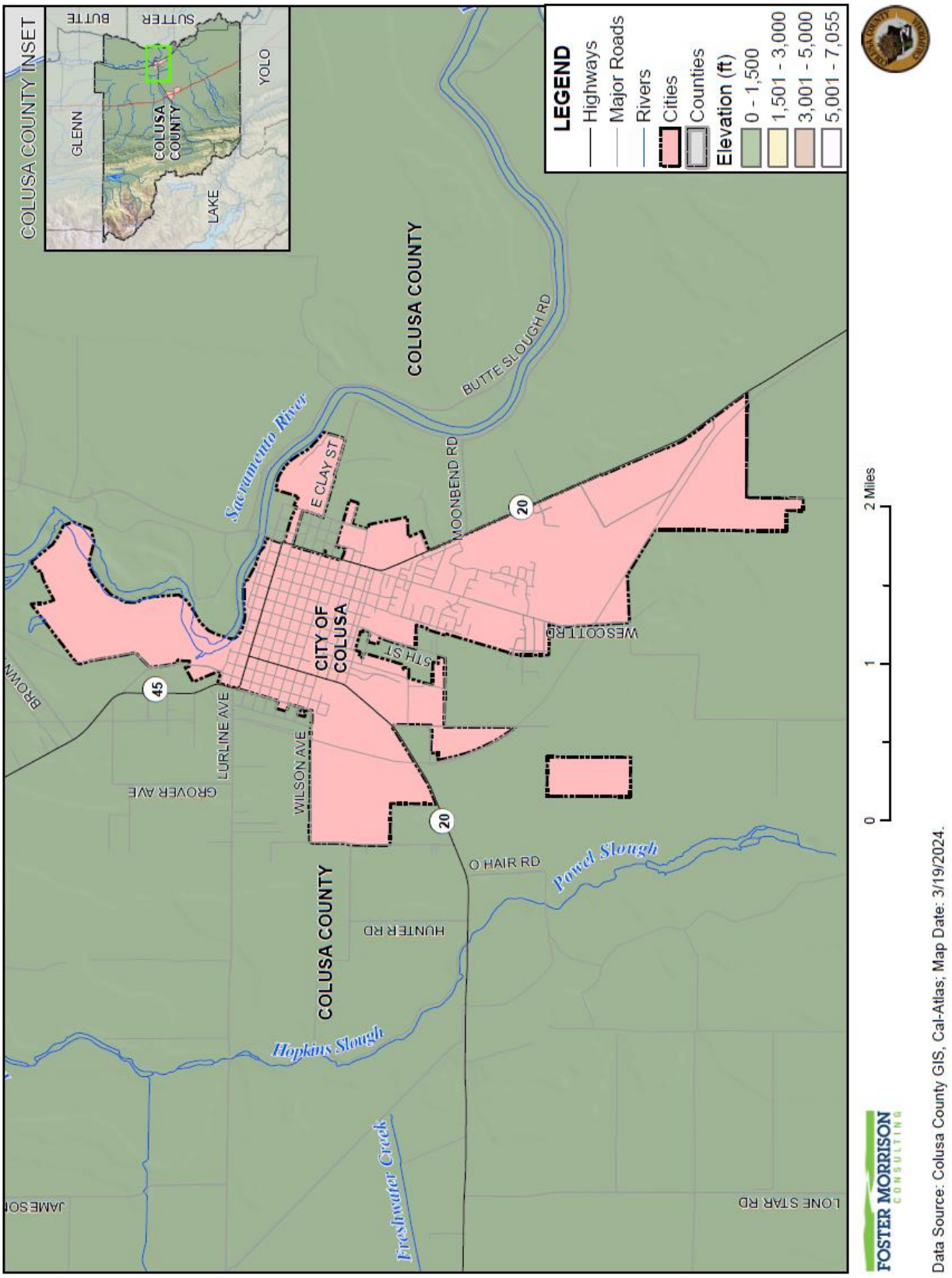
*Table A-2 2018 LHMP Incorporation*

| Planning Mechanism 2018 LHMP Was Incorporated/Implemented In. | Details: How was it incorporated? |
|---|---|
| – | Due to Covid-19, and the exit and absence of the city planner, it was difficult to implement any programs. |

## A.3 Community Profile

The community profile for the City of Colusa is detailed in the following sections. Figure A-1 displays a City map and the location of City of Colusa within Colusa County.

*Figure A-1 City of Colusa*



## A.3.1. Geography and Climate

The City of Colusa is located near the geographic center of the Sacramento Valley. The nearest major metropolitan city is Sacramento, approximately 60 miles to the south. The City of Chico, located approximately 50 miles northeast of Colusa, and Yuba City, 22 miles east, are other nearby urban areas. Unique features of the Colusa community include its location next to the Sacramento River and historic character in the downtown core. The climate varies from low temperatures ranging from 24 to 44 degrees to high temperatures reaching temperatures of 80 to as high as 110 degrees at certain times of the year. The average annual rainfall is about 14.2 inches per year, with primary rain events occurring in the Fall (October) through the Spring (April). Colusa lies in the central valley of California, is relatively flat, and sits at 49' in elevation above mean sea level.

## A.3.2. History

Founded in 1850, the City of Colusa was briefly known as Salmon Bend. Prior to its incorporation, the City was the site of an Indian village inhabited by a subgroup of the Wintun Indian Nation. One of the first Anglo-Saxon settlers was the Semple family. This group settled along the Sacramento River at present day Colusa and established a trading center for gold mining activities farther north in Trinity and Shasta Counties. River steamers could travel as far north as Red Bluff in the winter but could navigate only up to Colusa in the summer due to low water levels. Because Colusa was at the upper end of navigable waters during summer months, the town became a year-round center of commerce.

In the 1860s, the economy of Colusa County changed from primarily stock-raising to the farming of wheat, barley, and other crops. Wheat production eventually became the predominant land use and economic activity. However, the market for wheat eventually declined when Argentina and Canada became major exporters of the product in the 1890s. Following the decline of the wheat industry, rice was introduced to the area and became the dominant crop in the County. Rice required a large amount of water compared to other crops produced in the area. The need for additional water was addressed with the construction of the Glenn-Colusa Irrigation Canal.

Colusa was incorporated in 1868, during an expansion of farming and a growth in population in the region. The City grew to a population of 2,000 in the prosperous 1870s, distinguished by broad, level streets, numerous brick business buildings, and stately residences. As the county seat, Colusa counted among its residents an unusually large complement of judges, attorneys, assessors, and governing officials, many of whom also earned their livelihoods as farmers and merchants.

Vestiges of Colusa's 19th century traditional life continue to the present day. Stately Italianate and Queen Anne dwellings, intermingled with Craftsman bungalows and clusters of Tudor Revival homes, provide residences for a new generation of Colusans. Farm-supporting businesses continue to service agricultural production in the surrounding unincorporated lands.

## A.3.3. Economy and Tax Base

Colusa's location, at the intersection of two state highways, provides an advantage for its retail economy. Colusa has three highway ingresses, all of which funnel traffic through downtown. The highway layouts,

combined with the historic small town commercial sites, provide a distinct advantage to the City's opportunity for economic development. Colusa's retail sector is the predominant influence on its economy, as well as the major generator of tax revenues to the City.

Colusa still relies in large part on the same economic base that has sustained it for more than a century – agriculture and its related businesses. Most of the residents in Colusa work in Colusa or the surrounding area, within a 30-minute commute or less from their homes. Unlike many other cities of equal distance from Sacramento, it has not become a "bedroom" community where most working residents face hours of daily commute to work.

US Census estimates show economic characteristics for the City of Colusa. These are shown in Table A-3 and Table A-4. Mean household income in the City was $75,073. Median household income in the City was $59,400.

### *Table A-3 City of Colusa – Civilian Employed Population 16 years and Over*

| Industry | Estimated Employment | Percent |
|---|---|---|
| Agriculture, forestry, fishing and hunting, and mining | 439 | 16.2% |
| Construction | 169 | 6.2% |
| Manufacturing | 370 | 13.7% |
| Wholesale trade | 38 | 1.4% |
| Retail trade | 187 | 6.9% |
| Transportation and warehousing, and utilities | 90 | 3.3% |
| Information | 15 | 0.6% |
| Finance and insurance, and real estate and rental and leasing | 74 | 2.7% |
| Professional, scientific, and management, and administrative and waste management services | 71 | 2.6% |
| Educational services, and health care and social assistance | 594 | 21.9% |
| Arts, entertainment, and recreation, and accommodation and food services | 270 | 10.0% |
| Other services, except public administration | 126 | 4.7% |
| Public administration | 265 | 9.8% |

Source: US Census Bureau American Community Survey 2022 Estimates

### *Table A-4 City of Colusa – Income and Benefits*

| Income Bracket | Percent |
|---|---|
| <$10,000 | 7.7% |
| $10,000 – $14,999 | 55.3% |
| $15,000 - $24,9999 | 7.9% |
| $25,000 – $34,999 | 13.0% |
| $35,000 – $49,999 | 10.3% |
| $50,000 – $74,999 | 17.0% |

| Income Bracket | Percent |
|---|---|
| $75,000 – $99,999 | 15.5% |
| $100,000 – $149,999 | 12.7% |
| $150,000 – $199,999 | 7.6% |
| $200,000 or more | 3.0% |

Source: US Census Bureau American Community Survey 2022 Estimates

Major employers of City residents in the area include the County of Colusa, City of Colusa, Colusa Casino Resort, Colusa Unified School District, Colusa Regional Medical Center, Colusa Industrial Properties, and Sunsweet Dryers. While many residents work locally, others commute to Yuba City, Williams, and the Yolo-Sacramento area for work.

## A.4 Risk Assessment

As defined by FEMA, risk is a combination of hazard, vulnerability, and exposure. "It is the impact that a hazard would have on people, services, facilities, and structures in a community and refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage."

The City of Colusa risk assessment identifies and profiles relevant hazards and assesses the exposure of lives, property, infrastructure, and the environment to these hazards. The process allows for a better understanding of the City's potential risk to hazards and provides a framework for developing and prioritizing mitigation actions to reduce risk from future hazard events.

Building on the Community Profile above, a risk assessment was performed for the City. This includes the following sections:

- A.4.1 Assets Inventory and Growth and Development Trends
- A.4.2 Hazard Identification
- A.4.3 Hazard Profiles and Vulnerability to Specific Hazards

### A.4.1. Assets Inventory and Growth and Development Trends

This section provides an inventory of the City of Colusa's total assets potentially at risk to hazards and an overview of growth and development trends. This section is broken into two parts:

- **Asset Inventory** – The assets inventory identifies the City of Colusa's total assets, including the people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; and economic assets and community activities of value. This data is not hazard specific, but is representative of total assets within the City, potentially at risk to identified hazards as discussed in Section A.4.3 Hazard Profiles and Vulnerability to Specific Hazards.
- **Growth and Development Trends** – A discussion of growth and development trends in the City, both current and future, is presented.

#### *Assets Inventory*

The City's asset inventory is detailed in the following sections:

- People and Populations
- Structures
- Critical Facilities and Infrastructure
- Community Lifelines
- Natural, Historic, and Cultural Resources
- Economic Assets and Community Activities of Value

A discussion of each of these assets follows and serves as the template for the asset discussion for each hazard in Section A.4.3.

## People and Populations

The most important asset within any community are the people and populations that reside in the community. This section includes an inventory of past and current populations of the City and also discusses socially vulnerable populations and underserved communities as a subsection of people and populations located within the City and potentially at risk to hazards. Information from the City, US Census Bureau, California Department of Finance, and other sources as detailed below form the basis of this discussion.

### Historic Population Trends and Current Population

Population growth can increase the number of people living in hazard prone areas. The City of Colusa has 6,447 residents, as of January 1, 2024. The City of Colusa has seen growth rates as shown in Table A-5. As shown, the City has grown consistently since 1950, with growth slowing recently.

*Table A-5 City of Colusa– Population Changes Since 1950*

| Year | Population | % Change |
|---|---|---|
| 1950 | 3,031 | – |
| 1960 | 3.518 | 16.1% |
| 1970 | 3.842 | 9.2% |
| 1980 | 4,075 | 6.1% |
| 1990 | 4,934 | 21.1% |
| 2000 | 5,402 | 9.5% |
| 2010 | 5,971 | 10.5% |
| 2020 | 6,411 | 7.4% |
| 2023 | 6,447 | 0.3% |

Source: US Census Bureau, California Department of Finance (2024)

### Special Populations and Disadvantaged Communities

The City is a very socially and economically diverse community, and many residents that are socially or economically disadvantaged or vulnerable due to varying reasons reside within the City. The City and surrounding County are no strangers to large natural disasters which have had a direct impact on the populations of the area. Thus, it is important to consider the potential effects of hazard events and disasters

on these more vulnerable populations. Socially vulnerable and disadvantaged communities in the City are discussed by the following sources:

- CDC Social Vulnerability Index
- California Department of Water Resources (CA DWR) Special Populations and Disadvantaged Community Mapping
- FEMA Community Disaster Resilience Zones
- City Planning Team Input

### *CDC Social Vulnerability Index*

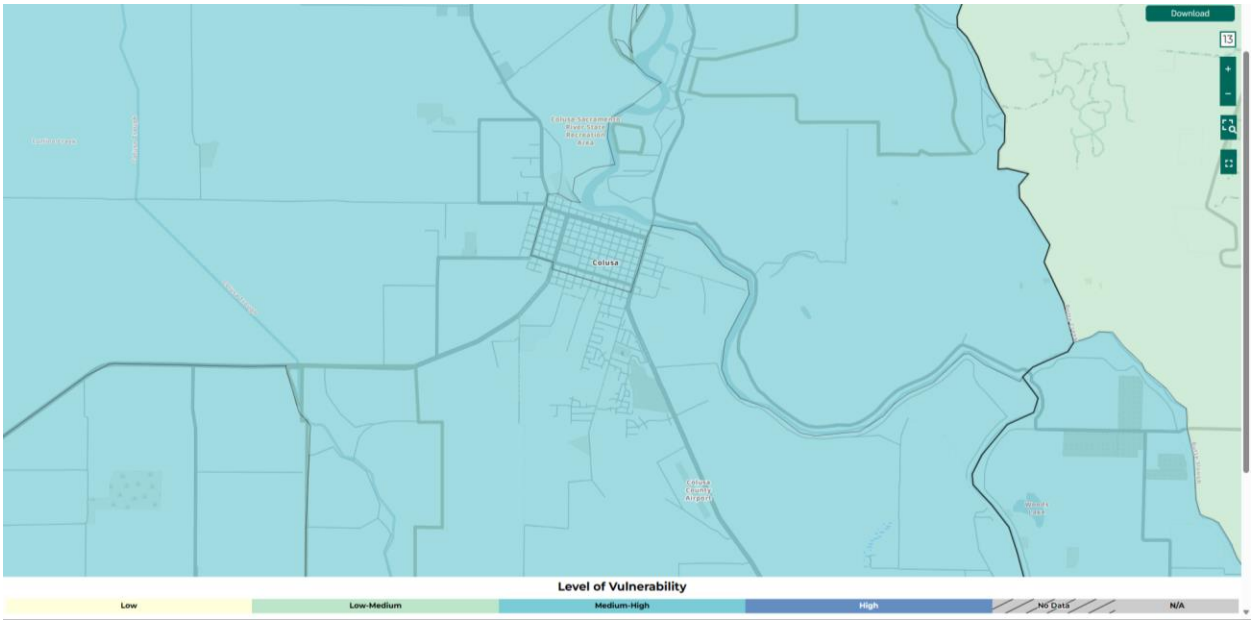
Every community must prepare for and respond to a hazard event, including the range of natural hazards addressed in this Plan, from severe weather extremes to large potentially catastrophic events such as wildfires or earthquakes. A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability.

Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. The Agency for Toxic Substances and Disease Registry (ATSDR) Geospatial Research, Analysis & Services Program (GRASP) created databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event. The CDC used these databases to create the CDC Social Vulnerability Index (CDC SVI), which uses 15 U.S. census variables to help local officials identify communities that may need additional support before, during, or after disasters.

CDC SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The CDC SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. Each tract receives a separate ranking for each of the four themes, as well as an overall ranking. Maps of the four themes for the City are shown in the figures below.

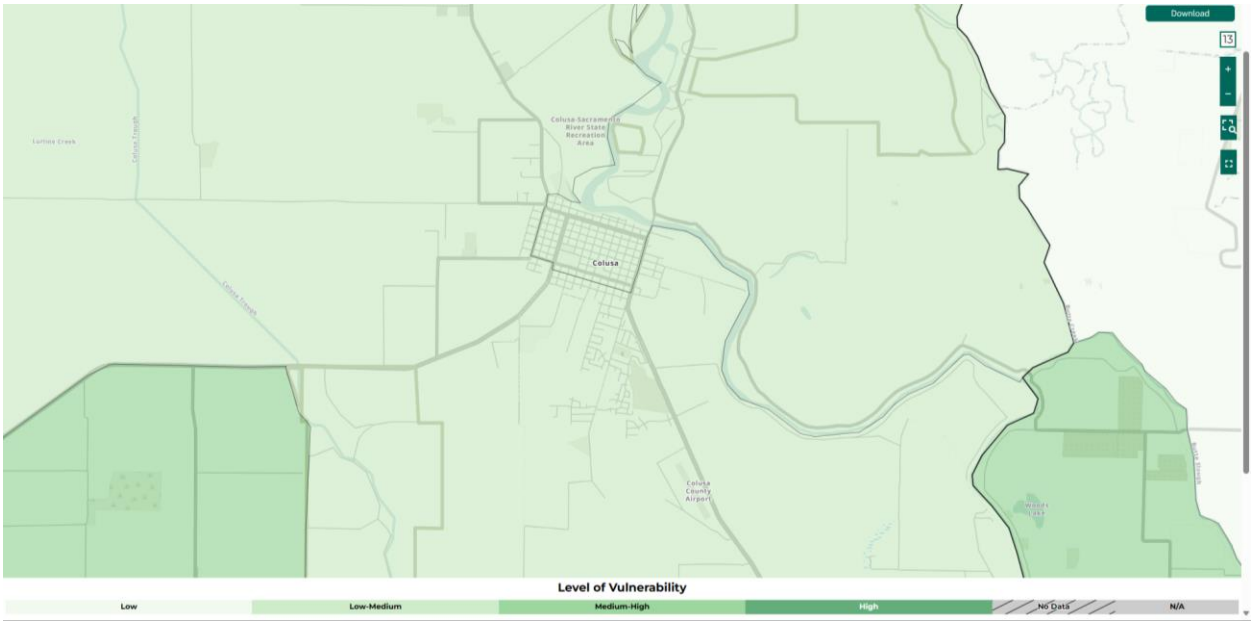
The overall SVI map is shown in Figure A-2; the socioeconomic SVI for the census tracts in and around the City are shown in Figure A-3; the household composition SVI is shown in Figure A-4; the minority and language SVI is shown in Figure A-5; and the housing and transportation SVI is shown in Figure A-6. Overall, the maps indicate that, in general, the City sees little change in social vulnerability regardless of location. As shown, there is very minimal change in each SVI across the City.

## *Figure A-2 City of Colusa – Overall Social Vulnerability*



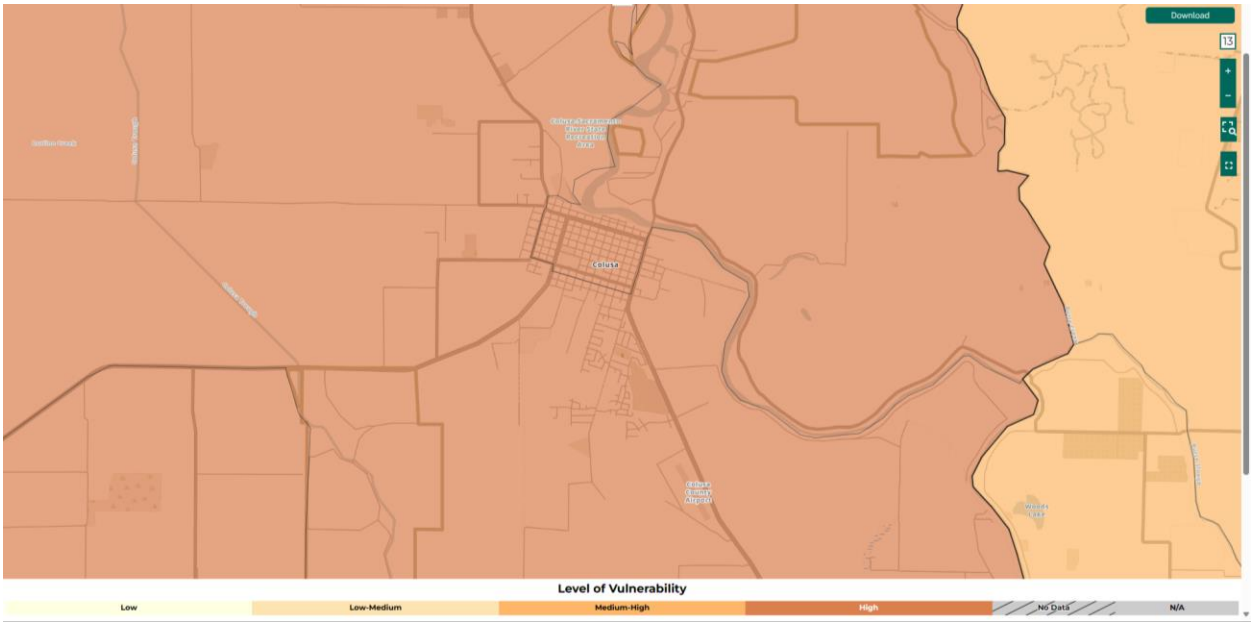

Source: CDC Social Vulnerability Index – map retrieved 3/20/2024
Level of Vulnerability Rating: **Yellow** – Low; **Green** – Low/Medium; **Aqua** – Medium/High; **Blue** – High; **Grey Hatched** – No Data; **Grey** – Not Available

## *Figure A-3 City of Colusa – Socioeconomic Status Vulnerability*



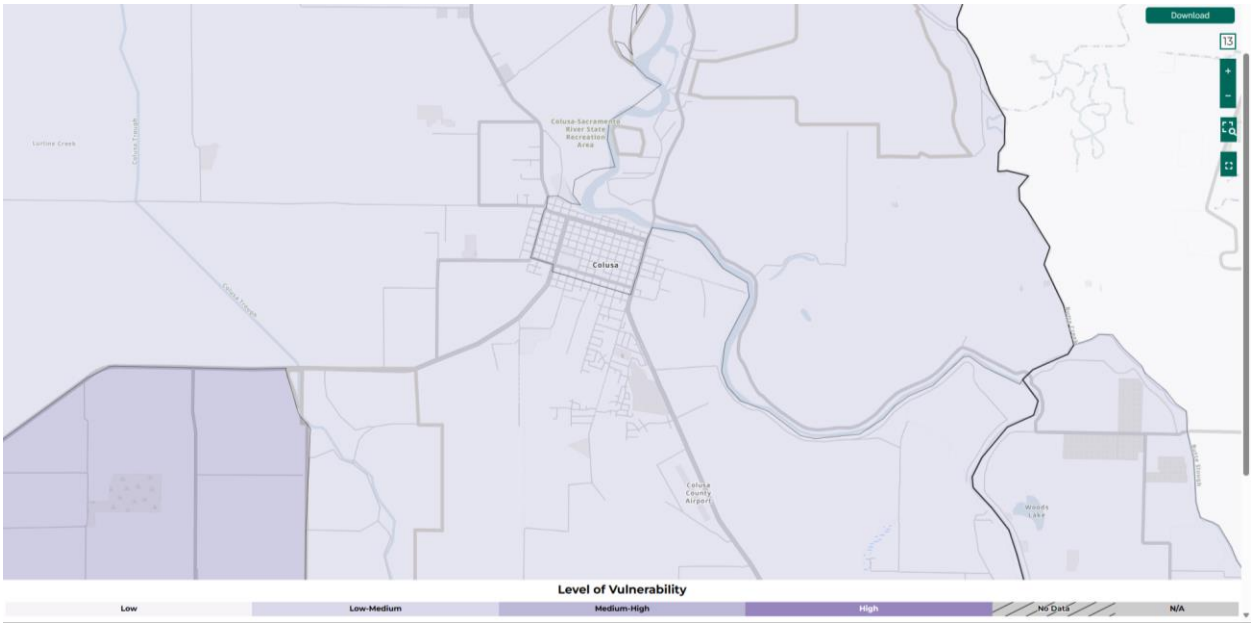

Source: CDC Social Vulnerability Index – map retrieved 3/20/2024
Level of Vulnerability Rating: **Faint Green** – Low; **Light Green** – Low/Medium; **Green** – Medium/High; **Dark Green** – High; **Grey Hatched** – No Data; **Grey** – Not Available

## *Figure A-4 City of Colusa – Household Characteristics*



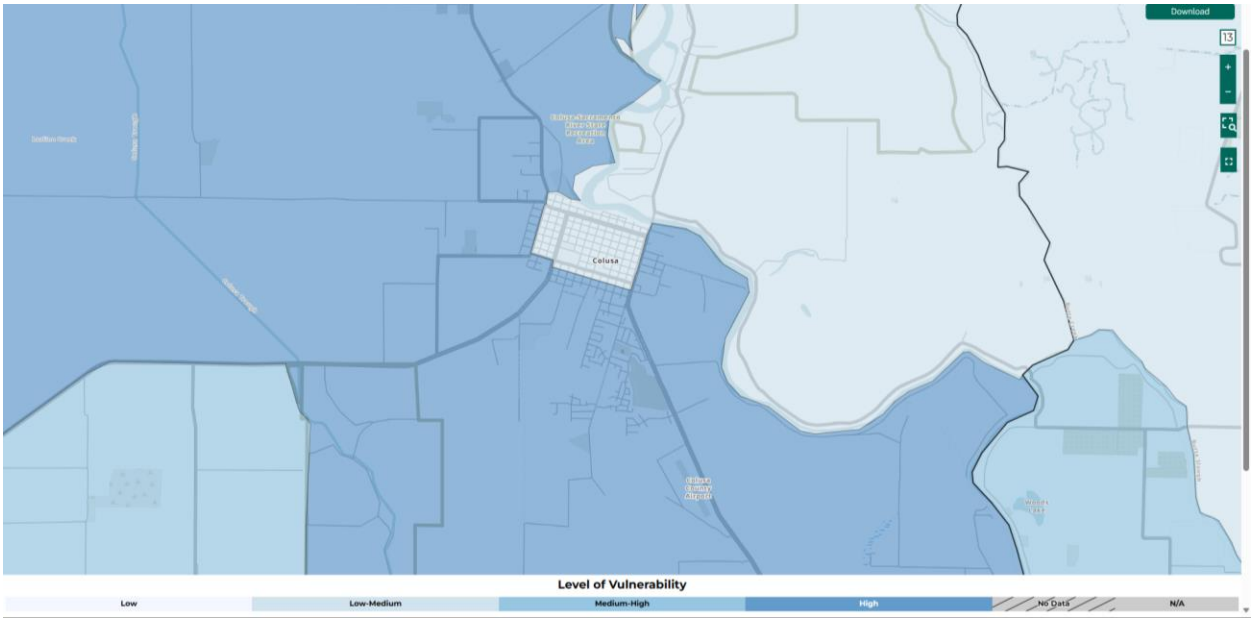

Source: CDC Social Vulnerability Index – map retrieved 3/20/2024
Level of Vulnerability Rating: **Faint Orange** – Low; **Light Orange**– Low/Medium; **Orange** – Medium/High; **Dark Orange** – High; **Grey Hatched** – No Data; **Grey** – Not Available

## *Figure A-5 City of Colusa – Racial and Ethnic Minority Status*




Source: CDC Social Vulnerability Index – map retrieved 3/20/2024
Level of Vulnerability Rating: **Faint Purple** – Low; **Light Purple** – Low/Medium; **Purple** – Medium/High; **Dark Purple** – High; **Grey Hatched** – No Data; **Grey** – Not Available

### *Figure A-6 City of Colusa – Housing Type and Transportation*

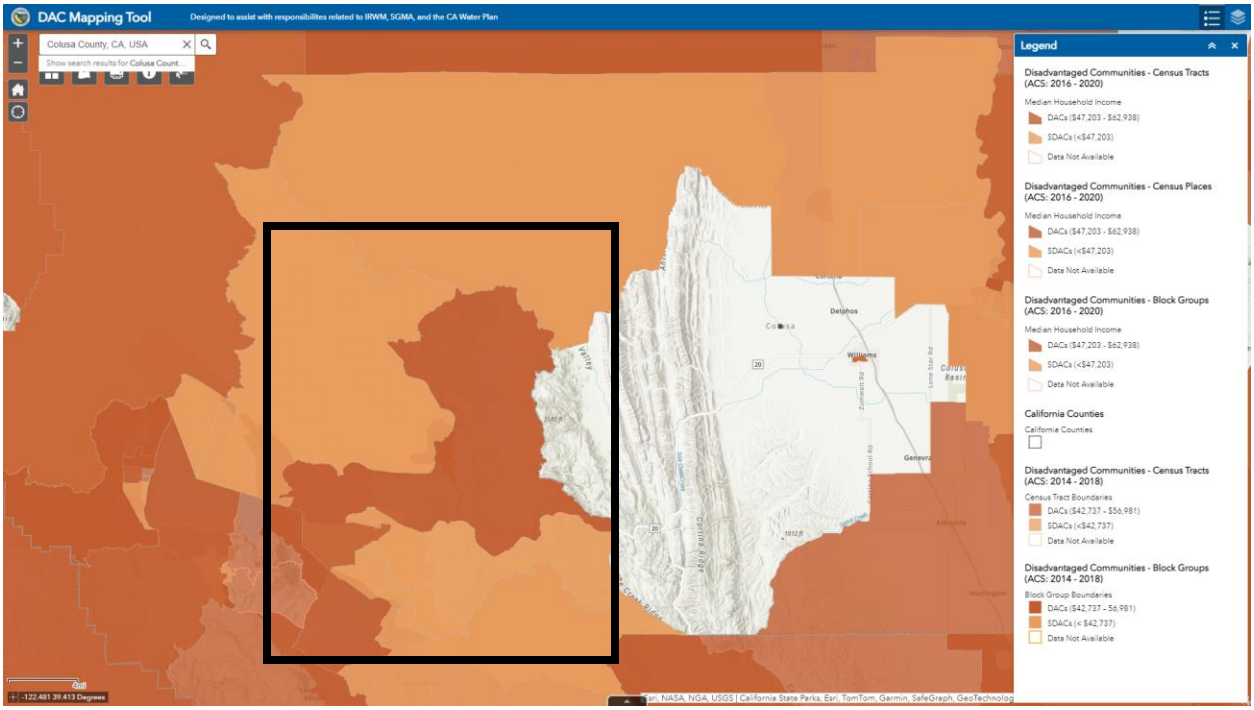



Source: CDC Social Vulnerability Index – map retrieved 3/20/2024
Level of Vulnerability Rating: **Faint Blue** – Low; **Light Blue** – Low/Medium; **Blue** – Medium/High; **Dark Blue** – High; **Grey Hatched** – No Data; **Grey** – Not Available

### *California DWR Disadvantaged Community Mapping Tool*

The State of California's Proposition 1 Disadvantaged Community (DAC) Involvement Program is designated to ensure the involvement of DACs as well as Economically Distressed Areas and Underrepresented Communities, which DWR collectively refers to as DACs. The Cal DWR definition for a Disadvantaged Community is a community with an annual median household income (MHI) that is less than 80% of the Statewide annual MHI (PRC Section 75005(g)), and those census geographies with an annual MHI less than 60% of the Statewide annual MHI are considered "Severely Disadvantaged Communities". Those areas in the City considered disadvantaged are shown in Figure A-7. As shown, much of the City falls in these DAC areas.

### *Figure A-7 Colusa County Planning Area – Disadvantaged Areas*

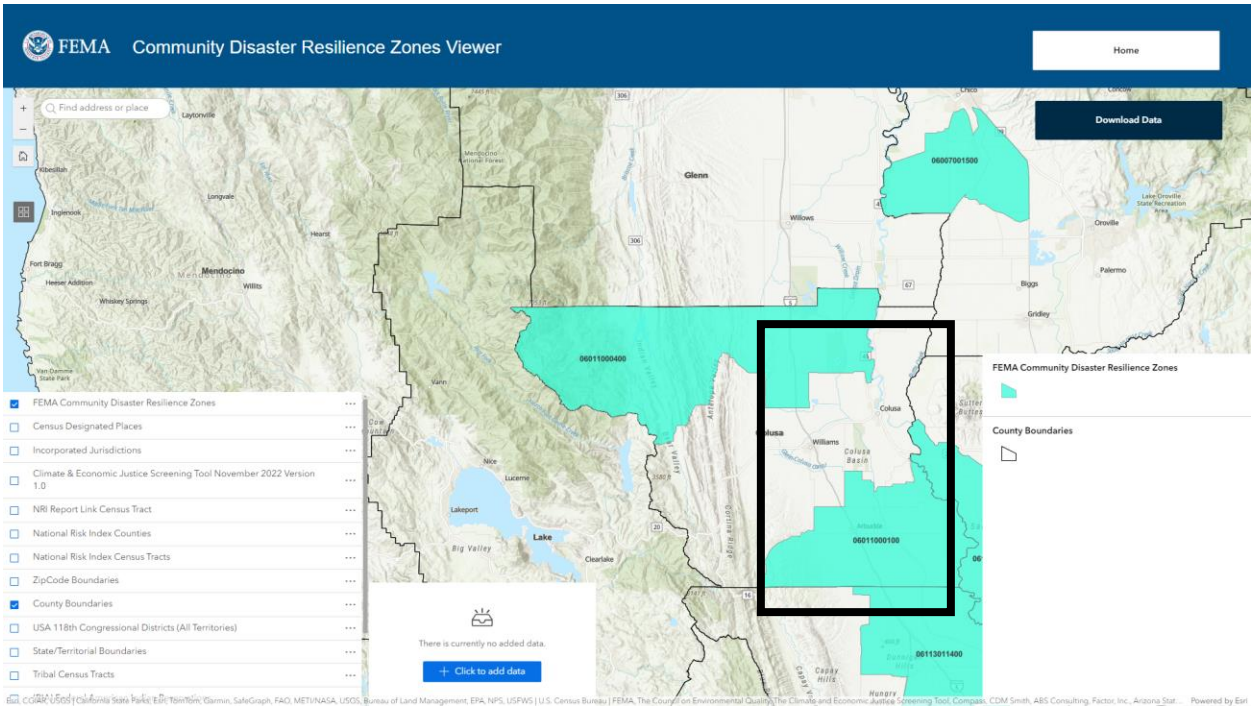



Source: Cal DWR DAC Mapping Tool – retrieved 3/14/2023

### *FEMA Community Disaster Resilience Zones*

Community Disaster Resilience Zones aim to build and strengthen community resilience across the nation by driving federal, public, and private resources to the most at-risk and in-need communities. The Community Disaster Resilience Zones Act uses FEMA's National Risk Index to identify the most at-risk and in-need communities to identify resilience zones. Designated zones will be prioritized for targeted federal support, such as increased cost-share for resilience and mitigation projects, lessening the financial burden on communities to perform resilience-related activities. On September 6, 2023, FEMA announced the initial 483 designations in all 50 states and the District of Columbia. Figure A-8 shows these zones in teal green. As shown, these areas lie adjacent to the City, but outside of the City limits.

*Figure A-8 Colusa County Planning Area – FEMA Community Disaster Resilience Zones*




Source: FEMA. Map retrieved 3/15/2024.

### *City Planning Team Input*

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

The City Planning Team noted that the City of Colusa has limited facilities/housing for special needs populations. The City also noted that elderly residents are primarily congregated in the Jaconetti Center near the NW corner of Carson and D Streets. The Eskaton Frank Jaconetti Center is one of the largest non-profit providers of aging services in Northern California and has been serving older adults in the region for over 55 years. The organization offers stand-alone independent living, assisted living, and memory care communities, Life Plan Communities (CCRC, Continuing Care Retirement Community), affordable housing communities, home and community-based services, along with an array of education, social programs and resources to empower older adults to live well.

In addition, the City provides services through the local Veterans Hall. The Veterans of Foreign Wars of the United States is a nonprofit veterans service organization comprised of eligible veterans and military service members.

### City of Colusa General Plan 2020-2028 Housing Element

The City of Colusa 2020-2028 Housing Element also discusses special populations in the City. Discussions for seniors, those with disabilities, people experiencing homelessness, large households, female headed

households, extremely low-income households, and farmworkers were included. These are discussed below.

### Seniors

Seniors have special housing needs primarily resulting from physical disabilities and limitations, fixed or limited income and health care costs. Additionally, senior households also have other needs to preserve their independence, including supportive services to maintain their health and safety, in-home support services to perform activities of daily living, conservators to assist with personal care and financial affairs, public administration assistance to manage and resolve estate issues, and networks of care to provide a wide variety of services and daily assistance.

According to the U.S. Census Bureau, approximately 683 persons in Colusa were 65 years and older in 2016 as compared to 868 in 2011. This resulted in an overall 3.1% decrease in seniors of the City's overall population. There are three skilled care senior facilities in the Colusa area: Colusa Regional Medical Center (Colusa), Valley West Care Center (Williams) and the Sunbridge Care Center (Willows) to help care for this population.

### Persons with Disabilities

A disability includes, but is not limited to, any physical or mental disability that limits a major life activity by making the achievement of major life activities difficult, including physical, mental and social activities and working. disabled persons often require special housing needs related to potential limited earning capacity, the lack of accessible and affordable housing, and higher health costs associated with disabilities. Additionally, various disabilities require a wide range of different housing options depending on the type and severity of the disability. According to the US Census Bureau, there are 1,200 persons with a disability living in the City. 6.6% of this number are employed, typically in low wage-earning positions indicating that this population needs access to affordable housing options.

### Persons with a Developmental Disability

This term "developmental disability" includes mental retardation, cerebral palsy, epilepsy, autism and disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for individuals with mental retardation. The California Department of Development Services (DDS) reports that approximately 54 developmentally disabled persons reside in the City, with almost all persons living with a parent or guardian.

### Large Households

Large households are defined as those households containing 5 or more people. These families are typically limited in their income which causes housing issues due to larger units are more expensive and most units with over 3 bedrooms are typically single-family homes, instead of multi-family rental units. Large family households are considered a special needs group because there is a limited supply of adequately sized housing to accommodate their needs. Between 2011 and 2016, the number of owner-occupied large households in Colusa decreased from 148 to 121. However, renter-occupied households increased by more than 69% from 62 to 201 units, an increase of 139 households.

### Overcrowded Households

Overcrowded households are usually a reflection of the lack of affordable housing available. Households that cannot afford housing units suitably sized for their families are often forced to live in housing that is too small for their needs, which may result in poor physical condition of the dwelling unit. Although there is more than one way of defining overcrowded housing units, the definition used in the Housing Element is 1.01 or more persons per room, the same definition used in the 2000 and 2010 Censuses. Overcrowding increases health and safety concerns and stresses the condition of the housing stock and infrastructure.

According to the U.S. Census Bureau in 2016, 180 households were living in crowded conditions. The majority of these households were living in overcrowded conditions with 1.01 to 1.50 person per room. The level of overcrowding is somewhat higher among renter occupied households at 8.9% compared to 8.6% for owner-occupied households, for a total average of 8.3% for all housing types. However, over all this is lower than the County average of 12.5% of households experiencing overcrowded conditions.

### Female Head of Households

There are about 304 female headed households (single without husbands) residing in the City, which consists of about 20.3% of all households in Colusa. There has been very little shift in this number since 2010. Just under half of this population lives below the poverty rate, indicating that more housing support is needed for this vulnerable group that typically struggles with earning income opportunities and other specific needs like daycare availability.

### Extremely Low Income

Households in the extremely low-income category have special housing needs because they are unlikely to find market-rate housing that is affordable at any price. Extremely low-income households may be homeless or in danger of being homeless because of their inability to find appropriately priced housing. Over 100 people in Colusa with annual incomes of less than $20,000 were paying more than 30% of their income for shelter. That constitutes over 26% of this extremely low-income category. Because of these cost burdens, extremely low-income households may require specific housing solutions, including subsidies, housing with supportive services, shared housing and/or single-room occupancy units.

### Homeless Population

Homeless individuals, generally in the extremely low-income category, include, but are not limited to victims of domestic violence, persons with mental illness, persons suffering from addiction, families with single heads-of-household and unaccompanied minors. This term also includes individuals who have purchased parcels of land but are unable to afford site improvements for a home. Though there appears to be no significant homeless population in the City, some extremely low-income households are most at-risk of becoming homeless. In any case, it is clear that there is a need for a regional emergency shelter to serve the homeless' needs.

Periodically, there are a few individuals who are homeless in the City who call Colusa the location of their last permanent residence. There are no homeless encampments in the City. Many of the homeless individuals are permanently homeless who often live outside the City, but who need periodic emergency

shelter during in-climate weather, such as during the winter when the temperature can reach below freezing and during the summer when it can reach above 100 degrees.

### Agricultural Workers

Agriculture workers can be characterized as having extremely low incomes that need special housing needs. They play a critical role in contributing to Colusa County's major producing industry since the largest portion of Colusa's workforce was employed in agriculture, forestry, fishing/hunting and mining in 2018. This does not account for how many of these individuals are employed separately in farm industries or whether they are seasonally or permanently employed. The housing needs of permanent farm workers are no different from those of other employment groups. Such needs consist of housing that is affordable in relation to income, meets acceptable housing standards and is reasonably accessible to the site of employment.

Seasonal or part-time farm workers who do not leave the area and seek year-round residency in the area, have similar needs, but their income is likely to be considerably less than year-round employees and these individuals may require subsidized housing or employer-based housing. As a result, migrant farm workers may seek housing in a labor camp or may rent an available and inexpensive unit (which may be shared among several workers). If such housing is not available, migrant farm workers may resort to substandard shelters, ranging from vehicles to tents or other forms of temporary shelter. Because migrant farm workers desire to reside near the work sites, most farm worker housing should be provided in these unincorporated areas; farm workers with reliable transportation could reside within the City limits.

### Structures

This section looks at the parcels (and associated structures) that make up the built environment of the City. The following data from the Colusa County Assessor's Office is based on the 2023 Assessor's data, and the associated parcel layer. The methodology used to derive the number of total and improved parcels (i.e., those with an improved structure value) and land and improved property values (as well as content replacement values) and other values is the same as in Section 4.2.1 of the Base Plan. This data should only be used as a guideline to overall values in the City, as the information has some limitations. The most significant limitations are created by Proposition 13. With respect to Proposition 13, instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the City. It is also important to note, in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table A-6 shows the Colusa County Parcel/Assessor Data values and content replacement values (e.g., the values at risk) broken down by property use for the City.

*Table A-6 City of Colusa – Total Parcels (and Structures) by Property Use*

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 23 | 11 | $13,938,078 | $552,430 | $495,940 | $552,430 | $15,538,878 |
| Commercial | 249 | 190 | $20,544,713 | $57,204,144 | $6,312,332 | $57,204,144 | $141,265,333 |
| Government | 107 | 51 | $5,985,502 | $33,560,789 | $18,519,832 | $33,560,789 | $91,626,912 |
| Industrial | 65 | 22 | $12,418,971 | $34,637,423 | $15,447,206 | $51,956,134 | $114,459,734 |
| Institutional | 34 | 20 | $2,286,791 | $6,200,820 | $6,039,649 | $6,200,820 | $20,728,080 |
| Miscellaneous | 12 | 5 | $615,343 | $8,431,121 | $0 | $8,431,121 | $17,477,585 |
| Residential | 1,844 | 1,778 | $88,514,146 | $303,181,060 | $2,413,584 | $151,590,525 | $545,699,315 |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

Source: 2023 Colusa County Parcel/Assessor Data

## Critical Facilities and Infrastructure

Beyond just the buildings and structures that comprise the built environment, it is important to identify the critical facilities and infrastructure that are critical for life safety and property protection. This is done for the City of Colusa below.

For purposes of this plan, a critical facility is defined as:

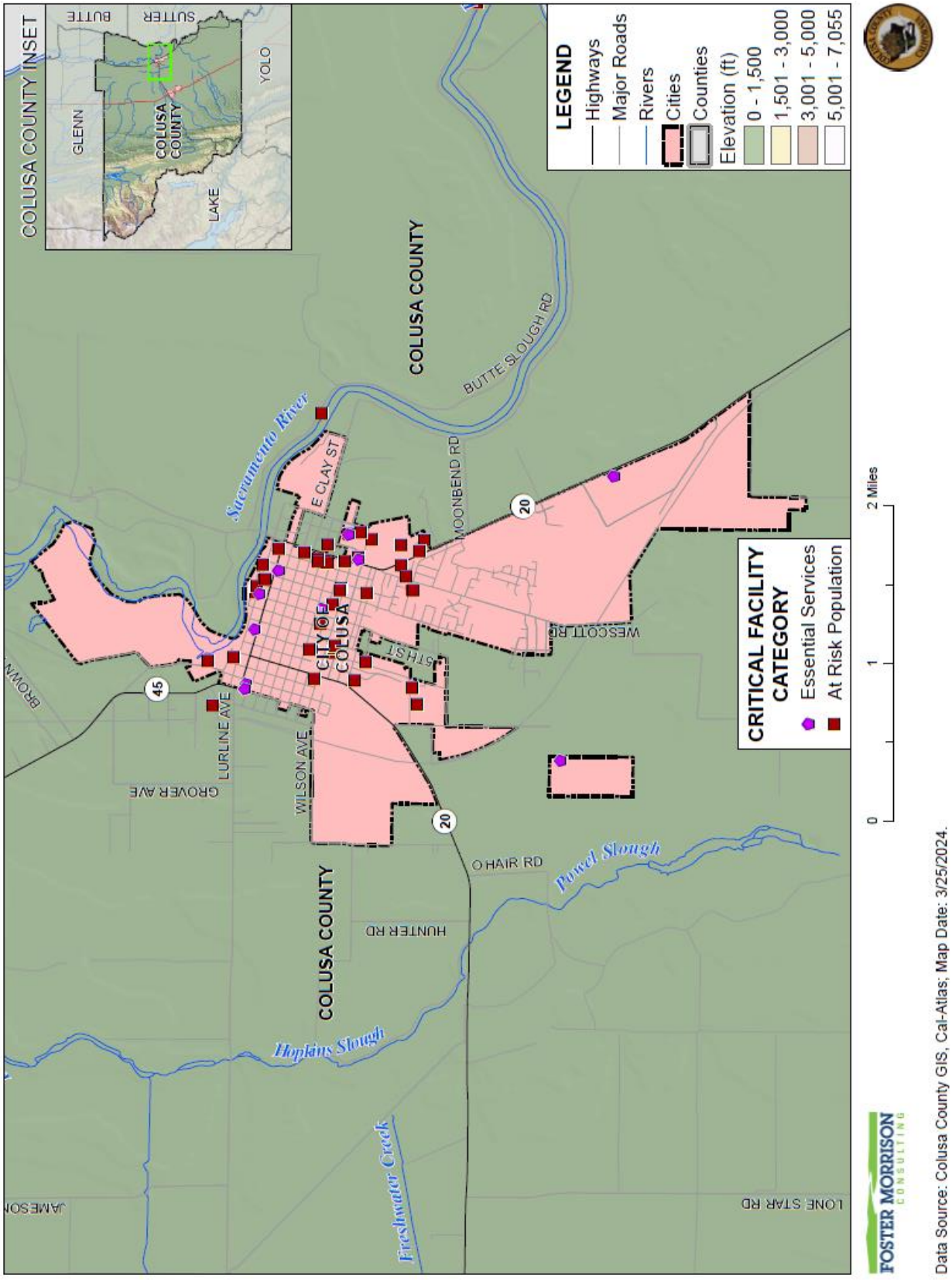
> ***Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.***

A critical facility is classified by the following categories: (1) Essential Services Facilities and (2) At-Risk Populations Facilities:

- **Essential Service Facility**: A facility in either the public or private sector that provides essential products and services to the general public, is otherwise necessary to preserve the welfare and quality of life in the County, or fulfills important public safety, emergency response, and/or disaster recovery functions.
- **At-Risk Populations**: Pre-schools, public and private primary and secondary schools, before and after school care centers, daycare centers, group homes, and assisted living residential or congregate care facilities with multiple residents.

Critical facilities in the City are shown on Figure A-9. A summary of all critical facilities in the Colusa County Planning Area is shown in Table A-7 and detailed in Table A-8. Additional details of individual critical facilities can be found in Appendix F of this Plan Update.

*Figure A-9 City of Colusa – Critical Facilities*



### *Table A-7 City of Colusa – Critical Facilities by Category*

| Critical Facility Category | Facility Count |
|---|---|
| Essential Services Facilities | 10 |
| At Risk Population Facilities | 40 |
| **City of Colusa Total** | **50** |

Source: Colusa County GIS

### *Table A-8 City of Colusa – Critical Facilities by Category and Type*

| Critical Facility Category | Facility Type | Facility Count |
|---|---|---|
| Essential Services Facilities | Emergency Response | 1 |
| | Fire Station | 2 |
| | Medical | 1 |
| | Police Station | 1 |
| | Public Services | 3 |
| | Utility Facility | 2 |
| | **Essential Services Facilities Total** | **10** |
| At Risk Population Facilities | Apartment Complex | 22 |
| | Assisted-Living | 1 |
| | Hotel or Motel | 2 |
| | Jail | 1 |
| | Mobile Home Park | 5 |
| | School | 8 |
| | Senior Living Facility | 1 |
| | **At Risk Population Facilities Total** | **40** |
| **City of Colusa Total** | | **50** |

Source: Colusa County GIS

## Community Lifelines

Assessing the vulnerability of the City of Colusa to natural hazards and disasters also involves reviewing and inventorying the community lifelines in place that could be affected. It is important to include these items in hazard discussions as the continuous operation of critical government and business functions is essential to human health and safety, property protection, and economic security. The importance of community lifelines is discussed below:

- Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function.
- FEMA has developed a construct for objectives-based response that prioritizes the rapid stabilization of Community Lifelines after a disaster.

- The integrated network of assets, services, and capabilities that provide lifeline services are used day-to-day to support the recurring needs of the community and enable all other aspects of society to function.
- When disrupted, decisive intervention (e.g., rapid re-establishment or employment of contingency response solutions) is required to stabilize the incident.

Community lifelines, as defined by FEMA, include the following:

- **Safety and Security** – Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety
- **Food, Hydration, Shelter** – Food, Water, Shelter, Agriculture
- **Health and Medical –** Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management
- **Energy –** Power Grid, Fuel
- **Communications** – Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch
- **Transportation** – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime
- **Hazardous Material –** Facilities, HAZMAT, Pollutants, Contaminants
- **Water Systems** – Potable Water Infrastructure, Wastewater Management

It should be noted that these community lifelines are all in place and functional as part of regular government operations in the County as a partnership between the City, local special districts, and Colusa County. Due to its rural nature, there is an interplay in community lifelines between all jurisdictions in the County. In fact, most of the City's community lifelines overlap the County's. It should also be noted that these lifelines collectively include many of the critical facilities and infrastructure assets inventoried for this LHMP. Due to this fact, specific information on these community lifelines in the City and how they may be affected by a hazard event or disaster are discussed in each hazard section; however, many of these sections refer back to the detailed lists that are captured in Section 4.2.1 of the Base Plan.

### Natural, Historic, and Cultural Resources

Assessing the vulnerability of the City of Colusa to natural hazards and disasters also involves inventorying the natural, historic, and cultural assets of the area. This step is important for the following reasons:

- Environmental and natural resources add to a community's identity and quality of life. They also help the local economy through agriculture, tourism, and recreation. They support ecosystem services, such as clean air and water.
- Conserving the environment may help people mitigate risk. It can also protect sensitive habitats, develop parks and trails, and build the economy.
- The community may decide that these types of resources warrant a greater degree of protection due to their unique and irreplaceable nature and contribution to the overall economy.
- If these resources are impacted by a disaster, knowing so ahead of time allows for more prudent care in the immediate aftermath, when the potential for additional impacts are higher.
- The rules for reconstruction, restoration, rehabilitation, and/or replacement are often different for these types of designated resources.

- Natural resources can have beneficial functions that reduce the impacts of natural hazards, such as wetlands and riparian habitat, which help absorb and attenuate floodwaters.

## Natural Resources

The City contains a variety of natural resources. Natural resources are unique to each area and are difficult to replace. Should a natural disaster occur, these species, resources, and locations are at risk.

The City of Colusa has a variety of natural resources of value to the community. Surrounding the City are many natural resources in preserves and open space, including the Colusa National Wildlife Refuge, one-half mile west of the City, and the Colusa-Sacramento River State Recreation Area to the north. In the future, the City of Colusa intends to promote these natural resources through increased awareness and improved public access.

The 2007 City of Colusa General Plan noted that Colusa is located next to the Sacramento River, in an area with high levels of waterfowl activity and raptor nesting. The River Basin contains a number of species, subspecies, and genetically distinct populations of fish that are presently listed as federally- or state-threatened/endangered species or species that appear to be approaching that status. However, the urbanized areas both in and just outside of the City limits are generally less likely to contain significant wildlife resources or habitat, and the California Department of Fish and Game has indicated there are no endangered animal species within the City of Colusa.

Just south of the City of Colusa, the federal government maintains the Colusa National Wildlife Refuge, part of the Pacific Flyway, which provides winter refuge for migrating waterfowl, such as ducks and geese. The 10,783-acre refuge consists of about 7,600 acres of managed wetlands, uplands, riparian habitat, and vernal pools. The refuge supports several endangered plants and animals, including transplanted colonies of palmate-braced bird's-beak, species of fairy shrimp, vernal pool tadpole shrimp, giant garter snake, wintering peregrine falcon, bald eagle, and breeding tri-colored blackbird. Resident wildlife includes grebe, heron, blackbird, golden eagle, beaver, muskrat, black-tailed deer, and other species typical of upland and wetland habitats. Approximately 9,000 people hunt on the refuge each year, and 73,000 people use the visitor center, auto tour route, and walking trail.

Although the urbanized area of the City of Colusa and outlying areas do not have species or vegetation which fall into the rare, threatened, or endangered categories, the City does consider its large variety of mature trees lining its streets a significant resource.

### *Wetlands and their Natural and Beneficial Functions*

Wetlands are habitats in which soils are intermittently or permanently saturated or inundated. Wetland habitats vary from rivers to seasonal ponding of alkaline flats and include swamps, bogs, marshes, vernal pools, and riparian woodlands. Wetlands are considered to be waters of the United States and are subject to the jurisdiction of the U.S. Army Corps of Engineers as well as the California Department of Fish and Wildlife (CDFW). Where the waters provide habitat for federally endangered species, the U.S. Fish and Wildlife Service may also have authority.

Wetlands are a valuable natural resource for communities providing beneficial impact to water quality, wildlife protection, recreation, and education, and play an important role in hazard mitigation. Wetlands provide drought relief in water-scarce areas where the relationship between water storage and streamflow regulation is vital and reduce flood peaks and slowly release floodwaters to downstream areas. When surface runoff is dampened, the erosive powers of the water are greatly diminished. Furthermore, the reduction in the velocity of inflowing water as it passes through a wetland helps remove sediment being transported by the water.

Wetlands are often found in floodplains and depressional areas of a watershed. Many wetlands receive and store floodwaters, thus slowing and reducing downstream flow. Wetlands perform a variety of ecosystem functions including food web support, habitat for insects and other invertebrates, fish and wildlife habitat, filtering of waterborne and dry-deposited anthropogenic pollutants, carbon storage, water flow regulation (e.g., flood abatement), groundwater recharge, and other human and economic benefits.

Wetlands, and other riparian and sensitive areas, provide habitat for insects and other invertebrates that are critical food sources to a variety of wildlife species, particularly birds. There are species that depend on these areas during all parts of their lifecycle for food, overwintering, and reproductive habitat. Other species use wetlands and riparian areas for one or two specific functions or parts of the lifecycle, most commonly for food resources. In addition, these areas produce substantial plant growth that serves as a food source to herbivores (wild and domesticated) and a secondary food source to carnivores.

Wetlands slow the flow of water through the vegetation and soil, and pollutants are often held in the soil. In addition, because the water is slowed, sediments tend to fall out, thus improving water quality and reducing turbidity downstream.

These natural floodplain functions associated with the natural or relatively undisturbed floodplain that moderates flooding, such as wetland areas, are critical for maintaining water quality, recharging groundwater, reducing erosion, redistributing sand and sediment, and providing fish and wildlife habitat. Preserving and protecting these areas and associated functions are a vital component of sound floodplain management practices for the City.

Wetlands in the City are shown in Section 4.2.1 and detailed in Table A-9.

### *Table A-9 City of Colusa – Wetland Types and Acreages*

| Wetlands Area Type | Wetlands Count | Wetlands Area (in Acres) |
|---|---|---|
| Freshwater Emergent Wetland | 27 | 56 |
| Freshwater Forested/Shrub Wetland | 12 | 87 |
| Freshwater Pond | 29 | 67 |
| Lake | 0 | 0 |
| Riverine | 52 | 11 |
| Estuarine and Marine Wetland | 0 | 0 |
| **City of Colusa Total** | **120** | **221** |

Source: US Fish and Wildlife Service

### Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk. The City of Colusa has a stock of historically significant homes, public buildings, and landmarks. The California Department of Parks and Recreation Office of Historic Preservation (OHP) was the primary source of information. OHP administers the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest programs. Each program has different eligibility criteria and procedural requirements. These requirements are detailed in Section 4.2.1 of the Base Plan. Table A-10 shows 6 historic buildings in the City in the OHP Database.

*Table A-10 City of Colusa – Historic Resources*

| Resource Name (Plaque Number) | National Register | State Landmark | Point of Interest | Date Listed | City/ Community |
|---|---|---|---|---|---|
| Colusa Carnegie Library (N1657) | X | | | 12/10/1990 | Colusa |
| Colusa County Courthouse (890) | | X | | 12/29/1975 | Colusa |
| Colusa Grammar School (N632) | X | | | 6/13/1978 | Colusa |
| Colusa High School and Grounds (N434) | X | | | 8/13/1976 | Colusa |
| Colusa IOOF Hall / Odd Fellows Building (P505) | | | X | 7/28/1977 | Colusa |
| Grand Island Shrine (P329) | X | | X | 5/15/1974 | Colusa |

Source: California Department of Parks and Recreation Office of Historic Preservation, http://ohp.parks.ca.gov/. Retrieved March 2024.

It should be noted that these lists may not be complete, as they may not include those currently in the nomination process and not yet listed. Additionally, as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), any property over 50 years of age is considered a historic resource and is potentially eligible for the National Register. Thus, in the event that the property is to be altered, or has been altered, as the result of a major federal action, the property must be evaluated under the guidelines set forth by CEQA and NEPA. Structural mitigation projects are considered alterations for the purpose of this regulation.

## Economic Assets and Community Activities of Value

Assessing the vulnerability of the City of Colusa to natural hazards and disasters also involves inventorying the economic assets and community activities of value in the City.

### Economic Assets

After a disaster, economic resiliency is one of the major drivers of a speedy recovery. Each community has specific economic drivers. These include:

- Primary Economic Sectors
- Major employers
- Commercial Centers

In the City of Colusa, this includes the following:

- Colusa's retail sector is the predominant influence on its economy, as well as the major generator of tax revenues to the City.
- The Countywide agricultural industry is an economic driver benefitting the City

### Community Activities of Value

Inventorying economic assets in the City and their vulnerability to natural hazards and disasters also involves inventorying activities that have value to the community. This includes activities that are important to a community, like long-standing traditions such as a festival or fair. Some areas rely on seasonal industries to sustain them throughout the year. Many of these activities also provide economic benefits to the City. A hazard event that cancels or shortens these can affect a community's livelihood and can make disaster recovery more difficult or prolonged. This includes activities such as:

- Festivals and Fairs
- Sporting Events
- Tourism
- Local Pool
- Local Splash Pool

The City noted the following community activities of value:

- Christmas time in Colusa
- 4th of July
- Founders Day
- Concerts in the Park
- Non-Profit events
- Farmers Market

## *Growth and Development Trends*

As part of the planning process, the City looked at changes in growth and development, both current and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time.

### Land Use

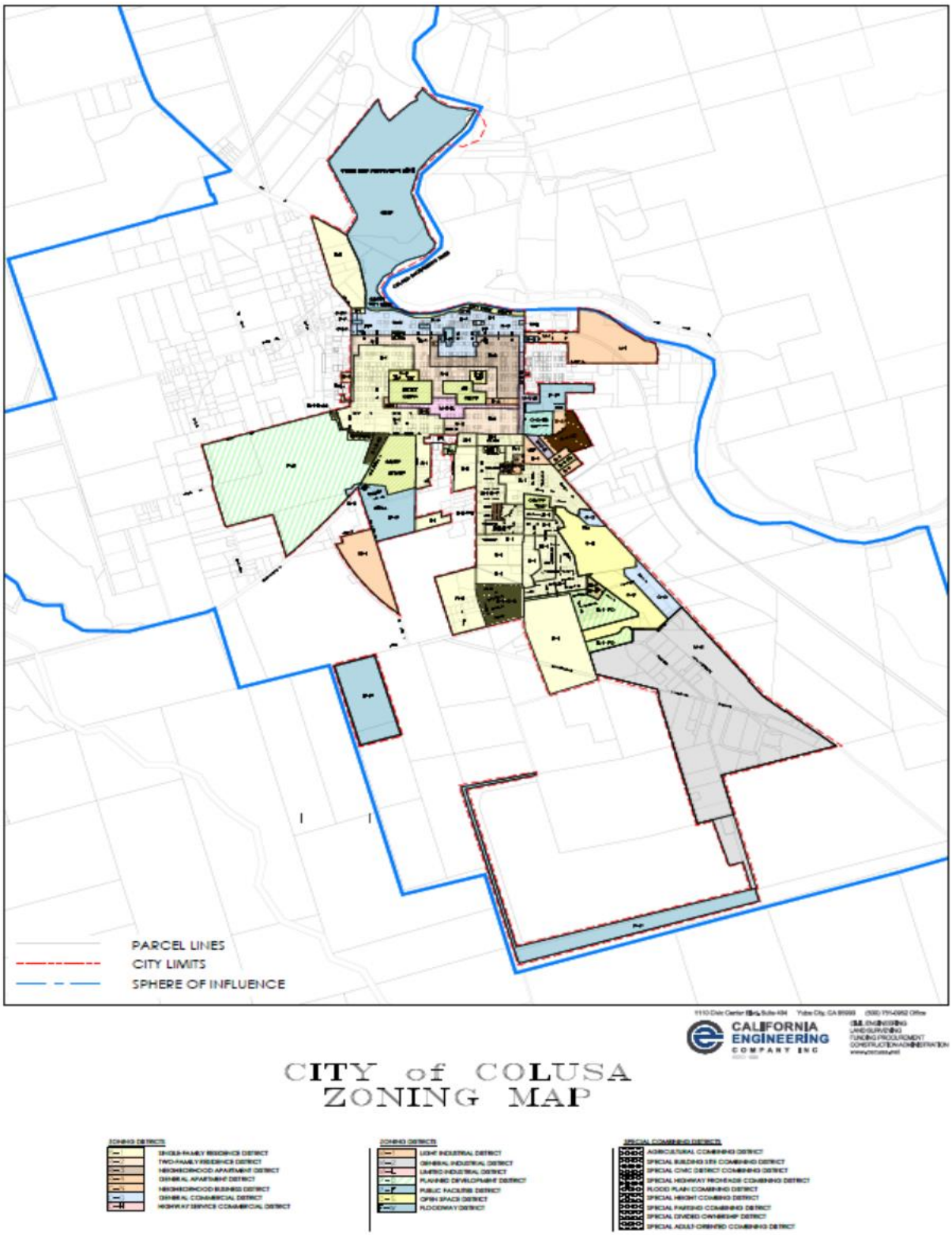
State planning law requires that a land use element of a general plan include a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The City's land use designations are generally described below and mapped on the Land Use Diagram (Figure A-10). The City of Colusa Municipal Code provides detailed land use and development standards for development.

The Municipal Code works hand in hand with the City's General Plan Land Use Element. The purpose of the Land Use Element is to provide goals, policies, actions diagrams and standards to guide future land use decisions in the City of Colusa. While all elements of the General Plan have equal weight under California

law, in some respects this Element is the most far-reaching. It informs all other elements of the General Plan, shaping the future transportation network and the location of future housing sites, and influencing public facility requirements and park and recreation needs. It defines the City's future open space system and responds to natural resource conservation issues and safety hazards. It establishes the basic pattern of development in the City for the next 20-25 years, including land uses and densities, and presents the policies and actions to ensure that future development will enhance the quality of life for all City of Colusa residents.

Future land use for the City of Colusa from the 2007 City of Colusa General Plan Land Use Element is shown on Figure A-10.

*Figure A-10 City of Colusa – Land Use Diagram*




Source: City of Colusa website (https://cityofcolusa.com/planning-and-building/). Retrieved 7/1/2024

## Population Trends and Projections

The City is expected to continue to increase in population. The 2020-2028 City of Colusa Housing Element contained population projections for the City from 2020 to 2028. These are shown on Table A-11.

### *Table A-11 City of Colusa – Future Population Projections*

| Forecast Factor | 2020 | 2025 | 2028 |
|---|---|---|---|
| Population | 6,196 | 6,406 | 6,624 |

Source: 2020-2028 City of Colusa Housing Element

## Development since 2018 Plan

The City noted that the Wildwood Estates (identified in the 2019 LHMP) has been completed. The Sunrise Landing Phase 1 and 2 was also developed since the last plan. Phase 1 and 2 included 90 units of single family residential housing. Also developed since last plan: it the Little Ceasars Pizza completed in 2023 on one parcel

Development has occurred in the City since the last plan. Some of this has occurred in hazard prone areas. The City Planning Department tracked total building permits issued since 2019 for the City. These are tracked by total development, property use type, and hazard risk area. These are shown in Table A-12 and Table A-13.

### *Table A-12 City of Colusa – Total Development Since 2019*

| Property Use | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Residential | 36 | | 42 | 21 | 21 |
| Commercial | 3 | 1 | | 2 | 2 |
| Industrial | | | | | |
| Other | | | | | |
| **Total** | **39** | **1** | **42** | **23** | **23** |

Source: City of Colusa Planning Department

### *Table A-13 City of Colusa – Development in Hazard Areas since 2018*

| Property Use | 1% Annual Chance Flood | Levee Protected Area | Wildfire Risk Area[1] | Other |
|---|---|---|---|---|
| **Total** | **110** | **18** | **0** | **0** |

Source: City of Colusa Planning Department

[1]Moderate or higher wildfire risk area

Development has occurred in the identified hazard areas, including the 1% annual chance floodplains and high wildfire risk areas. It was completed in accordance with all current and applicable development codes, floodplain ordinances, and standards and should be adequately protected. Thus, with the exception of more people living in the area potentially exposed to natural hazards, this growth should not cause a significant change in vulnerability of the City to identified priority hazards.

## Future Development Areas

It is important to review future development plans for the City. Future development should be sited in areas that are away from known hazard risks. If this is not possible, mitigation should be done to ensure that future development is protected against future hazards.

### GIS Analysis

The City provided 7 future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Where multiple parcels are listed, the parcels are merged to form one polygon, and the hazards assigned are based on the centroid of the polygon. Figure A-11 show the locations of the future development areas in the City, while Table A-14 shows the details of the future development areas by acres and parcels.

*Figure A-11 City of Colusa – Future Development Areas*

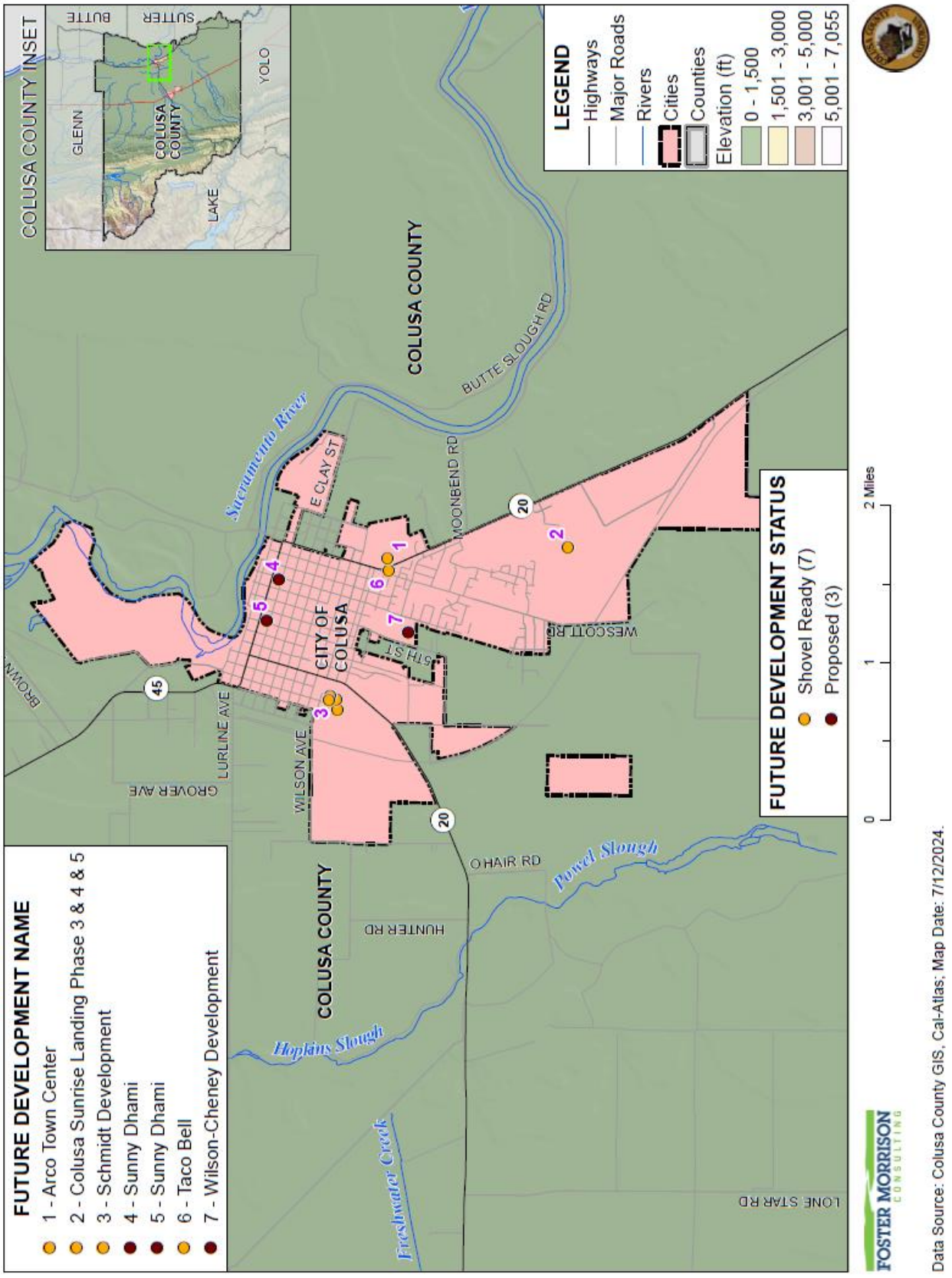


*Table A-14 City of Colusa – Future Development by Status*

| Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|
| Proposed | 4 | Sunny Dhami | 1 | 1 |
| | 5 | Sunny Dhami | 1 | 0.25 |
| | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | **Proposed Total** | | **3** | **10.61** |
| Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | 3 | Schmidt Development | 4 | 8.4 |
| | 6 | Taco Bell | 1 | 1.26 |
| | **Shovel Ready Total** | | **7** | **33.24** |
| **Grand Total** | | | **10** | **43.85** |

Source: City of Colusa

## A.4.2. Hazard Identification

The City of Colusa identified the hazards that affect the City and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to the City (see Table A-15).

### *Table A-15 City of Colusa—Hazard Identification Assessment*

| Hazard | Geographic Extent | Likelihood of Future Occurrences | Magnitude/ Severity | Significance | Climate Change Influence |
|---|---|---|---|---|---|
| Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds) | Limited | Occasional / Unlikely | Limited | Low | Medium |
| Climate Change | Extensive | Highly Likely | Limited | Low | – |
| Dam Failure | Extensive | Occasional | Catastrophic | High | Medium |
| Drought & Water shortage | Extensive | Likely | Catastrophic | High | High |
| Earthquake | Extensive | Occasional | Critical | Medium | Low |
| Floods: 1%/0.2% annual chance | Extensive | Occasional / Unlikely | Catastrophic | High | Medium |
| Floods: Localized Stormwater | Significant | Likely | Critical | Medium | Medium |
| Landslide, Mudslide, and Debris Flow | Likely | Unlikely | Negligible | Low | Medium |
| Levee Failure | Likely | Unlikely | Negligible | High | Medium |
| Severe Weather: Extreme Cold and Freeze | Extensive | Highly Likely | Critical | Low | Medium |
| Severe Weather: Extreme Heat | Extensive | Highly Likely | Critical | Low | High |
| Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning) | Extensive | Highly Likely | Critical | Medium | Medium |
| Severe Weather: High Winds and Tornados | Extensive | Highly Likely | Critical | Low | Low |
| Stream Bank Erosion | Extensive | Likely | Catastrophic | Low | Medium |
| Subsidence | Significant | Occasional | Critical | Low | Low |
| Wildfire | Significant | Highly Likely | Critical | Low | Medium |

**Geographic Extent**
***Limited:*** Less than 10% of planning area
***Significant:*** 10-50% of planning area
***Extensive:*** 50-100% of planning area

**Likelihood of Future Occurrences**
***Highly Likely:*** Near 100% chance of occurrence in next year or happens every year.
***Likely:*** Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less.
***Occasional:*** Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years.
***Unlikely***: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.

**Magnitude/Severity**
***Catastrophic:*** More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths
***Critical:*** 25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability
***Limited:*** 10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability
***Negligible:*** Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid

**Significance**
***Low:*** Minimal potential impact
***Medium:*** Moderate potential impact
***High:*** Widespread potential impact

**Climate Change Influence**
***Low:*** Minimal potential impact
***Medium:*** Moderate potential impact
***High:*** Widespread potential impact

## A.4.3. Hazard Profiles and Vulnerability to Specific Hazards

This section includes the hazard profiles and vulnerability assessment for hazards ranked of medium or high significance specific to the City of Colusa (as identified in the Significance column of Table A-15) and also includes a hazard profile and vulnerability assessment to the four primary hazards to the State of California: dam failure, earthquake, flood, and wildfire, regardless of the significance ranking by the City. Chapter 4 of the Base Plan provides more detailed information about these hazards and their impacts on the Colusa County Planning Area. Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.2 of the Base Plan.

### Hazard Profiles and Vulnerability Assessment

Each hazard is profiled in the following format:

- **Hazard Profile** – A hazard profile is included for each hazard. This includes information on:
  - ✓ **Hazard Overview** - A general discussion of the hazard and related issues is detailed here.
  - ✓ **Location** and **Extent** - Location is the geographic area within the City that is affected by the hazard. Extent is the expected range of intensity for each hazard. These are discussed in specific detail for mapped hazards, and in more general detail for those hazards that do not have discrete mapped hazard areas.
  - ✓ **Past Occurrences** - Past occurrences are discussed for each hazard. A discussion of disaster declarations is included in each hazard section. NCDC events are also discussed. Other past occurrences data specific to the City follow the disaster declarations for each hazard.
  - ✓ **Climate Change**—This section contains the effects of climate change (as applicable). The possible influence of climate change on the hazard is discussed.

After the hazard profile, a vulnerability assessment is presented. As part of the vulnerability assessment, an estimate of the vulnerability of the City to each identified hazard, in addition to the estimate of risk of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

After this classification, a general discussion of hazard vulnerabilities occurs. This is done in the following format:

- **Local Concerns** – This includes City provided information on how the City is uniquely affected by or vulnerable to each hazard.
- **Assets at Risk** – A discussion of the assets at risk follows, presented in the same format as in Section A.4.1 above. This includes sections on: People and Populations; Structures; Critical Facilities and Infrastructure, Community Lifelines; Natural, Historic, and Cultural Resources; and Economic Assets and Community Activities of Value. These are discussed in specific terms for mapped hazards, and in more general terms for those hazards that are unmapped.
- **Impacts** – A discussion on hazard impacts follows. Impacts describe how each hazard can affect the City and its assets. The type and severity of impacts reflect both the potential magnitude of the hazard and the vulnerability of the asset. Impacts are also affected by the community's ability to mitigate, prepare for, respond to, and recover from an event.
- **Future Conditions/Development** – A discussion of how future development will be affected by the hazard is also included. This is addressed specifically for mapped hazards, and in more general terms for those hazards that are unmapped.

## Power Interruption/Power Failure: A Common Vulnerability of all Hazards

An impact of almost all hazards evaluated as part of this LHMP Update relates to power shortage and/or power failures. The US power grid crisscrosses the country, bringing electricity to homes, offices, factories, warehouses, farms, traffic lights and even campgrounds. According to statistics gathered by the U.S. Department of Energy, major blackouts are on the upswing. Incredibly, over the past two decades, blackouts impacting at least 50,000 customers have increased 124 percent. The electric power industry does not have a universal agreement for classifying disruptions. Nevertheless, it is important to recognize that different types of outages are possible so that plans may be made to handle them effectively. In addition to blackouts, brownouts can occur. A brownout is an intentional or unintentional drop in voltage in an electrical power supply system. Intentional brownouts are used for load reduction in an emergency. Electric power disruptions can be generally grouped into two categories: intentional and unintentional. More information on types of power disruptions can be found in Section 4.3 of the Base Plan.

### Public Safety Power Shutoff (PSPS)

A new intentional disruption type of power shortage/failure event has been recently occurring in California. In recent years, several wildfires have started as a result of downed power lines or electrical equipment. This was the case for the Camp Fire in 2018. As a result, California's three largest energy companies (including PG&E), at the direction of the California Public Utilities Commission (CPUC), are coordinating to prepare all Californians for the threat of wildfires and power outages during times of extreme (fire) weather. To help protect customers and communities during extreme fire weather events, electric power may be shut off for public safety in an effort to prevent wildfire. This is called a PSPS. More information on PSPS criteria can be found in Section 4.3 of the Base Plan.

In addition to PSPSs, to help prevent wildfires, electric utilities have begun to evolve safety efforts. This includes installing safety settings on powerlines in and around high fire-risk areas. These are known as Enhanced Powerline Safety Settings (EPSS), and they help prevent falling tree branches, animals and other hazards from starting a wildfire. By stopping ignitions, it helps prevent wildfires from starting and spreading. According to PG&E, if ignitions occur, the size of fires are much smaller due to EPSS. In 2022,

there was a 99% decrease in acres impacted by ignitions (as measured by fire size from electric distribution equipment (compared to the 2018-2020 average). This decrease occurred despite dry conditions.

### Local Concerns

The City noted that there have been no PSPS events that have affected them.

## *Dam Failure*

**Likelihood of Future Occurrence**–Occasional
**Vulnerability**–Extremely High

### Hazard Profile

Dams are manmade structures built for a variety of uses including flood protection, power generation, agriculture, water supply, and recreation. When dams are constructed for flood protection, they are usually engineered to withstand a flood with a computed risk of occurrence. For example, a dam may be designed to contain a flood at a location on a stream that has a certain probability of occurring in any given year. If prolonged periods of rainfall and flooding occur that exceed the design requirements, that structure may be overtopped or fail. Overtopping is the primary cause of earthen dam failure in the United States.

Dam failure is a natural disaster from two perspectives. First, the inundation from released waters resulting from dam failure is related to naturally occurring floodwaters. Second, a total dam failure would most probably happen as a consequence of the natural disaster triggering the event, such as an earthquake.

### Location and Extent

An inventory map of dams located within Colusa County was shown in Section 4.3.8 in the Base Plan. Dams with an inundation area within the City of Colusa are shown on Figure A-12. This includes two extremely high hazard dams – Lake Almanor and Lake Oroville. It also includes three high hazard dams – Black Butte, Shasta, and Whiskeytown. It should be noted that no mapped significant hazard dam inundation areas affect the City.

There is no scale with which to measure dam failure. However, FEMA and CA DWR Division of Safety of Dams (DSOD) assigns hazard potential classifications to dams within the State that provides information on the potential impact should a dam fail. The following two factors are considered when assigning hazard ratings: existing land use and land use controls (zoning) downstream of the dam. FEMA categorizes the downstream hazard potential into three categories in increasing severity: Low, Significant, and High. DSOD adds a fourth category of Extremely High. Dams are classified in these four categories that identify the potential hazard to life and property. These were discussed in more detail in Section 4.3.8 of the Base Plan.

While a dam may fill slowly with runoff from winter storms, a dam break has a very quick speed of onset. The duration of dam failure is generally not long – only as long as it takes to empty the reservoir of water the dam held back. For dam overtopping, the speed of onset is somewhat slower than that of a dam break,

and the duration is longer (as evidenced in the 2017 Oroville Dam spillway event). The City would be affected for as long as the flood waters from the dam failure took to drain downstream.

Geographic flood extent from the DSOD and Cal OES dam inundation areas is shown on Figure A-12 and Figure A-13, as well as in Table A-16.

*Figure A-12 City of Colusa – Extremely High Hazard Dam Inundation Areas*

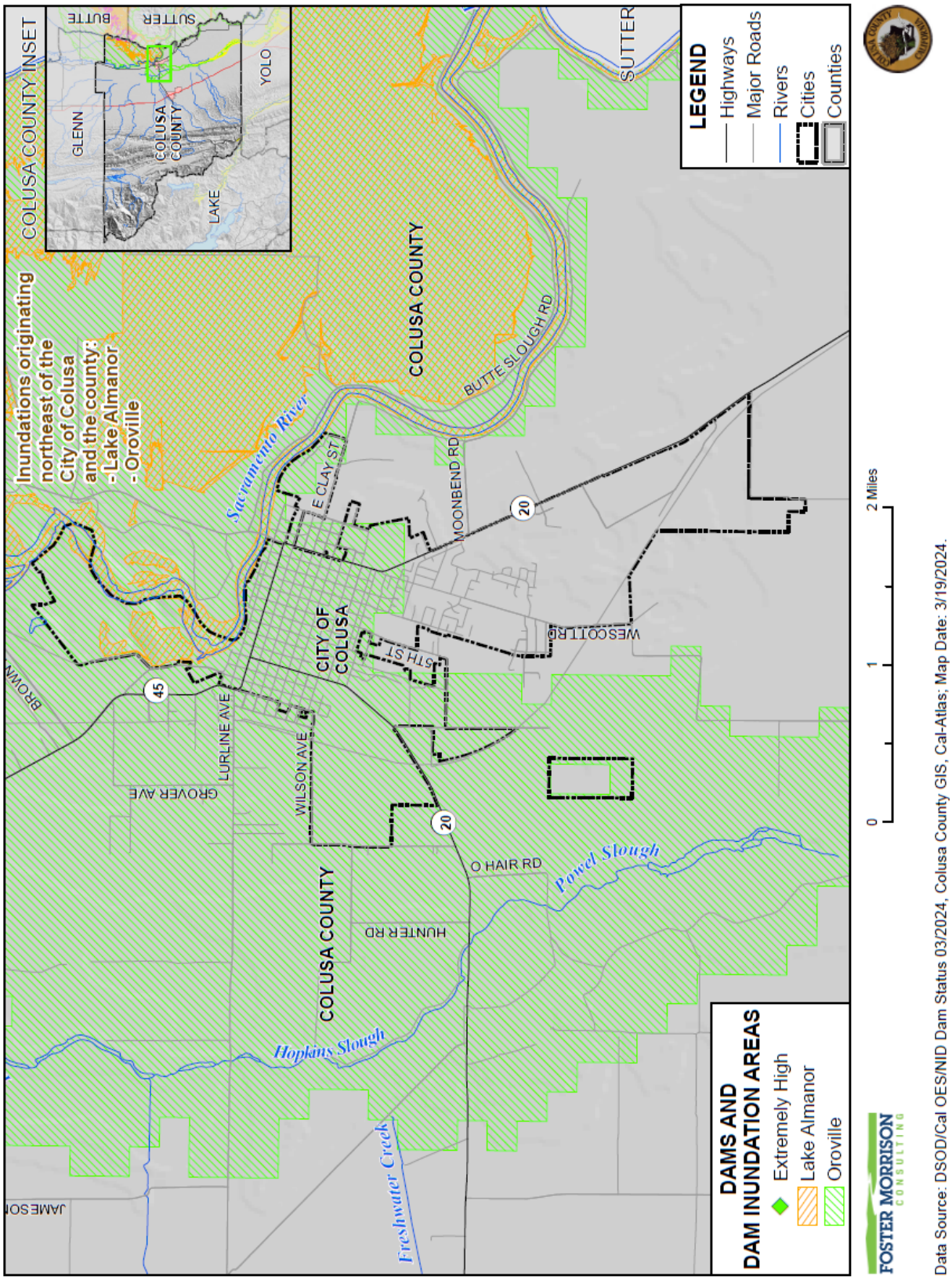


*Figure A-13 City of Colusa – High Hazard Dam Inundation Areas*

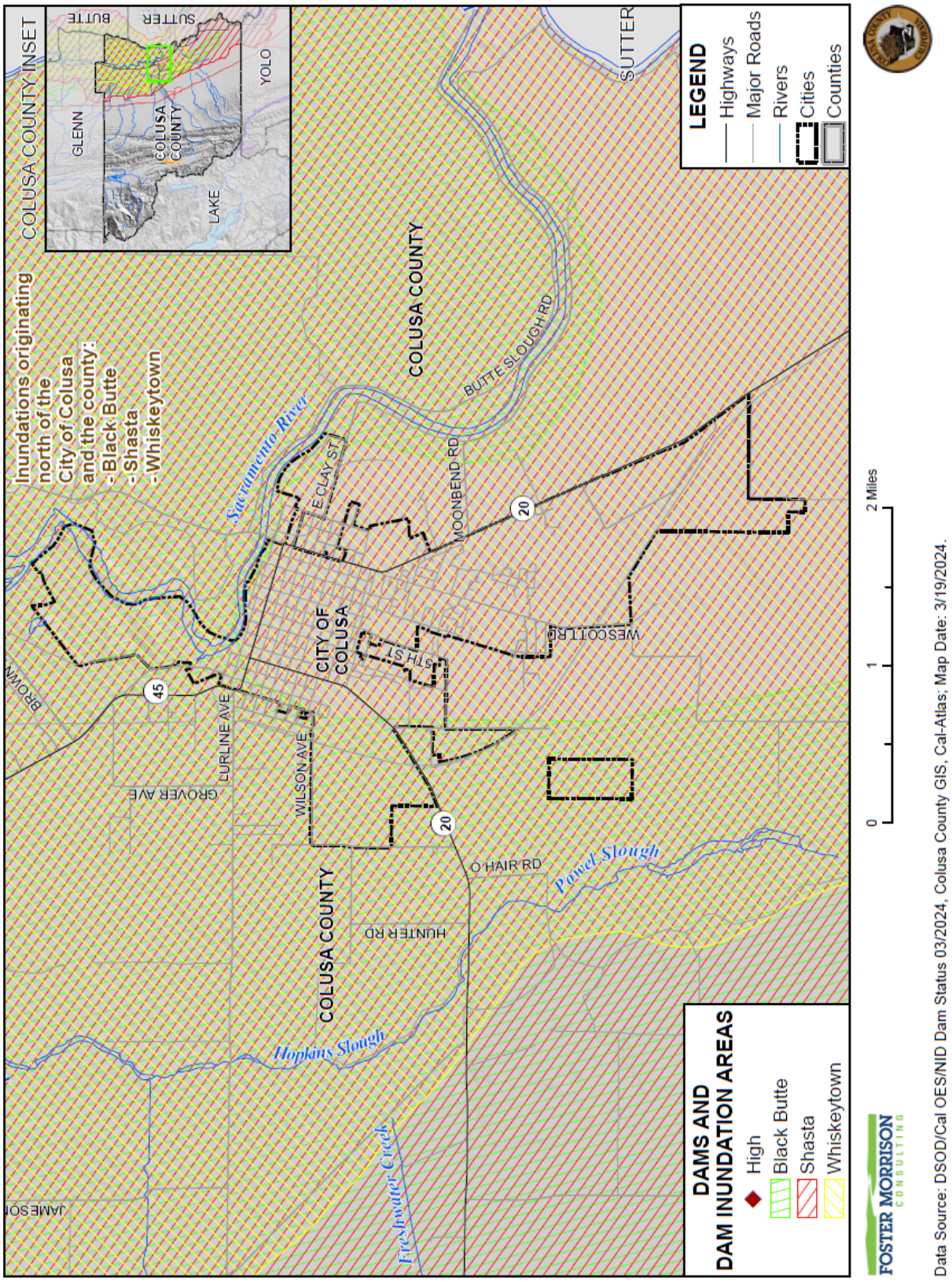


*Table A-16 City of Colusa – Dam Inundation Areas Geographical Extents*

| Dam Inundation Area | Total Acres | % of Total Acres | Improved Acres | % of Total Improved Acres | Unimproved Acres | % of Total Unimproved Acres |
|---|---|---|---|---|---|---|
| Lake Almanor | 81 | 3.349% | 0 | 0.005% | 81 | 7.887% |
| Oroville | 1,283 | 53.180% | 811 | 58.430% | 471 | 46.057% |
| Shasta | 2,412 | 100.000% | 1,388 | 100.000% | 1,023 | 100.000% |
| Thermalito Afterbay | 0 | 0.000% | 0 | 0.000% | 0 | 0.000% |

Source: Cal OES, DSOD, Colusa County GIS

## Past Occurrences

### *Disaster Declaration History*

There have been no state or federal disaster declarations for dam failure in Colusa County.

### *NCDC Events*

The NCDC does not contain any dam failure events for Colusa County.

### *City of Colusa Events*

The City of Colusa noted that it was affected by dam incidents such as the 2017 Oroville dam failure. The City is indirectly affected due to the rise in river levels when there are dam failures. Similar to Colusa County, the City was also affected during the 2017 Oroville dam failure as a result of evacuees looking for shelter and other needs within the City of Colusa. The City noted that there have been no new dams or threats since the last LHMP.

## Climate Change and Dam Failure

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with dam failure. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

The 2023 California State Hazard Mitigation Plan noted that modeling described in California's Fourth Climate Change Assessment projects less frequent but more extreme daily precipitation. Year-to-year precipitation will become more volatile, and the number of dry years will increase by mid-century. As the climate continues to warm, atmospheric rivers will carry more moisture, and extreme precipitation may increase. Climate model projections show a tendency for the northern part of the State to become wetter. Increases in both precipitation and heat causing snow melt in areas upstream of dams could increase the potential for dam failure and uncontrolled releases in Colusa County and the City.

## Vulnerability to Dam Failure

The vulnerability of the City to dam failure flooding would vary depending on which dam fails and the nature and extent of the dam failure and associated flooding. An assessment of a community's vulnerability to dam failure begins with an understanding of local exposure to dam failure. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

The 2010 General Plan Background Report for the Colusa County noted that Lake Oroville, which is located in Butte County, would represent the most immediate threat to Colusa County (and the City) in the event of a dam failure, as flood waters could reach the County within eight hours. Lake Shasta, in Shasta County, could cause the most extensive inundation, reaching as far west as Maxwell and College City in a period of 42 hours. Inundation from Whiskeytown Lake, located in Trinity County, would take over three days to reach Colusa County. Failure of the dam of Black Butte Lake, which is on the border of Glenn and Tehama Counties, could result in some inundation within a period of about 35 hours. The inundation from a failure of this dam would be less extensive than if the other above referenced dams were to fail.

Failure of the dam at East Park Reservoir could cause minor inundation at the reservoir's outlet. The flood waters would flow into Glenn County; thus, its failure would not likely impact areas of Colusa County. In Glenn County, the flooding could extend up to one-quarter mile on either side of Stony Creek at its widest point. The water could cause an overflow of Stony Gorge Reservoir, which is located on Stony Creek. Black Butte Reservoir would retain the excess inundation.

### Assets at Risk

Assets at risk from dam failure include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

All people and populations located in dam inundation areas are vulnerable to dam failure. Certain vulnerable populations may be at increased risk to dam failure, especially during a large event with minimal advance notice. These vulnerable populations may include: the unsheltered, those with limited mobility, and those that lack the resources to leave the area.

City residents that live in these dam inundation areas are often the most vulnerable. Not only are the residents at risk, but their homes and contents are all at risk, compounding the impacts associated with significant hazard events. To future evaluate the impact to the City of Colusa's residential populations located in these hazard areas, a separate analysis was performed to determine residential populations in the dam inundation areas. The DSOD and Cal OES dam inundation areas were overlayed on the parcel layer.

Those residential parcel centroids that intersect the dam inundation areas were counted and multiplied by the Census Bureau average household factors for the City of Colusa – 2.55. This is shown in Table A-17.

### *Table A-17 City of Colusa – Improved Residential Parcels and Population by Dam Inundation Area*

| Dam Classification /Dams | City of Colusa | |
|---|---|---|
| | Improved Residential Parcels | Population |
| **Extremely High Hazard Dams** | | |
| Oroville | 982 | 2,848 |
| **High Hazard Dams** | | |
| Black Butte | 76 | 194 |
| Shasta | 1,778 | 5,156 |
| Whiskeytown | 1,778 | 5,156 |

Source: Cal OES, DSOD, Colusa County 2023 Parcel/Assessor Data, US Census Bureau American Community Survey 2022 Household Size Estimates.

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

#### *Structures*

Most structures in the City have some measure of risk to dam failure. Dam failure flooding can affect the built environment of the City. Structures in dam inundation areas are at risk and depending on flood depths, can range from slight damage to totally inundated. Analysis by extremely high hazard and high hazard dam follows.

A GIS based analysis was used to determine the possible impacts of dam inundation flooding on parcels and structures within the City of Colusa. The methodology described in Section 4.3.8 of the Base Plan was followed in determining City parcels and structures at risk to dam failure. Parcel counts, land and improved values (i.e., those with a structure improvement on the parcel), estimated content replacement values, and total values that fall within dam inundation areas in the City are presented below by hazard classification and by dam. The results are presented in tables below for the dams that affect the City. This starts with the extremely high hazard dam inundation areas – the Lake Oroville Dam (Table A-18). It continues with the high hazard dam inundation areas – the Black Butte Dam (Table A-19), the Shasta Dam (Table A-20), and the Whiskeytown Dam (Table A-21).

### *Table A-18 City of Colusa – Count and Value of Parcels (and Structures) in Lake Oroville Dam Inundation Area by Property Use*

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 11 | 6 | $7,643,184 | $345,000 | $0 | $345,000 | $8,333,184 |
| Commercial | 221 | 174 | $18,937,630 | $43,421,758 | $4,378,626 | $43,421,758 | $110,159,772 |

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Government | 88 | 44 | $5,089,700 | $26,665,866 | $13,472,001 | $26,665,866 | $71,893,433 |
| Industrial | 2 | 2 | $510,358 | $1,791,452 | $0 | $2,687,178 | $4,988,988 |
| Institutional | 28 | 15 | $1,740,632 | $3,228,069 | $2,616,683 | $3,228,069 | $10,813,453 |
| Miscellaneous | 8 | 4 | $510,307 | $7,426,379 | $0 | $7,426,379 | $15,363,065 |
| Residential | 1,022 | 982 | $45,077,411 | $140,127,506 | $949,458 | $70,063,756 | $256,218,131 |
| **City of Colusa Total** | **1,380** | **1,227** | **$79,509,222** | **$223,006,030** | **$21,416,768** | **$153,838,006** | **$477,770,026** |

Source: DSOD, Cal OES, Colusa County 2023 Parcel/Assessor Data,

### *Table A-19 City of Colusa – Count and Value of Parcels (and Structures) in Black Butte Dam Inundation Area by Property Use*

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 6 | 5 | $7,138,911 | $340,140 | $0 | $340,140 | $7,819,191 |
| Commercial | 19 | 15 | $1,191,676 | $2,038,772 | $0 | $2,038,772 | $5,269,220 |
| Government | 22 | 4 | $1,499,162 | $299,002 | $0 | $299,002 | $2,097,166 |
| Industrial | 2 | 2 | $510,358 | $1,791,452 | $0 | $2,687,178 | $4,988,988 |
| Institutional | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Miscellaneous | 1 | 1 | $12,294 | $582,611 | $0 | $582,611 | $1,177,516 |
| Residential | 82 | 76 | $3,610,457 | $9,474,280 | $161,962 | $4,737,140 | $17,983,839 |
| **City of Colusa Total** | **132** | **103** | **$13,962,858** | **$14,526,257** | **$161,962** | **$10,684,843** | **$39,335,920** |

Source: DSOD, Cal OES, 2023 Colusa County Parcel/Assessor Data

### *Table A-20 City of Colusa – Count and Value of Parcels (and Structures) in Shasta Dam Inundation Area by Property Use*

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 23 | 11 | $13,938,078 | $552,430 | $495,940 | $552,430 | $15,538,878 |
| Commercial | 249 | 190 | $20,544,713 | $57,204,144 | $6,312,332 | $57,204,144 | $141,265,333 |
| Government | 107 | 51 | $5,985,502 | $33,560,789 | $18,519,832 | $33,560,789 | $91,626,912 |
| Industrial | 65 | 22 | $12,418,971 | $34,637,423 | $15,447,206 | $51,956,134 | $114,459,734 |
| Institutional | 34 | 20 | $2,286,791 | $6,200,820 | $6,039,649 | $6,200,820 | $20,728,080 |
| Miscellaneous | 12 | 5 | $615,343 | $8,431,121 | $0 | $8,431,121 | $17,477,585 |
| Residential | 1,844 | 1,778 | $88,514,146 | $303,181,060 | $2,413,584 | $151,590,525 | $545,699,315 |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

Source: DSOD, Cal OES, 2023 Colusa County Parcel/Assessor Data

### *Table A-21 City of Colusa – Count and Value of Parcels (and Structures) in Whiskeytown Dam Inundation Area by Property Use*

| Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 23 | 11 | $13,938,078 | $552,430 | $495,940 | $552,430 | $15,538,878 |
| Commercial | 249 | 190 | $20,544,713 | $57,204,144 | $6,312,332 | $57,204,144 | $141,265,333 |
| Government | 107 | 51 | $5,985,502 | $33,560,789 | $18,519,832 | $33,560,789 | $91,626,912 |
| Industrial | 65 | 22 | $12,418,971 | $34,637,423 | $15,447,206 | $51,956,134 | $114,459,734 |
| Institutional | 34 | 20 | $2,286,791 | $6,200,820 | $6,039,649 | $6,200,820 | $20,728,080 |
| Miscellaneous | 12 | 5 | $615,343 | $8,431,121 | $0 | $8,431,121 | $17,477,585 |
| Residential | 1,844 | 1,778 | $88,514,146 | $303,181,060 | $2,413,584 | $151,590,525 | $545,699,315 |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

Source: DSOD, Cal OES, 2023 Colusa County Parcel/Assessor Data

### *Critical Facilities and Infrastructure*

Dam failure presents a threat to both critical facilities and infrastructure. A separate analysis was performed on the critical facility inventory in the City to determine critical facilities that fall into dam inundation areas. Using GIS, the DFIRM flood zones were overlayed on the critical facility GIS layer. This is shown on Figure A-14 for extremely high hazard dam inundation areas in the City, and on Figure A-15 for high hazard dam inundation areas in the City. Table A-22 details which critical facilities fall in which dam inundation area. Details of critical facility categories, type, name, and address by detailed flood zone are listed in Appendix F.

*Figure A-14 City of Colusa – Critical Facilities in Extremely High Hazard Dam Inundation Areas*

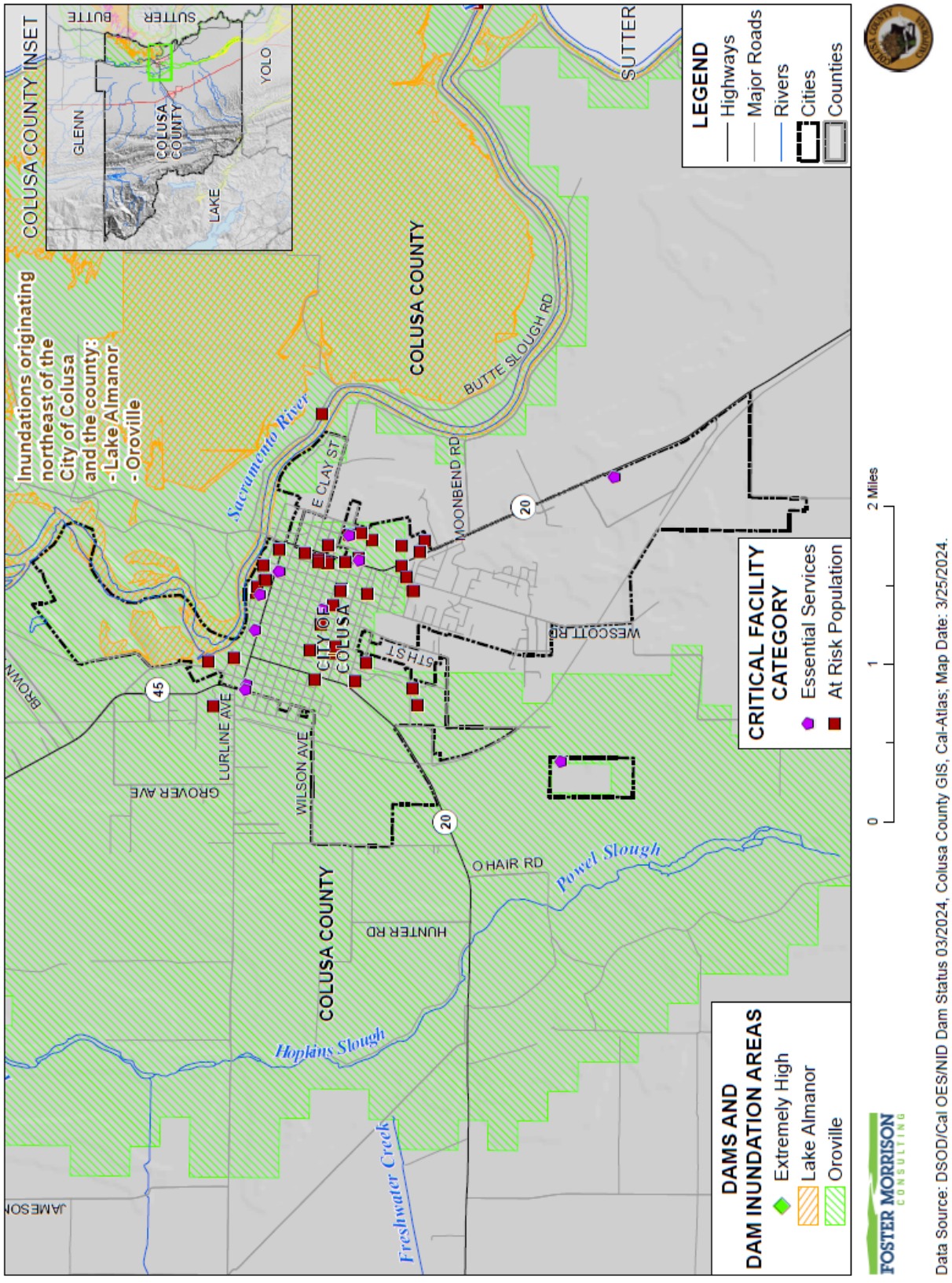


***Figure A-15 City of Colusa – Critical Facilities in High Hazard Dam Inundation Areas***

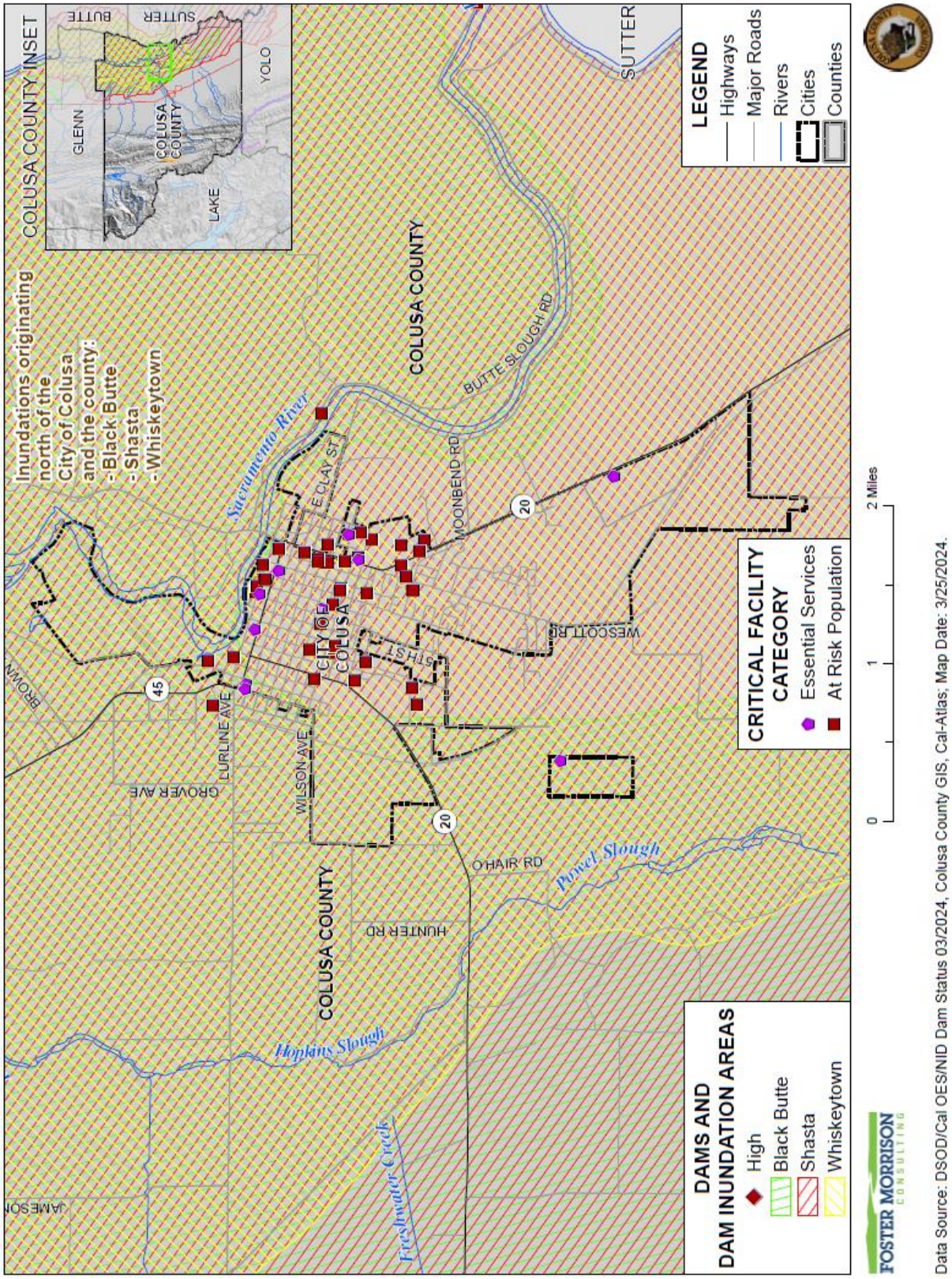


*Table A-22 City of Colusa – Critical Facilities in Extremely High and High Hazard Dam Inundation Areas by Category and Type*

| Dam / Dam Classification/ Critical Facility Category | Facility Type | Facility Count |
|---|---|---|
| **Extremely High Hazard Dam Inundation Area – Oroville Dam** | | |
| Essential Services Facilities | Emergency Response | 1 |
| | Fire Station | 2 |
| | Medical | 1 |
| | Police Station | 1 |
| | Public Services | 2 |
| | Utility Facility | 2 |
| | **Total** | **9** |
| At Risk Population Facilities | Apartment Complex | 19 |
| | Assisted-Living | 1 |
| | Hotel or Motel | 2 |
| | Jail | 1 |
| | Mobile Home Park | 4 |
| | School | 8 |
| | Senior Living Facility | 1 |
| | **Total** | **36** |
| **City of Colusa Oroville Dam Total** | | **45** |
| **High Hazard Dam Inundation Area – Black Butte Dam** | | |
| Essential Services Facilities | Emergency Response | 1 |
| | Public Services | 1 |
| | Utility Facility | 1 |
| | **Total** | **3** |
| At Risk Population Facilities | Mobile Home Park | 2 |
| | **Total** | **2** |
| **City of Colusa Black Butte Dam Total** | | **5** |
| **High Hazard Dam Inundation Area – Shasta Dam** | | |
| Essential Services Facilities | Emergency Response | 1 |
| | Fire Station | 2 |
| | Medical | 1 |
| | Police Station | 1 |
| | Public Services | 3 |
| | Utility Facility | 2 |
| | **Total** | **10** |
| At Risk Population Facilities | Apartment Complex | 22 |

| Dam / Dam Classification/ Critical Facility Category | Facility Type | Facility Count |
|---|---|---|
| | Assisted-Living | 1 |
| | Hotel or Motel | 2 |
| | Jail | 1 |
| | Mobile Home Park | 5 |
| | School | 8 |
| | Senior Living Facility | 1 |
| | **Total** | **40** |
| **City of Colusa Shasta Dam Total** | | **50** |
| **Hich Hazard Dam Inundation Area – Whiskeytown Dam** | | |
| Essential Services Facilities | Emergency Response | 1 |
| | Fire Station | 2 |
| | Medical | 1 |
| | Police Station | 1 |
| | Public Services | 3 |
| | Utility Facility | 2 |
| | **Total** | **10** |
| At Risk Population Facilities | Apartment Complex | 22 |
| | Assisted-Living | 1 |
| | Hotel or Motel | 2 |
| | Jail | 1 |
| | Mobile Home Park | 5 |
| | School | 8 |
| | Senior Living Facility | 1 |
| | **Total** | **40** |
| **City of Colusa Whiskeytown Dam Total** | | **50** |

Source: Cal OES, DSOD, Colusa County GIS

### *Community Lifelines*

Dam failure flooding presents a threat to life and property, including community lifelines in the City. They are likely to be overwhelmed in a dam failure event. A catastrophic dam failure could challenge local response capabilities and require evacuations to save lives. Many of the City's community lifelines are the same as or similar to Colusa County's. This was discussed in greater detail in Section 4.3.8 of the Base Plan.

### *Natural, Historic, and Cultural Resources*

A major dam failure event and associated flooding could have a devastating impact on the City. Large flood events can affect all natural, historic, and cultural resources that lie in the dam inundation areas. There

are a number of ways floodwaters associated with a dam failure event can impact natural resources and the environment: Wildlife habitats can be destroyed by floodwaters. Contaminated floodwater can pollute rivers and habitats. Silt and sediment can destroy natural areas. Riverbanks and natural levées can be eliminated as rivers reach bankfull capacity. Rivers can be widened, and deposition can increase downstream. Trees can be uprooted by high-velocity water flow. Plants that survive the initial flood may die due to being inundated with water. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to these structures within the inundated areas, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged, and lost during extreme dam failure flood events.

### *Economic Assets and Community Activities of Value*

As shown on the maps and tables above, there are multiple dams that would affect large swaths of the City should they fail. Most economic assets of the City would be at least temporarily disrupted. Many of these may come back online relatively quickly after a dam failure flood event, but some would take longer to re-engage in business. Some economic assets may be damaged to the point where the business or area would no longer be economically viable to continue to operate.

Depending on the dam, and the nature and extent of the failure, most community activities of value would be affected if they occurred during a dam failure event.

### Impacts from Dam Failure

Impacts to the City from dam failure flooding could be extensive and widespread and include loss of life and injury, flooding and damage to property and structures, damage to critical facilities and infrastructure, loss of natural resources, and all other flood related impacts. Levees within the City and surrounding areas may also be damaged or destroyed contributing to the flood waters. Additionally, mass evacuations may be necessary and compounded by impacts to transportation systems and infrastructure. Economic losses to the City and Colusa County Planning Area can also be significant.

Other impacts associated with dam failure include landslides, bank erosion, and destruction of habitat. Dam failures can cause downstream flooding and can transport large volumes of sediment and debris and contaminants from the floodwaters. Other environmental impacts can include contamination from septic system failures and releases of contaminants from hazardous materials facilities, contamination of potable water supplies; changes in configurations of streams; loss of wildlife habitats; and degradation of wetlands. A large dam failure event could have significant and catastrophic impacts.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Climate Change and Dam Failure discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

## Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for Colusa include the following:

- Climate change is likely to exacerbate future rain and storm conditions and associated impacts and vulnerability of the City to dam failure.
- Population growth in the City has recently slowed; however, additional growth within the dam inundation areas of the City would place additional populations at risk to dam failure. Additional population growth would likely bring continued diversity to the City. Vulnerable population groups could face disproportionate effects from a dam failure and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. Locating new development, structures, and critical facilities and infrastructure within or near areas of dam failure risk may put additional development at risk. However, City building codes are in effect to partially reduce this risk and should be updated as necessary to continue to address future dam failure conditions. Thus, depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Future dam failure events may occur in the City. Given the high number of affected parcels and structures, future development in the City, could be affected by dam failures and associated flooding. Siting of future development areas should take dam failure flooding into account. As the City continues to grow and develop, the population will continue to grow and become more diverse. Changing migration patterns will fluctuate the vulnerability of the City and the vulnerable populations such as AFN, unhoused, the elderly, and very young may feel the effects of this disaster disproportionately.

Future development areas and their vulnerability to dam failure are discussed further in the below GIS analysis.

### *GIS Analysis*

The City provided 7 future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Utilizing the future development area spatial layer, the parcel centroid data was intersected to determine the future development areas within each mapped dam inundation area. Figure A-16 show the locations of the future development areas overlayed on the extremely high hazard dam inundation areas, while Figure A-17 show the locations of the future development areas overlayed on the extremely high hazard dam inundation areas. Table A-23 shows each future development area in the City in these areas.

*Figure A-16 City of Colusa – Future Developments in Extremely High Hazard Dam Inundation Areas*

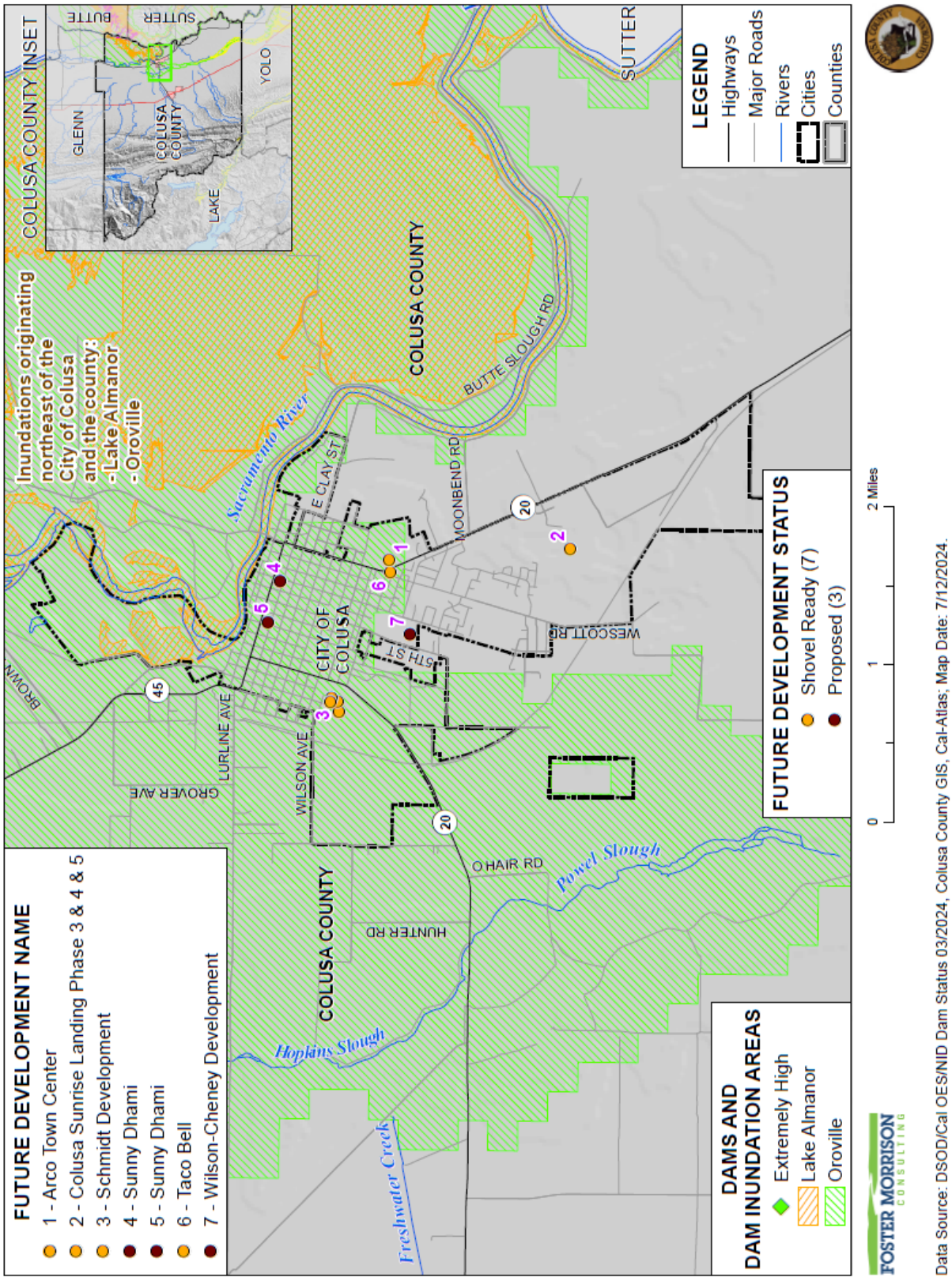
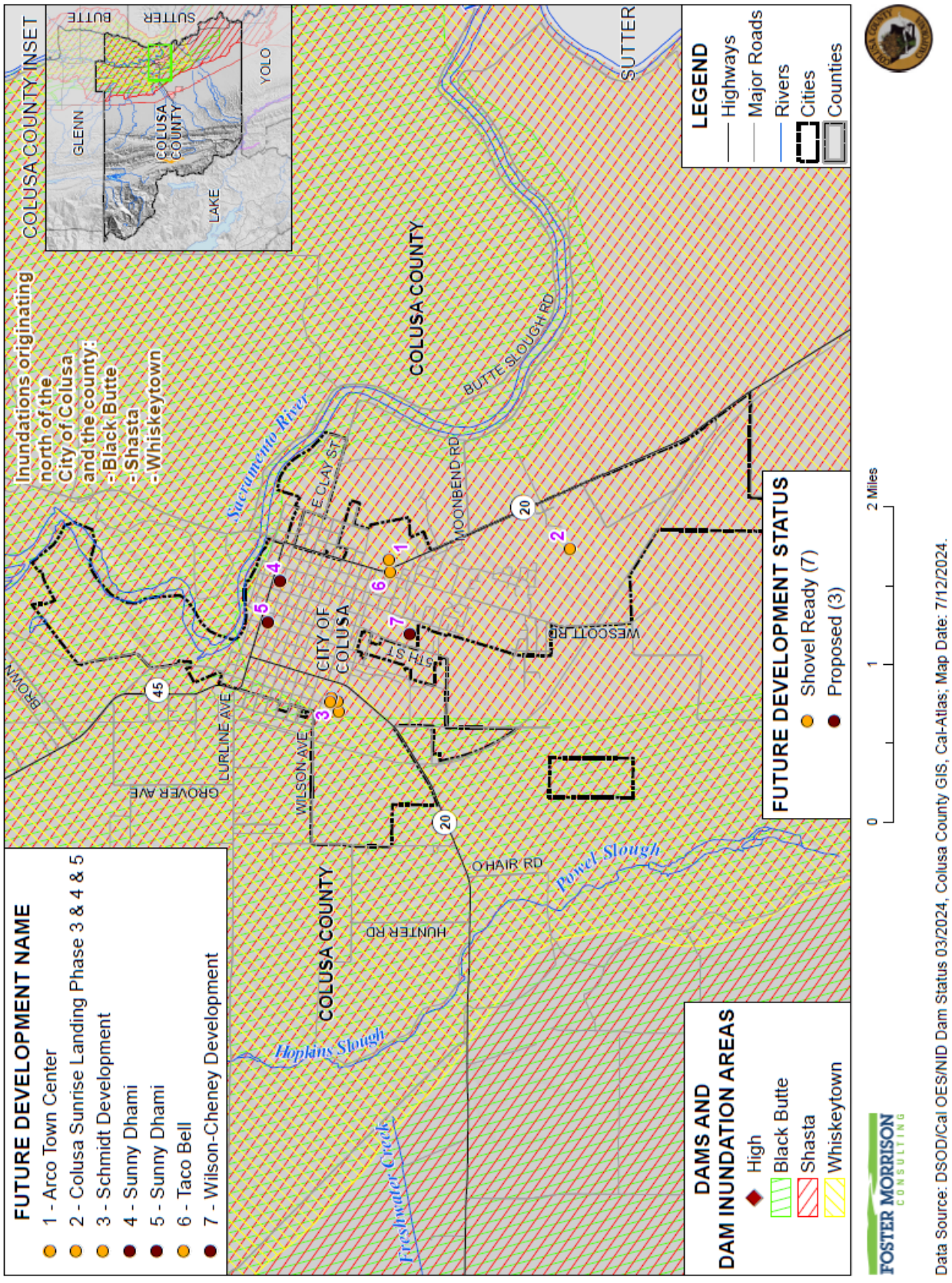


*Figure A-17 City of Colusa – Future Developments in High Hazard Dam Inundation Areas*



### *Table A-23 City of Colusa – Future Development in Extremely High and High Hazard Dam Inundation Areas*

| Dam Inundation Area | Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|---|
| **Extremely High Dam Inundation Area** | | | | | |
| Oroville | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | **Proposed Total** | | **2** | **1.25** |
| | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | | 3 | Schmidt Development | 4 | 8.4 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **6** | **14.24** |
| | **Oroville Total** | | | **8** | **15.49** |
| **High Dam Inundation Area** | | | | | |
| Shasta | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | | **Proposed Total** | | **3** | **10.61** |
| | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | | 3 | Schmidt Development | 4 | 8.4 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **7** | **33.24** |
| | **Shasta Total** | | | **10** | **43.85** |
| Whiskeytown | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | | **Proposed Total** | | **3** | **10.61** |
| | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |

| Dam Inundation Area | Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|---|
| | | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | | 3 | Schmidt Development | 4 | 8.4 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **7** | **33.24** |
| | **Whiskeytown Total** | | | **10** | **43.85** |

Source: DSOD/Cal OES, City of Colusa

## *Drought & Water Shortage*

**Likelihood of Future Occurrence**–Likely
**Vulnerability**–Medium

### Hazard Profile

Drought and water shortage are complex issues involving many factors—it occurs when a normal amount of precipitation and snow is not available to satisfy an area's usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water supply is the most significant issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. Drought has also affected tree mortality in the area in the past. As the population in the area continues to grow, so will the demand for water.

#### Location and Extent

Drought and water shortage are regional phenomenon. The whole of the City and County is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- D0 – Abnormally dry
- D1 – Moderate Drought
- D2 – Severe Drought
- D3 – Extreme drought
- D4 – Exceptional drought

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time (which does not usually affect water shortages) or for longer periods (which may challenge water supplies). Should a drought last for a long period of time, water shortage becomes a larger issue. Current drought conditions in the City are shown in Section 4.3.9 of the Base Plan.

## Past Occurrences

### *Disaster Declaration History*

There have been one federal and three state disaster declarations from drought. This can be seen in Table A-24.

*Table A-24 Colusa County – Federal and State Drought Disaster Declarations 1950-2024*

| Disaster Type | Federal Declarations | | State Declarations | |
|---|---|---|---|---|
| | Count | Years | Count | Years |
| Drought | 1 | 1977 | 3 | 1976, 2014, 2021 |

Source: Cal OES, FEMA

### *NCDC Events*

There have been 58 NCDC drought events in Colusa County. These most likely had some impact on the City.

### *City of Colusa Events*

Based on historical information, the occurrence of drought in California, including the City of Colusa, is cyclical, driven by weather patterns. Section 4.3.9 of the Base Plan notes that five droughts have occurred in the past 86 years. Drought has occurred in the past and will occur in the future.

## Climate Change and Drought and Water Shortage

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with drought and water shortage. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Climate scientists studying California find that drought conditions are likely to become more frequent and persistent over the 21st century due to climate change. The experiences of California during recent years underscore the need to examine more closely the state's water storage, distribution, management, conservation, and use policies. The 2021 CAS stresses the need for public policy development addressing long term climate change impacts on water supplies. The CAS notes that climate change is likely to significantly diminish California's future water supply, stating that: California must change its water management and uses because climate change will likely create greater competition for limited water supplies needed by the environment, agriculture, and cities.

A 2018 report from the Public Policy Institute of California noted that thousands of Californians – mostly in rural, small, disadvantaged communities – already face acute water scarcity, contaminated groundwater, or complete water loss. Climate change would make these effects worse.

Cal Adapt scenarios for modeled future drought scenarios were shown in Section 4.3.9 of the Base Plan.

## Vulnerability to Drought and Water Shortage

Based on historical information, the occurrence of drought and water shortage in California, including the City, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users. The vulnerability of the City of Colusa to drought may vary and include reduction in water supply, turf losses, impacts to natural resources, and an increase in dry fuels and tree dieback.

### *Tree Mortality and Drought*

One of the specific impacts of drought in the City of Colusa and the Colusa County Planning Area is the increased risk to trees from beetle kill and other insects, pathogens and parasites, and other tree mortality and die back issues. Drought weakens trees and makes them more susceptible to insect infestation and other pathogens. Insects, such as bark beetles and others, frequently attack trees weakened by drought, disease, injuries, or other factors that may stress the tree. These insects and other pathogens can contribute to the decline and eventual death of trees throughout the City. The tree mortality and dieback problems are a high priority because of the issue of hazardous trees and an increased wildfire hazard. In addition to an increase in wildfire fuels, hazardous trees can fall onto structures causing damage and a result in a reduction on the tree canopy within the City that provides relief during extreme heat days.

The whole of the City is at some measure of vulnerability to drought and water shortage. An assessment of a community's vulnerability to drought and water shortage begins with an understanding of local exposure to drought. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

The City of Colusa obtains its drinking water from underground natural wells. Five municipal wells plus two additional wells are on an inter-tie agreement with CIP. The inter-tied wells are planned to be purchased by the City of Colusa at a later date. Two of the five City-owned wells will be shut down in the coming year and replaced with one new well. The City also has three untapped agricultural wells and no agricultural irrigation sites within its limits.

### Assets at Risk

Assets at risk from drought and water shortage include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

### *People and Populations*

The people and populations of the City are not directly affected by drought; although, their turfed areas, trees, and other water dependent resources can all be affected. In extreme drought conditions, however, residents and other populations within the City may be vulnerability to drought and water shortage issues. Water quality can be impacted causing health problems, especially to vulnerable populations. Drought and water shortage can lead to an increase in wildfires threatening City residents. Water shortages can have an effect on all of the population in the City, but often have a greater effect on the unhoused and other vulnerable populations that may be unable to access clean drinking water during shortages. During periods of drought as the costs of water usage may increase, especially during mandated conservation times, those who are economically disadvantaged may be unable to afford the increased costs of potable water.

### *Structures*

Structures have a limited vulnerability to drought and water shortage. It is the secondary hazard of drought (wildfire) which causes risks to structures. Drought can also stress trees, causing die off. These trees may fall on structures adjacent to them.

### *Critical Facilities and Infrastructure*

Most critical facilities and infrastructure have a limited vulnerability to drought and water shortage. Should drought conditions be severe enough to cause water shortage reliability issues, some facilities and infrastructure may be affected. Water and wastewater systems may be impacted during times of reduced water supply and need to employ contingencies to remain functional and fully operational. Other water dependent systems may also be adversely affected. Further, the secondary hazard of drought (increased potential for spread of urban fires and wildfire) can pose a significant risk to critical facilities and infrastructure. Sufficient water supply for firefighting can also be an issue. Drought can also stress trees, causing die off. These trees may fall on critical infrastructure adjacent to them and impact power lines and other utilities.

### *Community Lifelines*

While limited, community lifelines can have a vulnerability to drought and water shortage. Many of the City's community lifelines are the same as or similar to Colusa County's. Drought will most likely not overwhelm these community lifelines. This was discussed in greater detail in Section 4.3.9 of the Base Plan.

### *Natural, Historic, and Cultural Resources*

Drought and water shortage can have a significant impact on natural resources. Water levels in reservoirs and lakes may be reduced and a loss of wetlands and coastal marsh areas may occur. Severe drought conditions can contribute to an increase in erosion of soils and lead to poor soil quality. Further, all of the trees in the City are at risk to drought impacts and a reduction in water supply. These trees provide a wealth of social and environmental benefits to City residents and visitors, from shade and beauty to air quality, carbon reduction and stormwater management. Drought can devastate crops and dry out pastures, dry out forests and critical habitat areas, and reduce food and water available for wildlife and livestock.

Additionally, drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding. It is unlikely that drought and water shortage would have a significant impact on historic and cultural resources in the City.

### *Economic Assets and Community Activities of Value*

Economic assets and community activities in the City of Colusa generally have a limited vulnerability to drought and water shortage. Drought affects rural small business owners such as farmers and agricultural contractors who rely on water for their crops. Given that agriculture is very important in the County, this could have economic impacts in the City. Water supply issues can also affect businesses such as cafes and restaurants in more developed areas. Drought impacts to the agricultural industry can affect the supply chain and increase the cost of food and water, and adversely impact businesses tied to these industries. Reduction in or interruption of the water supply could also lead to lower productivity or closure of manufacturing facilities. Other economic sectors with a heavy reliance on water may also be affected. Depending upon how severe the conditions get and how long they last, drought and water shortage can restrict recreational and community activities, all of which can stress businesses and local economies over time.

The City noted that most of the community activities that the City provides could be affected by significant drought conditions. This includes the County Fair, 4th of July Firework Celebration, Splash Pad, and Community Pool.

### Impacts from Drought and Water Shortage

The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservations measures during extended droughts. During these times, the costs of water can also increase. Also of concern, the increased dry fuels and fuel loads associated with drought conditions can result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts. Drought can also lead to turf losses and cause tree die off within the City.

Other qualitative impacts associated with drought in the City are those related to water intensive activities such as municipal usage, commerce, tourism, and recreation use. With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and

the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

## Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to exacerbate future drought conditions and associated impacts and vulnerability of the City to drought and water shortage.
- Future population growth should be considered as having more or less people in a community affects the overall hazard vulnerability to the City. Population growth in the City has recently slowed. According to the HMPC, the City and Colusa County has access to large quantities of water through its groundwater as well as surface water. However, any future population growth in the City will add additional pressure to water companies during periods of drought and water shortage. Water companies will need to continue to plan for and add infrastructure capacity for population growth. As the population grows, the nature and makeup of populations will shift and change along with it. Vulnerable and underserved populations, such as those with low incomes and the unhoused that might not always have access to clean water, will need to be considered as future development continues, since they may experience a disproportionate impact from drought and water shortage. Potential population growth will be a challenge not only with regard to the City's water access for agricultural production, but state- and nation-wide with regard to food production. Should the City see a growth in population, it will increase the vulnerability and impacts to the County from this hazard.
- Land use planning should be proactive to address future hazard conditions. As the City continues to grow, more cropland will be taken out of production to provide housing to accommodate for population growth. As Colusa's agricultural lands are reduced, it seems likely that there would be less of a competing demand for water. However, more development will also require an increase in water supply and associated infrastructure. Changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard depending on where and how this future growth occurs.

As the community develops, an additional ground storage tank and booster pumps will be necessary. The City is working towards increasing efforts to reduce the demand for water, and to move toward more sustainable water use. The 2007 City of Colusa General Plan noted that it is anticipated that the City's wells will continue to produce approximately 3.17 million gallons per day, which currently serves a population of approximately 5,600 people. Currently, the City's groundwater wells produce an adequate supply of potable water for Colusa residents. While peak demand is currently less than peak supply, demand will grow as the City's population grows with new residential development. In order to serve future growth and buildout of the General Plan, new water distribution conveyance and pumping facilities will need to be constructed.

## *Earthquake*

**Likelihood of Future Occurrence**–Occasional (minor)/ Unlikely (major)
**Vulnerability**–Extremely High

### Hazard Profile

An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Earthquakes can cause structural damage, injury, and loss of life, as well as damage to infrastructure networks, such as water, power, gas, communication, and transportation. Earthquakes may also cause collateral emergencies including dam and levee failures, seiches, hazmat incidents, fires, avalanches, and landslides. The degree of damage depends on many interrelated factors. Among these are: the magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surface deposits or bedrock, degree of consolidation of surface deposits, presence of high groundwater, topography, and the design, type, and quality of building construction.

#### Location and Extent

Since earthquakes are regional events, the whole of the City is at risk to earthquake. The City of Colusa, Colusa County, and surrounding areas have some level of risk from seismic and geologic hazards. Faults in and around the City were shown in Section 4.3.10 of the Base Plan. These include the Great Valley and Sutter Buttes faults. A significant seismic event on any of these major faults could cause serious damage in the City of Colusa.

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales, as discussed in Section 4.3.10 of the Base Plan.

Another measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. Seismic shaking is typically the greatest cause of losses to structures during earthquakes. The City is located in an area where earthquakes of significant magnitude occur, so both magnitude and intensity of earthquakes are expected to remain moderate. Seismic shaking maps for the area in Section 4.3.10 of the Base Plan show Colusa County and the City fall within a low to moderate shake risk.

#### Past Occurrences

##### *Disaster Declaration History*

There has been no state or federal disaster declarations in Colusa County from earthquake.

### *NCDC Events*

The NCDC does not track earthquake events.

### *City of Colusa Events*

As shown in the Base Plan, no disaster declarations have occurred in the County due to earthquake. The HMPC noted no past occurrences of earthquakes that affected the City in any meaningful way.

### Climate Change and Earthquake

Climate change is unlikely to increase earthquake frequency or strength. More information on future impacts can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

## Vulnerability to Earthquake

The combination of plate tectonics and associated California coastal mountain range building geology generates earthquakes as a result of the periodic release of tectonic stresses Earthquake vulnerability is primarily based on population and the built environment. Urban areas in high seismic hazard zones are the most vulnerable, while uninhabited areas are less vulnerable. The primary impacts of concern are life safety and property damage. Although several faults are in and near the Colusa County Planning Area, seismic hazard mapping indicates that the City has low to moderate seismic hazard potential. There is the potential for the City and Colusa County Planning Area to be subject to some level of moderate seismic shaking. Some degree of structural damage due to stronger seismic shaking could be expected.

Earthquake shaking can also cause liquefaction to occur. Areas with loose soil and high water tables are at risk from liquefaction. There are limited areas in and near the City prone to liquefaction.

The whole of the City is at some measure of vulnerability to earthquake. An assessment of a community's vulnerability to earthquakes begins with an understanding of local exposure to earthquakes. This is included in the Local Concerns section below. After that section, assets at risk are discussed.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

The Uniform Building Code (UBC) identifies four seismic zones in the United States. The zones are numbered one through four, with Zone 4 representing the highest level of seismic hazard. The UBC establishes more stringent construction standards for areas within Zones 3 and 4. All of California lies within either Zone 3 or Zone 4. The City of Colusa is within Zone 3.

Earthquake vulnerability is primarily based on population and the built environment. Urban areas in high seismic hazard zones are the most vulnerable, while uninhabited areas are less vulnerable. There is a

minimal amount of URM buildings within the City of Colusa. No survey of URM buildings has taken place. The City's historic "Chinatown" district (APNs: 001-035-001 through -009) is constructed of URM and located approximately 100 feet from the toe of the Sacramento River levee. There are underground tunnels (which fill with periodic seasonal high groundwater fluctuations) constructed by the original inhabitants. The Chinatown area is shown on Figure A-18, while a URM example in the City is shown on Figure A-19.

***Figure A-18 City of Colusa – Chinatown District and Levee***

Source: City of Colusa

*Figure A-19 City of Colusa – URM Building Example*


Source: City of Colusa

The City is also concerned with aging underground infrastructure pertaining to water and sewer utilities.

### Assets at Risk

Many assets in the City are at risk to ground shaking. Assets at risk from earthquake include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

All people and populations are at risk from earthquake shaking and surface fault. Those at heightened risk include:

- The unsheltered
- Infants and children under age five and their caregivers
- Elderly (65 and older)
- Individuals with disabilities

- Individuals dependent on medical equipment
- Individuals with impaired mobility

The greatest risk to people and populations from earthquake is death and injury. More information on people and populations at risk to earthquake shaking events can be seen in the Hazus scenarios developed for this LHMP and described below specific to the City of Colusa. More information on the Hazus scenarios and how the County is affected is included in Section 4.3.10 of the Base Plan.

### *Structures*

All structures in the City are vulnerable to earthquakes, depending on the severity and location of the event. Though not specific to the City, the Hazus scenarios in the Base Plan show how the larger Colusa County Planning Area structures may be affected.

### *Critical Facilities and Infrastructure*

Earthquake and its related hazards present risks to the City. Earthquakes can damage critical facilities and infrastructure that provide vital services to the City. The critical facilities at risk to earthquake for the Colusa County Planning Area, including the City of Colusa, are presented in the Hazus analysis in Section 4.3.10 of the Base Plan.

### *Community Lifelines*

All community lifelines in the City are vulnerable to earthquakes, depending on the severity and location of the shake. A major earthquake event could cause these lifelines to be overwhelmed. Some of these would be able to be restored to service quickly, while others would take more time having a prolonged impact on the people and structures within the City. More information on lifelines at risk can be seen in the Hazus scenarios in Section 4.3.10 of the Base Plan.

### *Natural, Historic, and Cultural Resources*

The 2023 State Hazard Mitigation Plan noted that environmental problems from earthquakes can be numerous. It is possible for earthquakes to reroute streams, which can change the water quality, possibly damaging habitat and feeding areas. Streams fed by groundwater and/or springs may dry up because of changes in underlying geology. Another threat to the environment from earthquakes is the potential release of hazardous materials. Historical and cultural resources are at risk, often due to their age and construction types. The Hazus scenarios in Section 4.3.10 of the Base Plan and included below are relatively silent on the vulnerability to natural, historic, and cultural resources, but impacts to these resources could be long lasting.

### *Economic Assets and Community Activities of Value*

All economic assets in the City are vulnerable to earthquakes, depending on the severity and location of the shake and associated cascading hazards and impacts. Should an earthquake occur causing significant damages, the local economy can be affected for an extended period until recovery occurs and businesses and other economic drivers are operational. More information on economic assets at risk can be seen in

the Hazus scenarios in Section 4.3.10 of the Base Plan. All community activities of value would be affected by an earthquake if they were underway during an earthquake event and may be postponed or cancelled until the City has sufficiently recovered.

### Impacts from Earthquake

Earthquakes can strike without warning and cause dramatic changes to the landscape of an area that can have devastating impacts on the built environment. The greatest impact is to life safety of the City of Colusa residents and visitors. Other impacts to the City would include damages to infrastructure such as roads, bridges, and dams; damages and loss of services to utilities and critical infrastructure, including those related to gas, power, water, wastewater and communication systems; damages to structures and other development; and possible loss of life and injuries.

Earthquakes can also cause failure of dams, levees, and reservoirs. Facilities and land downslope from dams or water reservoirs or behind levees might be subject to flooding, if the dams, reservoirs, or levees fail as a result of an earthquake. The City has locations with significant flood risk that include facilities downslope from dams or reservoirs or behind levees that could be affected by a significant earthquake event.

Impacts that are not quantified, but can be anticipated in large future events, include:

- Injury and loss of life;
- Commercial and residential structural and property damage;
- Disruption of and damage to public infrastructure, utilities, and services;
- Damage to roads/bridges resulting in loss of mobility;
- Significant economic impact (jobs, sales, tax revenue) to the community; and
- Negative impact on commercial and residential property values

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

### Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to have no effect on future earthquake conditions and associated impacts and vulnerability of the City.
- Population growth in the City of Colusa has recently slowed. Any additional growth in the City would place additional populations at risk to earthquake. Additional population growth would likely bring continued diversity to the City. Vulnerable population groups could face disproportionate effects from

an earthquake and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.

- Land use planning should be proactive to address future hazard conditions. However, City building codes are in effect to reduce structure damage, including damage to critical facilities and infrastructure, and should be updated as necessary to continue to address future earthquake conditions. Depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Although new growth and development corridors would fall in the area affected by earthquake, given the limited chance of major earthquake and the building codes in effect, development in areas prone to earthquakes will continue to occur. The City enforces the state building code, which mandates construction techniques that minimize seismic hazards. Migration patterns may impact the number of residents within the City, possibly affecting overall vulnerability. Future development in the City is subject to these building codes and land use planning.

## *Flood: 1%/0.2% Annual Chance*

**Likelihood of Future Occurrence**–Occasional (1%)/Unlikely (0.2%)
**Vulnerability**–High

### Hazard Profile

This hazard analyzes the FEMA DFIRM 1% and 0.2% annual chance floods. These tend to be the larger floods that can occur in the City and have caused damage in the past. Flooding can be a significant problem in the City. Historically, the City has been at risk to flooding primarily during the winter and spring months when river systems in the City swell with heavy rainfall and snowmelt runoff. Normally, storm floodwaters are kept within defined limits by a variety of storm drainage and flood control measures including the numerous levee systems located throughout the Colusa County Planning Area and the City of Colusa. Occasionally, extended heavy rains result in floodwaters that exceed normal high-water boundaries and cause damage. Flooding has occurred both within the 1% and 0.2% annual chance floodplains and in other localized areas in the City.

### Location and Extent

The City of Colusa has areas located in the 1% and 0.2% annual chance flood zones. This is seen in Figure A-20.

*Figure A-20 City of Colusa – FEMA DFIRM Flood Zones*

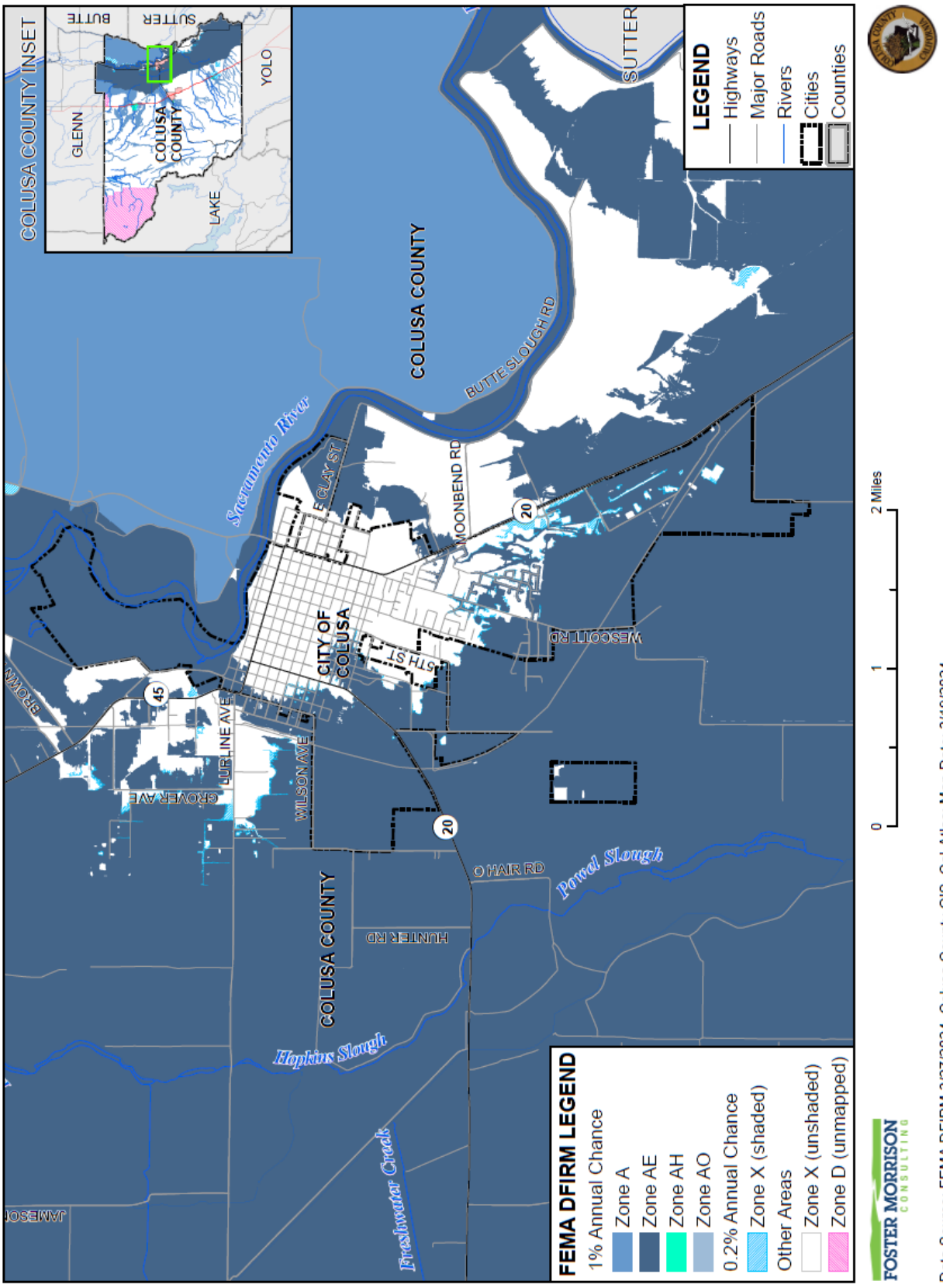


Table A-25 details the DFIRM mapped flood zones located within the City.

### *Table A-25 City of Colusa– DFIRM Flood Hazard Zones*

| Flood Zone | Description | Flood Zone Present in City of Colusa |
|---|---|---|
| A | 1% annual chance flooding: No base flood elevations provided | |
| AE | 1% annual chance flooding: Base flood elevations provided | X |
| AH | 1% annual chance flood areas of shallow flooding between one to three feet deep. Regulatory floodway; Base flood elevations provided | |
| AO | 1% annual chance flooding: sheet flow areas. BFEs derived from detailed hydraulic analyses are shown in this zone. | |
| Shaded X | 0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood | X |
| X (unshaded) | No flood hazard | X |
| D | Areas with a potentially moderate to high risk of flooding, but the probability has not been determined. | |

Source: FEMA DFIRM 3/27/2024

Additionally, flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the City vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the City tends to have a shorter speed of onset, due to the amount of water that flows through the City.

Geographical flood extents for the City from the FEMA DFIRMs are shown in Table A-26.

### *Table A-26 City of Colusa – Geographical DFIRM Flood Zone Extents*

| Flood Zone | Total Acres | % of Total Acres | Improved Acres | % of Total Improved Acres | Unimproved Acres | % of Total Unimproved Acres |
|---|---|---|---|---|---|---|
| 1% Annual Chance Flood Hazard | 2,857 | 26.82% | 1,175 | 21.95% | 1,682 | 31.74% |
| 0.2% Annual Chance Flood Hazard | 2,935 | 27.56% | 1,618 | 30.23% | 1,318 | 24.86% |
| Other Areas | 4,858 | 45.62% | 2,558 | 47.82% | 2,300 | 43.40% |
| **City of Colusa Total** | **10,651** | **100.00%** | **5,350** | **100.00%** | **5,300** | **100.00%** |

Source: FEMA DFIRM 3/27/2024

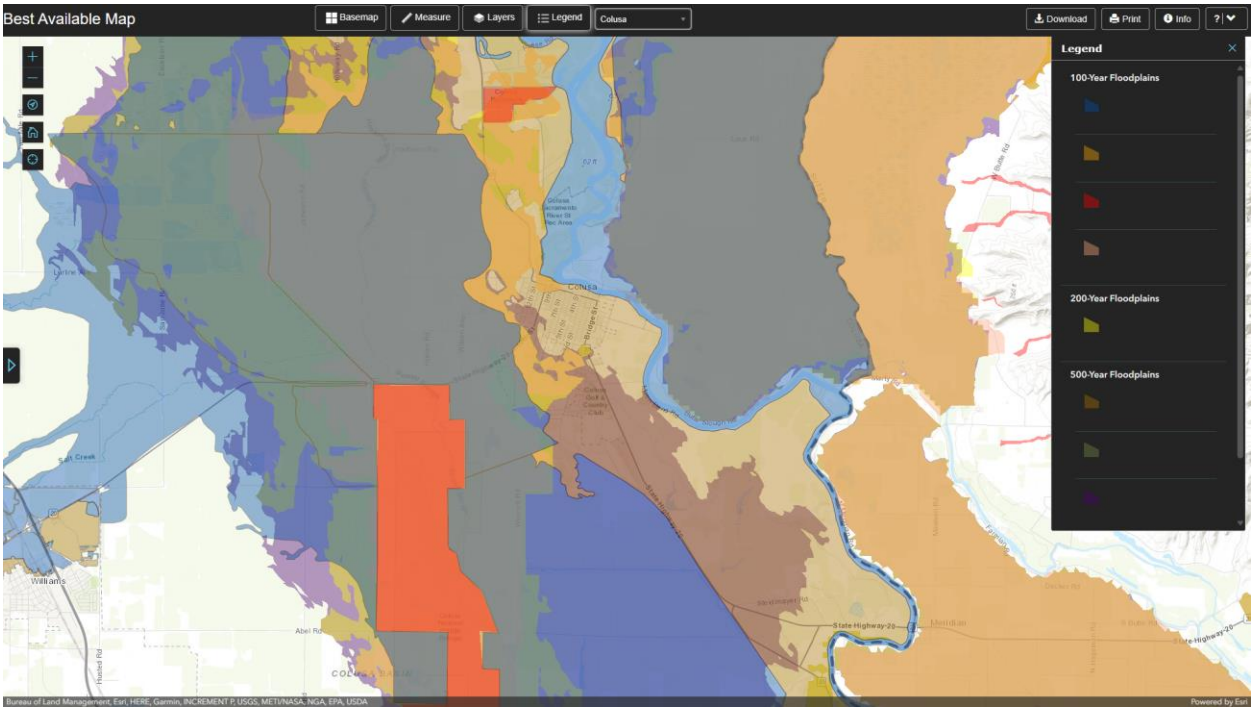
### *California Department of Water Resources Best Available Maps (BAM)*

The FEMA regulatory maps provide just one perspective on flood risks in the City. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed.

This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements. The value in the BAMs is that they provide a bigger picture view of potential flood risk to the City than that provided in the FEMA DFIRMs. The BAM map for the City of Colusa is shown in Figure A-21.

### *Figure A-21 City of Colusa – Best Available Map*




Source: California DWR

Legend explanation: **Blue** - FEMA 100-Year, **Orange** – Local 100-Year (developed from local agencies), **Red** – DWR 100-year (Awareness floodplains identify the 100-year flood hazard areas using approximate assessment procedures.), **Pink** – USACE 100-Year (2002 Sac and San Joaquin River Basins Comp Study), **Yellow** – USACE 200-Year (2002 Sac and San Joaquin River Basins Comp Study), **Tan** – FEMA 500-Year, Grey – Local 500-Year (developed from local agencies), **Purple** – USACE 500-Year (2002 Sac and San Joaquin River Basins Comp Study).

## Past Occurrences

### *Disaster Declaration History*

A list of state and federal disaster declarations for Colusa County from flooding is shown on Table A-27. These events also likely affected the City to some degree.

### *Table A-27 Colusa County – Federal and State Disaster Declarations from Flood 1950-2024*

| Disaster Type | Federal Declarations | | State Declarations | |
|---|---|---|---|---|
| | Count | Years | Count | Years |
| Flood (including heavy rain and storms) | 17 | 1955, 1958, 1963 (twice), 1970, 1983, 1986, 1995 (twice), 1997, 1998, 2005/2006, 2017, 2019 (twice), 2023 (twice) | 19 | 1950, 1955, 1958 (twice), 1963 (twice), 1973, 1978, 1983, 1986, 1995 (twice), 1997, 1998, 2005/2006, 2008, 2017, 2019 (twice) |

Source: Cal OES, FEMA

### *NCDC Events*

The NCDC tracks flooding events for the County. Events have been tracked for flooding since 1993. Colusa County has seen 14 events. These events most likely had some impact on the City.

### *City of Colusa Events*

The City noted that the following events had affects and damages to the City:

- During **December 1996 - January 1997**, the nearby Colusa Weir Gage reached flood stage. This historic flooding event devastated the region by destroying thousands of crop acres (rice, tomatoes, alfalfa) and property. The Colusa Weir Gage reached flood stage 68.67 feet on 1/3/1997.
- During **1995** the entire state experienced severe flooding, and the nearby Colusa Weir along with nearly all local main drainages including Powell Slough, and the 2047 canal reached flood stage, flooding nearly every piece of ground surrounding the south and west of the City of Colusa. Enormous damage occurred to the City and surrounding areas and the City and County were declared disaster areas by the state and federal government.
- **1998, 2006, and 2017** – the areas in and surrounding the City of Colusa experiences severe flooding, to the point where many roads leading into and from the City were closed, pavement was damaged, and the wastewater treatment plant and sewer collection facilities were inundated causing sanitary sewer overflows into the public streets.

Since 2019, the City has only experienced localized flooding, which has caused no significant property damage or loss. The localized flooding has been in the City streets and some alleyways.

## Climate Change and Flood

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with flood. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

According to the CAS, climate change may affect flooding in California, the Colusa County Planning Area, and the City of Colusa. While average annual rainfall may increase or decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century. It is possible that average soil moisture and runoff could decline, however, due to increasing temperature, evapotranspiration rates, and spacing between rainfall events. Reduced snowpack and increased number of intense rainfall events are likely to put additional pressure on water infrastructure which could increase the chance of flooding associated with breaches or failures of flood control structures such as levees and dams. Cal Adapt future precipitation projections were shown in Section 4.3.4.

### Vulnerability to Flood: 1% and 0.2% Annual Chance

Floods have been a part of the City's historical past and will continue to be so in the future. During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damage. Predominantly, the effects of 1% and 0.2% annual chance flooding are generally confined to areas near the waterways of the City. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat.

The whole of the City is at some measure of vulnerability to floods. An assessment of a community's vulnerability to flood begins with an understanding of local exposure to flood. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

#### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

As previously described in Section 4.3.11 of the Base Plan, the Colusa County Planning Area and the City of Colusa have been subject to historical flooding. The 2007 City of Colusa General Plan noted that Colusa is situated on the southern bank of a bend in the Sacramento River, which drains the northern half of the Central Valley. No other major bodies of water are located near the City. The river levee that protects the City from catastrophic flooding falls under the jurisdiction of Reclamation District No. 108 and is maintained by the Sacramento West Side Levee District.

The 2007 General Plan also noted that flooding within the City occurs during heavy rains and to some extent, even during mild storms. Periods of flooding can cause significant circulation problems and has resulted in some property damage in flood-prone areas. Flooding events cause inconveniences and potential safety hazards to motorists traveling through the flooded streets and property owners attempting to access parked cars. Minor flooding events can appear as quickly as one hour after significant rainstorms. While flooding may occur as quickly as one hour after the initiation of a storm event, generally speaking, the flooded areas drain within two or three hours after the end of the storm event.

## Assets at Risk

Assets at risk from flood include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; and economic assets and community activities of value. These are discussed in the following sections.

### *People and Populations*

All people and populations located in the 1% and 0.2% annual chance floodplains are at some risk to flooding. Certain vulnerable populations located within areas prone to flooding may be at increased risk to this hazard, especially during a large event with minimal advance notice. These vulnerable populations include: the unsheltered, those with limited mobility, and those that lack the resources to leave the area.

City residents that live in the 1% and 0.2% annual chance floodplains are often the most vulnerable. With the recent remapping of the City's floodplains, all former levee protected areas now fall in the DFIRM floodplains. Not only are the residents at risk, but their homes and contents are all at risk, compounding the impacts associated with significant hazard events. To further evaluate the impact to the City of Colusa's residential population residing within these hazard areas, the DFIRM flood zones were overlayed on the parcel layer. Those residential parcel centroids that intersect the flood zones were counted and multiplied by the 2022 Census Bureau average household factors for the City of Colusa – 2.55. According to this analysis, there is a total population of 870 and 38 residents of the City at risk to flooding in the 1% and 0.2% annual chance floodplains, respectively. This is shown in Table A-28.

***Table A-28 City of Colusa – Improved Residential Parcels and Population by Summary FEMA DFIRM Flood Zone***

| Jurisdiction | 1% Annual Chance | | 0.2% Annual Chance | |
|---|---|---|---|---|
| | Improved Residential Parcels | Population at Risk | Improved Residential Parcels | Population at Risk |
| City of Colusa | 300 | 870 | 13 | 38 |

Source: FEMA DFIRM 3/27/2024, Colusa County 2023 Parcel/Assessor Data, US Census Bureau American Community Survey 2022 Household Size Estimates.

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

### *Structures*

Certain structures in the City are at risk of DFIRM flooding and primarily include those structures located within the 1% and 0.2% annual chance floodplains. GIS was used to determine the possible impacts of flooding on parcels and structures within the City of Colusa. The methodology described in Section 4.3.11 of the Base Plan was followed in determining structures and values at risk to the 1% (100-year) and 0.2% (500-year) annual chance flood event. Table A-29 is a summary table for the City of Colusa. Parcel counts, land and improved values (i.e., those with a structure improvement on the parcel), other values, estimated content replacement values, and total values in the City are shown for the 1% and 0.2% annual chance flood

zones, as well as for those properties that fall outside of the mapped FEMA DFIRM flood zones. Table A-30 breaks down Table A-29 and shows the same analysis further broken out by detailed FEMA flood zone and property use.

### *Table A-29 City of Colusa – Count and Value of Parcels (and Structures) at Risk in Summary DFIRM Flood Zone*

| Flood Zone | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Total Value |
|---|---|---|---|---|---|---|
| 1% Annual Chance Flood Hazard | 476 | 355 | $41,614,561 | $118,703,421 | $12,800,623 | $173,118,605 |
| 0.2% Annual Chance Flood Hazard | 18 | 15 | $796,791 | $3,866,267 | $0 | $4,663,058 |
| Other Areas | 1,840 | 1,707 | $101,892,192 | $321,198,099 | $36,427,920 | $459,518,211 |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$637,299,874** |

Source: FEMA DFIRM 3/27/2024, Colusa County 2023 Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

### *Table A-30 City of Colusa – Count and Values of Parcels (and Structures) at Risk by Detailed DFIRM Flood Zone and Property Use*

| Flood Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| **1% Annual Chance Flood Hazard** | | | | | | | |
| **Zone AE** | | | | | | | |
| Agricultural | 12 | 6 | $7,527,941 | $337,204 | $0 | $337,204 | $8,202,349 |
| Commercial | 34 | 20 | $1,916,839 | $12,429,596 | $1,916,816 | $12,429,596 | $28,692,847 |
| Government | 39 | 9 | $2,018,999 | $2,650,628 | $22,874 | $2,650,628 | $7,343,129 |
| Industrial | 57 | 15 | $10,691,358 | $25,993,102 | $9,522,346 | $38,989,652 | $85,196,458 |
| Institutional | 2 | 2 | $286,062 | $485,498 | $771,560 | $485,498 | $2,028,618 |
| Miscellaneous | 5 | 3 | $492,767 | $7,399,098 | $0 | $7,399,098 | $15,290,963 |
| Residential | 327 | 300 | $18,680,595 | $69,408,295 | $567,027 | $34,704,148 | $123,360,065 |
| **Zone AE Total** | **476** | **355** | **$41,614,561** | **$118,703,421** | **$12,800,623** | **$96,995,824** | **$270,114,429** |
| **1% Annual Chance Flood Hazard Total** | **476** | **355** | **$41,614,561** | **$118,703,421** | **$12,800,623** | **$96,995,824** | **$270,114,429** |
| **0.2% Annual Chance Flood Hazard** | | | | | | | |
| **Zone X (shaded)** | | | | | | | |

| Flood Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Agricultural | 0 | 0 | $0 | $0 | $0 | $0 | |
| Commercial | 2 | 0 | $76,256 | $0 | $0 | $0 | $76,256 |
| Government | 1 | 0 | $23,286 | $0 | $0 | $0 | $23,286 |
| Industrial | 2 | 2 | $17,815 | $1,017,083 | $0 | $1,525,625 | $2,560,523 |
| Institutional | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Miscellaneous | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Residential | 13 | 13 | $679,434 | $2,849,184 | $0 | $1,424,591 | $4,953,209 |
| **Zone X (shaded) Total** | **18** | **15** | **$796,791** | **$3,866,267** | **$0** | **$2,950,216** | **$7,613,274** |
| **0.2% Annual Chance Flood Hazard Total** | **18** | **15** | **$796,791** | **$3,866,267** | **$0** | **$2,950,216** | **$7,613,274** |
| **Other Areas** | | | | | | | |
| **Zone X (unshaded)** | | | | | | | |
| Agricultural | 11 | 5 | $6,410,137 | $215,226 | $495,940 | $215,226 | $7,336,529 |
| Commercial | 213 | 170 | $18,551,618 | $44,774,548 | $4,395,516 | $44,774,548 | $112,496,230 |
| Government | 67 | 42 | $3,943,217 | $30,910,161 | $18,496,958 | $30,910,161 | $84,260,497 |
| Industrial | 6 | 5 | $1,709,798 | $7,627,238 | $5,924,860 | $11,440,857 | $26,702,753 |
| Institutional | 32 | 18 | $2,000,729 | $5,715,322 | $5,268,089 | $5,715,322 | $18,699,462 |
| Miscellaneous | 7 | 2 | $122,576 | $1,032,023 | $0 | $1,032,023 | $2,186,622 |
| Residential | 1,504 | 1,465 | $69,154,117 | $230,923,581 | $1,846,557 | $115,461,786 | $417,386,041 |
| **Zone X (unshaded) Total** | **1,840** | **1,707** | **$101,892,192** | **$321,198,099** | **$36,427,920** | **$209,549,923** | **$669,068,134** |
| **Other Areas Total** | **1,840** | **1,707** | **$101,892,192** | **$321,198,099** | **$36,427,920** | **$209,549,923** | **$669,068,134** |
| | | | | | | | |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

Source: FEMA DFIRM 3/27/2024, Colusa County 2023 Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table A-31 summarizes Table A-30 and shows City of Colusa loss estimates and improved values at risk by FEMA 1% and 0.2% annual chance flood zones. According to Table A-30 and Table A-31, the City of Colusa has 355 parcels and $228.5 million of structure and contents values or values in the 1% annual chance flood zone, and 15 improved parcels and $6.8 million of structure and contents values in the 0.2% annual chance flood zone. These values can be refined a step further. Applying the 20 percent damage factor as previously described in Section 4.3.11 of the Base Plan, there is a 1% chance in any given year of

a flood event causing $45 million in damage and a 0.2% chance in any given year of a flood event causing $1.4 million in damage in the City of Colusa. The loss ratio of 4.83% indicates that flood losses for 1% annual chance flooding would be relatively moderate, but the City would be able recover. The loss ratio of 0.14% indicates that flood losses for 0.2% annual chance flooding would be relatively major and the City would have some difficulty in recovering.

### *Table A-31 City of Colusa – Flood Loss Estimates*

| Flood Zone | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value | Loss Estimate | Loss Ratio |
|---|---|---|---|---|---|---|---|---|---|
| 1% Annual Chance | 476 | 355 | $41,614,561 | $118,703,421 | $12,800,623 | $96,995,824 | $228,499,868 | $45,699,974 | 4..83% |
| 0.2% Annual Chance | 18 | 15 | $796,791 | $3,866,267 | $0 | $2,950,216 | $6,816,483 | $1,363,297 | 0.14% |
| **Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$802,492,293** | **$160,498,459** | **0.05%** |

Source: FEMA DFIRM 3/27/2024, Colusa County 2023 Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

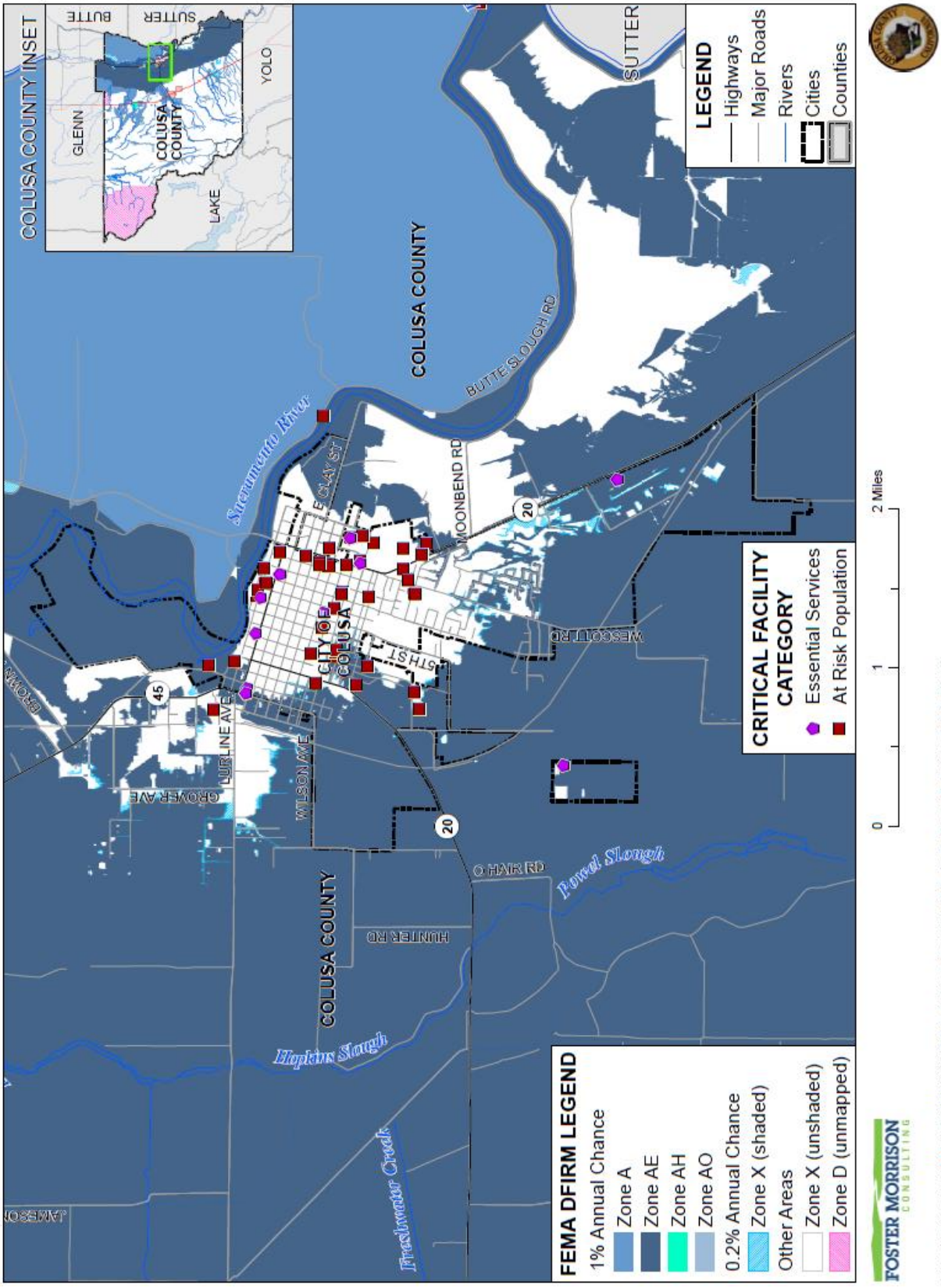
**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

### *Critical Facilities and Infrastructure*

Flooding presents a threat to threat to both critical facilities and infrastructure. Critical infrastructure plays an immensely important role in our communities. As previously noted, communities rely on roads and related biking and pedestrian routes for transportation, and on water infrastructure for drinking water, wastewater service, and draining streets of rainwater. Damage to any one of these systems can threaten public safety, wreak havoc on daily life, impact properties far from flood zones, and result in economic impacts that cascade throughout the Colusa County Planning Area.

A separate analysis was performed on the critical facility inventory in the City to determine critical facilities that fall into DFIRM flood zones. Using GIS, the DFIRM flood zones were overlayed on the critical facility GIS layer. This is shown on Figure A-22. Table A-32 details which critical facilities fall in which flood zone. Details of critical facility categories, type, name, and address by detailed flood zone for the entire Colusa County Planning Area including the City of Colusa are listed in Appendix F.

*Figure A-22 City of Colusa – Critical Facilities in DFIRM Flood Zones*



### *Table A-32 City of Colusa – Critical Facilities in DFIRM Flood Zones*

| Critical Facility Category | Facility Type | Facility Count |
|---|---|---|
| **1% Annual Chance Flood Hazard** | | |
| **Zone AE** | | |
| Essential Services Facilities | Emergency Response | 1 |
| | Public Services | 2 |
| | ***Total*** | ***3*** |
| At Risk Population Facilities | Apartment Complex | 3 |
| | Mobile Home Park | 4 |
| | ***Total*** | ***7*** |
| **Zone AE Total** | | **10** |
| **1% Annual Chance Flood Hazard Total** | | **10** |
| **Other Areas** | | |
| **Zone X (unshaded)** | | |
| Essential Services Facilities | Fire Station | 2 |
| | Medical | 1 |
| | Police Station | 1 |
| | Public Services | 1 |
| | Utility Facility | 2 |
| | ***Total*** | ***7*** |
| At Risk Population Facilities | Apartment Complex | 19 |
| | Assisted-Living | 1 |
| | Hotel or Motel | 2 |
| | Jail | 1 |
| | Mobile Home Park | 1 |
| | School | 8 |
| | Senior Living Facility | 1 |
| | ***Total*** | ***33*** |
| **Zone X (unshaded) Total** | | ***40*** |
| **Other Areas Total** | | **40** |
| **City of Colusa Total** | | **50** |

Source: FEMA DFIRM 3/27/2024, City of Colusa GIS

### *Community Lifelines*

1% and 0.2% annual chance flooding presents a threat to life and property, including community lifelines in the City. Many of the City's community lifelines are the same as or similar to Colusa County's. This was discussed in greater detail in Section 4.3.11 of the Base Plan. Generally, even major flood events are temporary events with flood waters receding back to pre-storm levels at the conclusion of the storm.

However, depending on the location, duration, and magnitude and severity of any given flood event, some of these community lifelines may be overwhelmed in the short term.

### *Natural, Historic, and Cultural Resources*

Large flood events can affect natural, historic, and cultural resources. There are a number of ways floodwaters can impact natural resources and the environment: Wildlife habitats can be destroyed by floodwaters. Contaminated floodwater can pollute rivers and habitats. Silt and sediment can destroy natural areas. Riverbanks and natural levées can be eliminated as rivers reach bankfull capacity. Rivers can be widened, and deposition can increase downstream. Trees can be uprooted by high-velocity water flow. Plants that survive the initial flood may die due to being inundated with water. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to structures within the flooded areas, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged and lost during extreme flood events. Any of these that fall in the flood zones shown on Figure A-20 would be vulnerable.

### *Economic Assets and Community Activities of Value*

Since the City lies entirely in the floodplain, major flood events could affect any economic asset that lies in the floodplain and can have long lasting effects. This could cause those businesses and economic assets within these areas to close or relocate. This could cause temporary or permanent loss of sales tax revenue. These events can also affect those economic assets outside of the floodplain, at least in the short term until the City has sufficiently recovered.

### Impacts from Flood: 1% and 0.2% Annual Chance

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Large flood events, including those associated with 1% and 0.2% annual chance floods, can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. People may be swept away in floodwaters, causing injuries or deaths. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Structures can be damaged directly from floodwaters and can also be damaged from trees falling as a result of water-saturated soils. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services causing power outages. The interruption of power causes major problems and can result in the closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues.

Standing water can cause damage to crops, roads, foundations, and electrical circuits. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts.

Impacts that are not quantified, but can be anticipated in large future events, include:

- Injury and loss of life;
- Commercial and residential structural and property damage;
- Disruption of and damage to public infrastructure, utilities, and services;
- Damage to roads/bridges resulting in loss of mobility;
- Significant economic impact (jobs, sales, tax revenue) to the community; and
- Negative impact on commercial and residential property values

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

### *Health Hazards from Flooding*

According to FEMA, certain health hazards are also common to flood events. Three general types of health hazards accompany floods. The first comes from the water itself. Floodwaters carry anything that was on the ground that the upstream runoff picked up, including dirt, oil, animal waste, and lawn, farm, and industrial chemicals. Pastures and areas where cattle and other livestock are kept or their wastes are stored can contribute polluted waters to the receiving streams.

Floodwaters also saturate the ground, which leads to infiltration into sanitary sewer lines. When wastewater treatment plants are flooded, there is nowhere for the sewage to flow. Infiltration and lack of treatment can lead to overloaded sewer lines that can back up into low-lying areas and homes. Even when it is diluted by flood waters, raw sewage can be a breeding ground for bacteria such as e. coli and other disease-causing agents.

The second type of health problem arises after most of the water has gone. Stagnant pools can become breeding grounds for mosquitoes, and wet areas of a building that have not been properly cleaned breed mold and mildew. A building that is not thoroughly cleaned becomes a health hazard, especially for small children, the elderly, and those that are medically vulnerable.

Another health hazard occurs when heating ducts in a forced air system are not properly cleaned after inundation. When the furnace or air conditioner is turned on, the sediments left in the ducts are circulated throughout the building and breathed in by the occupants. If a water system loses pressure, a boil order may be issued to protect people and animals from contaminated water.

The third problem is the long-term psychological impact of having been through a flood and seeing one's home damaged and irreplaceable keepsakes destroyed. The cost and labor needed to repair a flood-damaged structure puts a severe strain on people, especially the unprepared and uninsured. There is also a long-term problem for those who know that their homes can be flooded again. The resulting stress on floodplain residents takes its toll in the form of aggravated physical and mental health problems.

### *Insurance Coverage, Claims Paid, and Repetitive Losses*

Standard property insurance does not include flood coverage because of the relatively high risk. The National Flood Insurance Program (NFIP) provides flood insurance to residents in those communities that participate in the NFIP. Federal financial assistance requires the purchase of flood insurance for structures located within a 100-year floodplain – a requirement that affects nearly all mortgages financed through commercial lending institutions. Flood insurance is also recommended for all structures protected by levees, even if not mapped within a floodplain.

The City of Colusa joined the National Flood Insurance Program (NFIP) on June 30, 1976. The City does not participate in CRS program. NFIP data indicates that as of February 2, 2024, there were 75 flood insurance policies in force in the City with $25,650,000 of coverage. Of the 75 policies: 72 were for single family homes were residential (single-family homes), 2 were for a multi-family home, and 1 was for non-residential properties. Of the 75 policies in force, all were in B, C, and X zones. It should be noted that this data was provided before the new FEMA DFIRM flood mapping came into effect. The GIS parcel analysis detailed above identified 355 improved parcels in the 1% annual chance flood zone. There have been 13 historical claims for flood losses totaling $101,045.82.00. NFIP data further indicates that there are 2 repetitive loss (RL) and no severe repetitive loss (SRL) buildings in the City of Colusa. Data for FEMA's PIVOT database indicates that these repetitive loss parcels have been mitigated. There have been no substantial damage claims since 1978 in the City.

Based on this analysis of insurance coverage, the City has values at risk to the 1% annual chance and greater floods. Of the 355 improved parcels within the 1% annual chance flood zone, none of those parcels maintain flood insurance. This can be seen on Table A-33.

### *Table A-33 City of Colusa – Percentage of Policy Holders to Improved Parcels in the 1% Annual Chance Floodplain*

| Jurisdiction | Improved Parcels in SFHA (1% Annual Chance) Floodplain* | Insurance Policies in the SFHA (1% Annual Chance) Floodplain | Percentage of 1% Annual Chance Floodplain Parcels Currently Insured |
|---|---|---|---|
| City of Colusa | 355 | 0 | 0.0% |

Source: FEMA DFIRM 3/27/2024, Colusa County 2023 Parcel/Assessor Data, NFIP CIS data.

As the levees are decertified, an increased number of Colusa County residents are placed in the floodplain. Table A-34 illustrates the changes in the number of insured structures in the 1% annual chance floodplain. As seen in the table, the overall percentage of policy holders remains unchanged. Thus, flood insurance education and promotion will be an important focus moving forward with the recent DFIRM update putting more people and structures within the 1% annual chance floodplain.

*Table A-34 City of Colusa – Comparison of 2024 and 2018 Percentage of Policy Holders to Improved Parcels in the 1% Annual Chance Floodplain*

| Jurisdiction | 2018 LHMP | | | 2024 LHMP | | |
|---|---|---|---|---|---|---|
| | Improved Parcels in SFHA (1% Annual Chance) Floodplain* | Insurance Policies in the SFHA (1% Annual Chance) Floodplain | Percentage of 1% Annual Chance Floodplain Parcels Currently Insured | Improved Parcels in SFHA (1% Annual Chance) Floodplain* | Insurance Policies in the SFHA (1% Annual Chance) Floodplain | Percentage of 1% Annual Chance Floodplain Parcels Currently Insured |
| City of Colusa | 7 | 0 | 0.0% | 355 | 0 | 0.0% |

Source: FEMA DFIRM 3/27/2024, 2023 Colusa County Parcel/Assessor's Data, 2018 Colusa County LHMP Update

## Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to exacerbate future flood conditions and associated impacts and vulnerability of the County to 1% and 0.2% annual chance flooding.
- Future population growth should be considered, as having more or less people in a community affects the overall hazard vulnerability to the City. Population growth in the City of Colusa has recently slowed; however, additional growth within the recently decertified levee protected areas of the County and other 1% and 0.2% annual chance floodplains would place additional populations at risk to flood. Additional population growth would likely bring continued diversity to the County. Vulnerable population groups could face disproportionate effects from flooding and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. Locating new development, structures and critical facilities and infrastructure within or near areas of flood risk may put additional development at risk. However, City building codes and the City's floodplain ordinance are in effect to reduce this risk and should be updated as necessary to continue to address future flood conditions. Depending on the location of new development and adherence to protective building codes has recently slowed; however, additional growth within the recently decertified levee protected areas of the City and County and other 1% and 0.2% annual chance floodplains would place land at risk to flood.

The potential for flooding may increase as floodwaters are channeled due to land development. Such changes can exacerbate flooding problems inside and outside of natural floodplains by altering or confining natural drainage channels. Floodplain modeling and master planning should be based on built out property use to ensure that all new development remains safe from future flooding. While local floodplain management, stormwater management, and water quality regulations and policies address these changes on a site-by-site basis, their cumulative effects can have a negative impact on the overall floodplain. As levees

are decertified, vulnerability increases, and certain populations may experience a disproportionate impact due to lack of access to resources.

The City enforces its floodplain management ordinance. More detail on the specifics of the floodplain ordinance can be found in the Capability section below. With the new effective 2024 DFIRMs, the City's floodplain ordinance should be updated to ensure new development within floodplains is adequately protected. A discussion of general considerations follows.

### Future Development: General Considerations

Communities that participate in the NFIP adopt regulations and codes that govern development in special flood hazard areas (SFHAs) and enforce those requirements through their local floodplain management ordinances through the issuance of permits. The City of Colusa's floodplain management ordinance provides standards for development, subdivision of land, construction of buildings, and improvements and repairs to buildings that meet the minimum requirements of the NFIP and also the requirements of the City's current adopted version of the California Building Code (and International Building Code), which in some areas exceed the base requirements of the NFIP.

The International Residential Code and International Building Code, by reference to ASCE 24, include requirements that govern the design and construction of buildings and structures in flood hazard areas. FEMA has determined that the flood provisions of the I-Codes are consistent with the requirements of the NFIP (the I-Code requirements shown either meet or exceed NFIP requirements). ASCE 24, a design standard developed by the American Society of Civil Engineers, expands on the minimum NFIP requirements with more specificity, additional requirements, and some limitations.

With the adoption of the International Codes, communities are moving towards a more stringent approach to regulatory floodplain management, beyond the minimum requirements of the NFIP. The adoption and enforcement of disaster-resistant building codes is a core community action to promote effective mitigation. When communities ensure that new buildings and infrastructure are designed and constructed in accordance with national building codes and construction standards, they significantly increase local resilience now and in the future. With continued advancements in building codes, local ordinances should be reviewed and updated to meet and exceed standards as practicable to protect new development from future flood events and to further promote disaster resiliency.

One of the most effective ways to reduce vulnerability to potential flood damage is through careful land use planning that fully considers applicable flood management information and practices. Master planning will also be necessary to assure that open channel flood flow conveyances serving the smaller internal streams and drainage areas are adequately prepared to accommodate the flows. Preservation and maintenance of natural and riparian areas should also be an ongoing priority to realize the flood control benefits of the natural and beneficial functions of these areas.

Future development in the City may be built in the floodplain, in conformance to the standards of the floodplain ordinance. The City enforces the floodplain ordinance on new development in the City of Colusa. With the new FEMA DFIRMs in place, the City should consider additional flood protection standards with their flood ordinance update.

Future development areas and their vulnerability to DFIRM flooding is discussed further in the below GIS analysis.

### *GIS Analysis*

The City provided 7 future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Utilizing the future development area spatial layer, the parcel centroid data was intersected to determine the future development areas within each FEMA DFIRM flood zone. Figure A-23 show the locations of the future development areas overlayed on the FEMA DFIRM flood zones. Table A-35 shows each future development area in the City in these zones.

*Figure A-23 City of Colusa – Future Development in DFIRM Flood Zones*

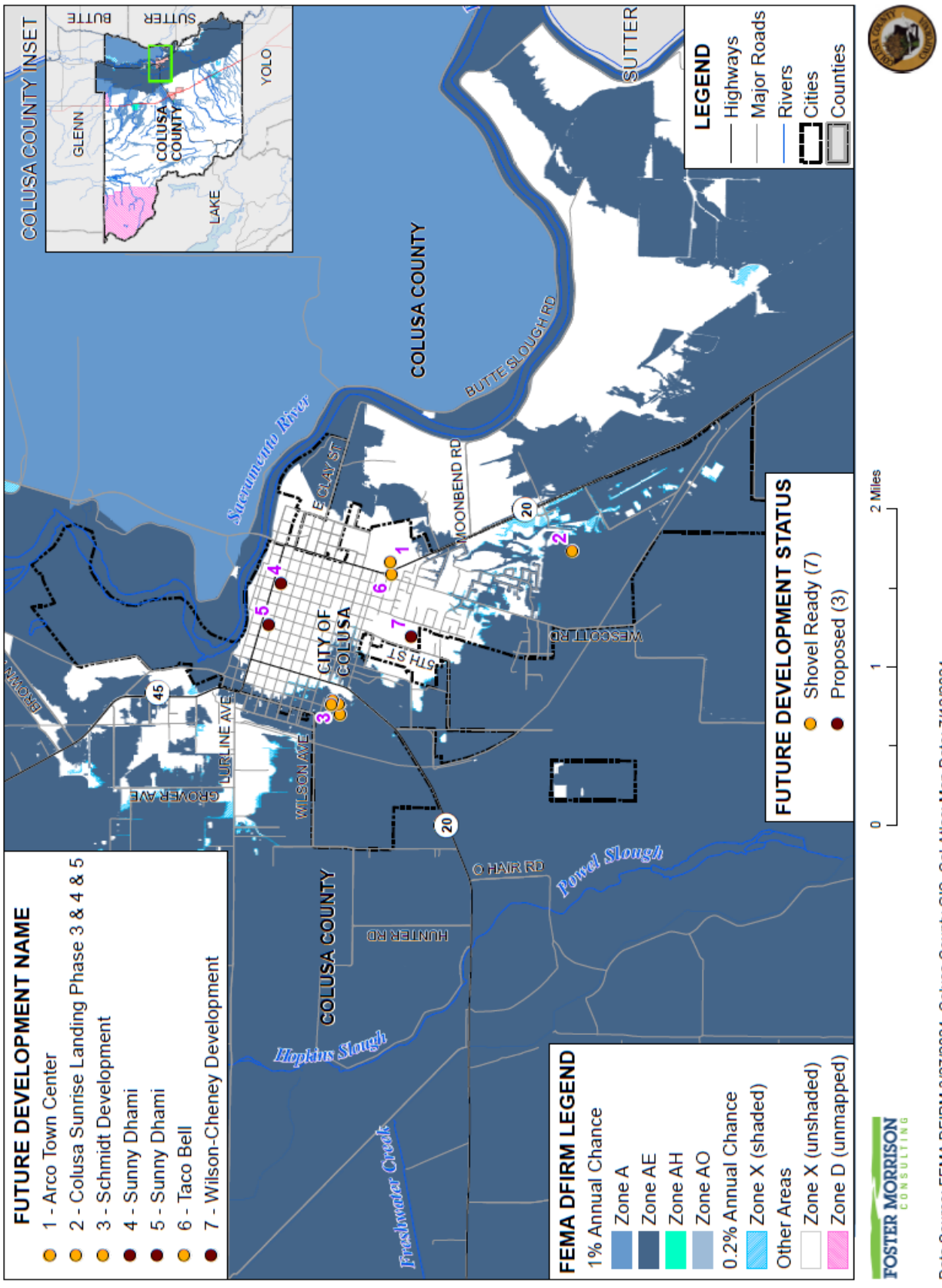


*Table A-35 City of Colusa – Future Development Areas in FEMA DFIRM Flood Zones*

| Flood Zone | Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|---|
| **1% Annual Chance Flood Hazard** | | | | | |
| Zone AE | Shovel Ready | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | | 3 | Schmidt Development | 3 | 3.27 |
| | | **Shovel Ready Total** | | **4** | **22.27** |
| | **Zone AE Total** | | | **4** | **22.27** |
| **1% Annual Chance Flood Hazard Total** | | | | **4** | **22.27** |
| **Other Areas** | | | | | |
| Zone X (unshaded) | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | | **Proposed Total** | | **3** | **10.61** |
| | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | | 3 | Schmidt Development | 1 | 5.13 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **3** | **10.97** |
| | **Zone X (unshaded) Total** | | | **6** | **21.58** |
| **Other Areas Total** | | | | **6** | **21.58** |
| | | | | | |
| **Grand Total** | | | | **10** | **43.85** |

Source: FEMA 3/27/2024 DFIRM, City of Colusa

## *Flood: Localized Stormwater Flooding*

**Likelihood of Future Occurrence**–Likely
**Vulnerability**–Medium

### Hazard Profile

Flooding occurs in areas other than the FEMA mapped 1% and 0.2% annual chance floodplains. Flooding may be from drainages not studied by FEMA, lack of or inadequate drainage infrastructure, or inadequate maintenance. Localized, stormwater flooding occurs throughout the City during the rainy season from

November through April. Prolonged heavy rainfall contributes to a large volume of runoff resulting in high peak flows of moderate duration.

### Location and Extent

The City of Colusa is subject to localized flooding throughout the City. This is discussed in Table A-36 below. Flood extents are usually measured in areas affected, velocity of flooding, and depths of flooding. Expected flood depths in the City vary by location. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Localized flooding in the City tends to have a shorter speed of onset, especially when antecedent rainfall has soaked the ground and reduced its capacity to absorb additional moisture.

### Past Occurrences

#### *Disaster Declaration History*

There have been no state or federal disaster declarations from localized floods. There would most likely have been localized flood events during the disaster declarations from flood as shown in the previous 1%/0.2% annual chance flood section.

#### *NCDC Events*

The NCDC occurrences of localized flooding are included in the 1% and 0.2% annual chance flood hazard profile above.

#### *City of Colusa Events*

The City noted the following past occurrences of localized flooding:

- Bridge Street between Main and south to Sioc Street experiences chronic flooding several times each year. Sioc Street on many of the same types of storm events experiences flooding west of the Bridge Street intersection and has to be closed. The central portion of the City covering a 10-12 block area bounded by Main street on the north, 4th street on the East, Fremont Street on the South and 9th Street on the north experiences chronic flooding. This area of town contains no underground storm drains. The Powell Slough leading out of town as an escape route at the Highway 20 crossing experiences severe flooding which overtops the Highway, which can then not be crossed by vehicular traffic. East Clay Street, east of Bridge Street experiences chronic flooding due to river seepage when the Sacramento River is at or around flood stage for extended time periods, and due to the lack of maintained storm drainage facilities and facilities that have been changed or removed downstream. Wilson road serving some commercial areas, and leading to the WWTP, experiences frequent flooding and must be closed.

### Climate Change and Localized Flood

It is likely that climate change will increase the chance of future occurrence as well as future impacts from localized flood. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Even if average annual rainfall may decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century, increasing the likelihood of overwhelming stormwater systems built to historical rainfall averages. This makes localized flooding more likely.

## Vulnerability to Localized Flood

Flood vulnerability and their impacts vary by location and severity of any given flood event and will likely only affect certain areas of the City during specific times. Based on the risk assessment, it is evident that floods will continue to have potentially significant impacts to certain areas of the City. However, while flooding can cause significant impacts, depending on the duration and volume of precipitation and the drainage in any given area, many of the floods in the City are minor, localized flood events that are more of a nuisance than a disaster.

Many areas of the City are at some measure of vulnerability to localized flooding. An assessment of a community's vulnerability to localized flooding begins with an understanding of local exposure to localized flooding. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

Localized flooding in the City is caused by heavy downpours, which overwhelm the city's drainage capacity for a short time. The City's drainage quickly drains the access water held in the streets. When these events occur, the City streets can carry the excess water. Very few properties are in danger of flooding because the City streets, curb, and gutter systems were designed to hold additional water during intermittent downpours. There has been degraded drainage in some areas due to damaged drainpipes at alley access points, i.e., 13$^{th}$ Street ditch.

The City storm drains were originally not designed for the new atmospheric river storms and the rain now experienced during the downpours.

Historically, the City has been affected by flooding of streams and creeks occurring during heavy rain and storm events. Additional development in the City and in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater runoff and contributes to localized flooding occurring in areas throughout the City. The lack of or inadequate drainage infrastructure in the City contributes to localized flooding issues.

The City tracks localized flooding areas. Affected localized flood areas identified by the City of Colusa are summarized in Table A-36.

*Table A-36 City of Colusa – List of Localized Flooding Problem Areas*

| Road/Area Name | Flooding | Pavement Deterioration | Washouts | High Water/ Creek Crossing | Landslides/ Mudslides | Debris | Downed Trees |
|---|---|---|---|---|---|---|---|
| 5th street and Fremont | X | X | | | | | X |
| 13th Street, Fremont St. to Market St. | X | X | | | | | X |
| North side of Main street | X | | | | | | X |
| 8th and 9th and SIOC | X | X | | | | | X |
| 1st Parkhill | X | | | | | | X |
| 1st Clay | | | | | | | |
| 1st Webster | | | | | | | X |

Source: City of Colusa

### Assets at Risk

Assets at risk from localized flood include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

People and populations (including vulnerable populations) are traditionally not highly vulnerable to localized flooding, but their structures and contents can be at risk. Localized flooding may also cause transportation issues as roads and lanes are impacted or closed and affect the ability for people to travel throughout the City.

#### *Structures*

Structures in areas with localized flooding can be affected if floodwaters intrude into the structure. Structures in low lying areas, or those with basements can be at greater risk. Buildings with older foundations that are prone to water intrusion are also at greater risk. Once water finds its way into a structure, it tends to continue to do so until the path that brings water into a structure is mitigated. Structures can also be damaged by trees that have become uprooted and fall during rain and storm events. Large trees falling onto structures can cause significant damage.

#### *Critical Facilities and Infrastructure*

Localized flooding, while often more of a nuisance, can cause damage to critical facilities and infrastructure during a heavy rain and storm event. Any facility that experiences localized flooding can be impacted. Utilities and other critical infrastructure can all be affected, causing interruptions in service until repairs

can be made. For example, water and wastewater systems can be vulnerable to heavy rains and flood events. Rainfall creates a high water table, surging streams and creeks, and saturates soil. Infiltration of stormwater into water and wastewater systems may occur and presents a threat to public health and safety, when the infrastructure is no longer able to meet operational needs and local demands. Other critical facilities such as roads, bridges and other transportation facilities can also experience localized flooding causing road closures and other impacts until storm waters recede. This can result in extended road closures requiring alternate routes.

### *Community Lifelines*

Due to the relatively minor nature of localized flooding, community lifelines are unlikely to be overwhelmed. Many of the City's community lifelines are the same as or similar to Colusa County's. This was discussed in greater detail in Section 4.3.12 of the Base Plan.

### *Natural, Historic, and Cultural Resources*

Natural resource assets may have some vulnerabilities to localized flood during major storm events, but can benefit from floodwaters, often by design. Many parks and green spaces are designed to take overflow water and release it into the underlying soils and natural areas. Wetlands areas in the City actually help reduce the risk of flooding, as they can absorb excess rainfall that would have to be drained away from impervious surfaces. Flooding can provide many benefits to the natural environment, including recharging wetlands and groundwater, increasing fish production, creating wildlife habitat, and rejuvenating soil fertility. These smaller localized flooding events often provide more benefits to the environment in comparison to negative impacts associated with large flood events. Historic and cultural resources may be at some measure of vulnerability if they are located in areas subject to repeated localized flooding.

### *Economic Assets and Community Activities of Value*

Localized flooding occurs on an annual basis throughout the City during storm events. Most of these events have limited impacts and include those associated with localized flooding due to undersized drainage systems, affecting nearby roads, structures, and other nearby assets. Unless directly affected by localized flooding, these events are unlikely to affect the City's key economic assets.

Community activities of value may have minor vulnerabilities if a localized flood event were to occur during the activity. This may cause the activity to be relocated, cancelled, or rescheduled.

### Impacts from Localized Flood

Primary concerns associated with stormwater flooding include impacts to infrastructure that provide a means of ingress and egress throughout the community. Ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Objects can also be buried or destroyed through sediment deposition. Floodwaters can break utility lines and interrupt services. Standing water can cause damage to crops, roads, and foundations. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

Life safety issues from localized flooding would be more limited. The amount and type of damage or flooding that occurs varies from year to year and from storm to storm, depending on the quantity of precipitation and runoff.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

### Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to exacerbate future heavy rain conditions and associated impacts and vulnerability of the City to localized flood.
- Population growth in the City of Colusa has recently slowed. Additional population growth would likely bring continued diversity to the City. This can also impact the vulnerable populations, like low-income individuals and households living in areas that are typically more hazardous. Vulnerable population groups such as low-income individuals and households living in floodprone areas could face disproportionate effects from localized flood and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. Creating more urban areas causes an increase in peak flow and stormwater runoff. Such growth will consume previously undeveloped acres, and the impacts may overwhelm existing drainage and flood control facilities. Locating new development, structures and critical facilities and infrastructure within or near areas of localized flooding risk may put additional development at risk. However, City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future localized flood conditions. Depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Future development in the City mainly east of Bridge Street and State Route (SR) 20 must adequately address and mitigate impacts upon storm water drainage systems which will add more impervious surfaces and need to drain those waters. The City will need to be proactive to ensure that increased development has proper siting and drainage for stormwaters. These considerations will also aid the vulnerable populations within the city, since these groups face a disproportionate impact from hazards. The risk of localized flooding to future development can also be minimized by accurate recordkeeping of repetitive localized storm activity. Mitigating the root causes of the localized stormwater flooding will reduce future risks of losses.

## *Levee Failure*

**Likelihood of Future Occurrence**–Unlikely
**Vulnerability**–Extremely High

### Hazard Profile

A levee is a raised area that runs along the banks of a river, stream, or canal. Levees reinforce the banks and help prevent flooding by containing higher flow events to the main channel of a stream. By confining the flow to a narrower steam channel, levees can also increase the speed of the water. Levees can be natural or man-made.

Levees provide strong flood protection, but they are not failsafe. Levees are designed to protect against a specific flood level and could be overtopped during severe weather events or dam failure. For example, levees can be certified to provide protection against the 1% annual chance flood. Levees reduce, not eliminate, the risk to individuals and structures located behind them. A levee system failure or overtopping can create severe flooding and high water velocities. Levee failure can occur through overtopping or from seepage issues resulting from burrowing rodents, general erosion, excessive vegetation and root systems, and other factors that compromise the integrity of the levee. No levee provides protection from events for which it was not designed, and proper operation and maintenance are necessary to reduce the probability of failure.

In the City of Colusa, levee failure poses a great risk to life and property in areas where levees protect surrounding property from flooding associated with stream and riverine flooding as well as areas where levees protect areas subject to events.

#### Location and Extent

Numerous levees are located throughout the City (as shown in Section 4.3.14 of the Base Plan. Figure A-24 shows the Levee Flood Protection Zones (LFPZs) in the City. Since the decertification of the levees, there is no FEMA DFIRM X Protected by Levee Flood Zone. However, analysis is performed using the LFPZ data of expected flood depths.

There is not a scientific scale or measurement system in place for levee failure. Expected flood depths from a levee failure in the City are not fully known, but the LFPZ maps provide a rough estimation. The speed of onset is slow as the river rises, but if a levee fails the warning times are generally short for those in the inundation area. The duration of a levee failure can be hours to weeks, depending on the water flows that the levee holds back. The City noted that when northern California reservoirs are nearing maximum capacity, they release water through the river systems, causing additional burdens on City levees. Geographical levee failure flood extent for the City developed from the LFPZs is shown in Table A-37.

*Figure A-24 City of Colusa – LFPZ*

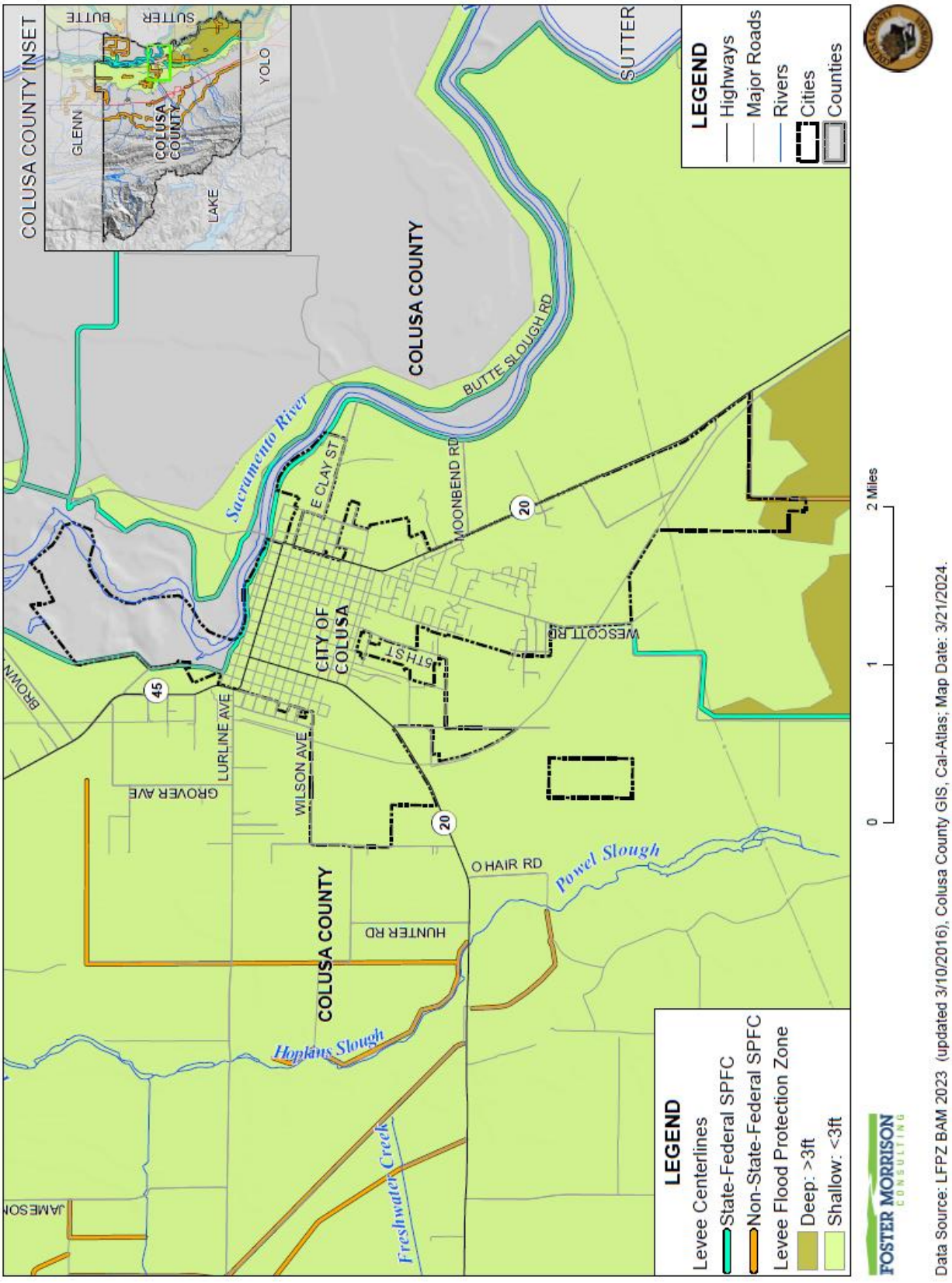


*Table A-37 City of Colusa –Geographical LFPZ Extents*

| Levee Flood Protection Zone | Total Acres | % of Total Acres | Improved Acres | % of Total Improved Acres | Unimproved Acres | % of Total Unimproved Acres |
|---|---|---|---|---|---|---|
| Shallow: <3ft | 2,062 | 85.504% | 1,377 | 99.194% | 685 | 66.927% |
| **City of Colusa Total** | **2,062** | **85.504%** | **1,377** | **99.194%** | **685** | **66.927%** |

Source: CA DWR

## Past Occurrences

### *Disaster Declarations*

There have been no state or federal disaster declarations from levee failure.

### *NCDC Events*

There have been no NCDC levee failure events in Colusa County.

### *City of Colusa Events*

The City has not experienced significant changes in its levee system since 2019. The seepage locations have remained the same as in prior years and are accurately identified in the 2018 plan. More recently, the City levee system did experience potential damage from encampments set up on the river side of the levee near the 3rd Street access. DWR inspected the levee where the people living in the camp had dug into the base of the levee near the river's edge. DWR was confident that it did not pose a serious risk to the levee because of the location of the dug-in. It was located at one of the most comprehensive portions of the levee and did not pose any immediate threat.

## Climate Change and Levee Failure

It is likely that climate change will increase the chance of future occurrence as well as future impacts from levee failure. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

In general, increased flood frequency in California is a predicted consequence of climate change. Mechanisms whereby climate change leads to an elevated flood risk include more extreme precipitation events and shifts in the seasonal timing of river flows. This threat may be particularly significant because recent estimates indicate the additional force exerted upon the levees is equivalent to the square of the water level rise. These extremes are most likely to occur during storm events, leading to more severe damage to levees from waves and floods.

## Vulnerability to Levee Failure

The probability of levee failure is increasing over time due to increased storms and flooding potential from global climate change. Levee failure flooding can occur as the result of partial or complete collapse of an

impoundment, and often results from prolonged rainfall and flooding. A levee failure can range from a small uncontrolled release to a catastrophic failure. The primary danger associated with levee failure is the high velocity flooding of those properties downstream of the breach. Vulnerability to levee failures is generally confined to the areas subject to inundation downstream of the levee. In addition, levee failure can cause stream bank erosion, which can in some instances have effects worse than those of flooding itself.

Large portions of the City are at some measure of vulnerability to levee failure as shown by the number of levees located within the City and the LFPZs. An assessment of a community's vulnerability to levee failure begins with an understanding of local exposure to levee failure. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

The 2004 LHMP noted that since dredging the river bottom has been discontinued, the bottom of the river has become higher, thus the water levels reach higher on the banks of the levees. When northern California reservoirs are nearing maximum capacity, they release water through the river systems, causing additional burdens on County levees. The potential for levee breaches and erosion damage has increased. Also, since the levees have been decertified in the County, many areas that were once outside the floodplain have now been placed inside the Special Flood Hazard Area. This has put many citizen's homes or businesses into the floodplain, which requires them to have flood insurance. The seepage locations have remained the same as in prior years and are accurately identified in the 2018 plan.

At this time, the City has no plans to certify the levees. The City will continue to work with the reclamation districts to evaluate levee improvement options, including possible levee certification in the future?

### Assets at Risk

Assets at risk from levee failure include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

Populations in the floodplains are at risk to flooding, including populations located in in leveed areas. The LFPZ areas provide some indication of the potential risk to populations located within areas protected by levees. Certain vulnerable populations may be at a greater risk of a sudden levee failure, including the unsheltered, those with limited mobility and those that lack the resources to leave the area.

City residents that live in areas protected by levees are often the most vulnerable, Not only are the residents at risk, but their homes and contents are all at risk, compounding the impacts associated with significant hazard events. To evaluate the population of residents of the City that live within areas protected by levees, the LFPZ was used to determine the potential risk of populations located within these leveed areas. The

LFPZs were overlayed on the parcel layer and linked to the Assessor data. Those residential parcel centroids that intersect the LFPZ were counted and multiplied by the 2022 Census Bureau average household factors for the City of Colusa – 2.55. According to this analysis, there is a total population of 5,156 residents of the City that reside in the LFPZs; although, all of these residents fall within the shallow, <3ft LFPZs. However, it should be noted that all populations located within areas protected by levees may be a risk to levee failure flooding. Residential populations within LFPZs are shown in Table A-28.

### *Table A-38 City of Colusa – Improved Residential Parcels and Population in LFPZs*

| Jurisdiction | Deep: >3ft | | Shallow: <3ft | |
|---|---|---|---|---|
| | Improved Residential Parcels | Population | Improved Residential Parcels | Population |
| City of Colusa | 0 | 0 | 1,778 | 5,156 |

Source: CA DWR, Colusa County 2023 Parcel/Assessor Data, US Census Bureau American Community Survey 2022 Household Size Estimates.

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

#### *Structures*

A levee failure can affect the built environment of the City, with multiple structures in the City at risk to a levee failure event. While all structures located within leveed areas are potentially at risk to a levee failure event, the LFPZ data was used to help quantify this risk. GIS was used to determine the possible impacts of levee failure flooding from LFPZs within the City of Colusa. The methodology described in Section 4.3.14 of the Base Plan was followed in determining structures and values at risk to levee failure flooding based on the LFPZ data. Table A-39 shows the parcel counts, land and improved values (i.e., those with a structure improvement on the parcel), estimated content replacement values, and total values by property use in the City that fall in LFPZs.

### *Table A-39 City of Colusa – Count and Value of Parcels (and Structures) in LFPZs by Property Use*

| Levee Flood Protection Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| **Deep: >3ft** | | | | | | | |
| Agricultural | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Commercial | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Government | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Industrial | 4 | 2 | $105,143 | $261,230 | $309,690 | $391,845 | $1,067,908 |
| Institutional | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Miscellaneous | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Residential | 0 | 0 | $0 | $0 | $0 | $0 | $0 |

| Levee Flood Protection Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| **Deep: >3ft Total** | **4** | **2** | **$105,143** | **$261,230** | **$309,690** | **$391,845** | **$1,067,908** |
| Shallow: <3ft | | | | | | | |
| Agricultural | 23 | 11 | $13,938,078 | $552,430 | $495,940 | $552,430 | $15,538,878 |
| Commercial | 246 | 190 | $20,522,317 | $57,204,144 | $6,312,332 | $57,204,144 | $141,242,937 |
| Government | 93 | 51 | $4,841,496 | $33,560,789 | $18,519,832 | $33,560,789 | $90,482,906 |
| Industrial | 61 | 20 | $12,313,828 | $34,376,193 | $15,137,516 | $51,564,289 | $113,391,826 |
| Institutional | 34 | 20 | $2,286,791 | $6,200,820 | $6,039,649 | $6,200,820 | $20,728,080 |
| Miscellaneous | 12 | 5 | $615,343 | $8,431,121 | $0 | $8,431,121 | $17,477,585 |
| Residential | 1,843 | 1,778 | $88,505,253 | $303,181,060 | $2,413,584 | $151,590,525 | $545,690,422 |
| **Shallow: <3ft Total** | **2,312** | **2,075** | **$143,023,106** | **$443,506,557** | **$48,918,853** | **$309,104,118** | **$944,552,634** |
| | | | | | | | |
| **City of Colusa Total** | **2,316** | **2,077** | **$143,128,249** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$945,620,542** |

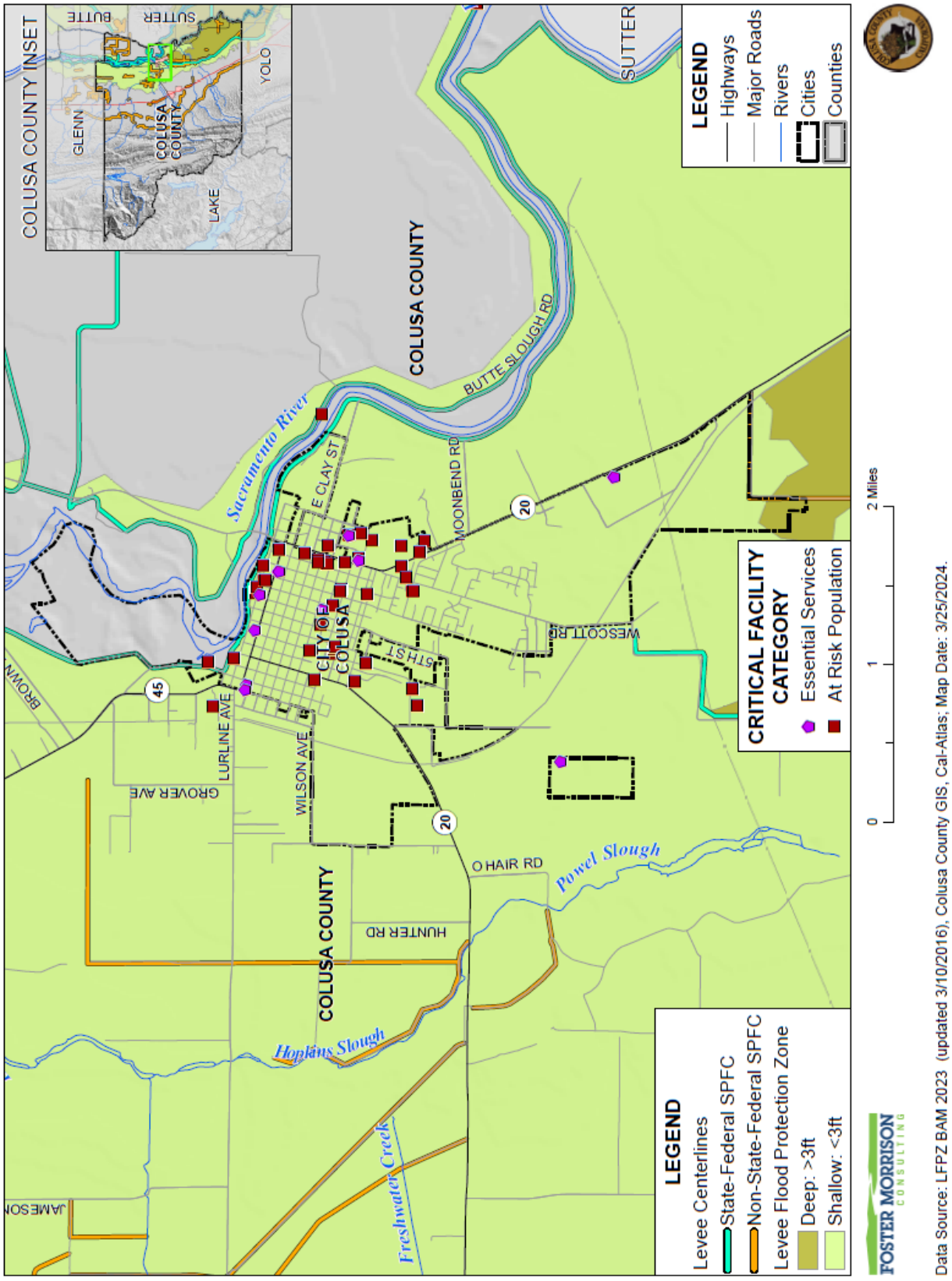
Source: CA DWR, Colusa County 2023 Parcel/Assessor

Structures protected by levees that fail, including those with mapped LFPZs, are often total losses. The analysis above assumes all levees in the City break at one time, which is unlikely. The extent and depth of actual flooding and associated damage will vary depending on the location, nature, depth, and extent of any levee break.

### *Critical Facilities and Infrastructure*

Levee failure flooding presents a threat to both critical facilities and infrastructure. Critical infrastructure failures such as loss of power, impacts to potable and wastewater treatment systems, and road and bridge failures can all be caused by levee failure events, depending on the magnitude of the resulting flood. While all critical facilities that are located behind leveed areas are potentially at risk to a levee failure event, a separate analysis was performed on the critical facility inventory in the City to determine critical facilities that fall within the LFPZs. Using GIS, the LFPZs were overlayed on the critical facility GIS layer. This is shown on Figure A-25 and detailed in Table A-40 for the LFPZ areas in the City. As shown, facilities lie in the Shallow: <3ft LFPZ.

*Figure A-25 City of Colusa – Critical Facilities in LFPZs*



### *Table A-40 City of Colusa – Critical Facilities in LFPZ*

| Levee Flood Protection Zone | Critical Facility Category | Facility Type | Facility Count |
|---|---|---|---|
| Shallow: <3ft | Essential Services Facilities | Emergency Response | 1 |
| | | Fire Station | 2 |
| | | Medical | 1 |
| | | Police Station | 1 |
| | | Public Services | 3 |
| | | Utility Facility | 2 |
| | | **Total** | **10** |
| | At Risk Population Facilities | Apartment Complex | 22 |
| | | Assisted-Living | 1 |
| | | Hotel or Motel | 2 |
| | | Jail | 1 |
| | | Mobile Home Park | 4 |
| | | School | 8 |
| | | Senior Living Facility | 1 |
| | | **Total** | **39** |
| **Shallow: <3ft Total** | | | **49** |
| **City of Colusa Total** | | | **49** |

Source: CAL FIRE, City of Colusa GIS

### *Community Lifelines*

Levee failure flooding presents a threat to life and property, including community lifelines in the City. Many of the City's community lifelines are the same as or similar to Colusa County's. These were discussed in greater detail in Section 4.3.14 of the Base Plan. A levee failure could overwhelm these community lifelines in the short term.

### *Natural, Historic, and Cultural Resources*

Large levee failure events can affect natural, historic, and cultural resources. There are a number of ways levee failures and associated floodwaters can impact natural resources and the environment: Wildlife habitats can be destroyed. Contaminated floodwater can pollute rivers and habitats. Silt and sediment can destroy natural areas. Riverbanks and natural levées can be eliminated as rivers reach bankfull capacity. Rivers can be widened, and deposition can increase downstream. Trees can be uprooted by high-velocity water flow. Plants that survive the initial flood may die due to being inundated with water. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to structures within the areas protected by levees, but other cultural resources such as those associated with Native Americans and tribal cultural areas can also be disturbed, damaged and lost during extreme levee failure events. Any of these that fall in areas protected by levees and within the LFPZ flood zones would be vulnerable.

### *Economic Assets and Community Activities of Value*

Major levee failure flooding events could affect any economic asset that lies in the areas protected by levees. These events can also affect those economic assets outside of the areas protected by levees, at least in the short term until floodwaters have receded and the City has sufficiently recovered. The City felt that a levee failure would have bearing on community activities of value, if a failure had a direct impact on the activity.

#### Impacts from Levee Failure

Floods and their impacts vary by location, including the added impacts associated with a levee failure flood event, and will only affect certain areas of the City that are in areas protected by levees. Based on the number of levees within the City and the LFPZ analysis, it is evident that levee failure floods could potentially have significant impacts to areas of the City protected by levees, depending on the severity of the event. Impacts that are not quantified, but could be anticipated in large future levee failure events, include:

- Injury and loss of life.
- Commercial and residential structural and property damage.
- Disruption of and damage to public critical infrastructure and services.
- Health hazards associated with mold and mildew, contamination of drinking water, etc.
- Impacts to natural resource areas, including stream bank erosion and loss of habitat areas.
- Damage to roads/bridges resulting in loss of mobility.

In addition to flood related levee failures, the levees in the City are at risk to failure during earthquake. Levee failure flooding could accompany an earthquake, especially if a dam or storage reservoir or tank fails. Severe ground shaking from an earthquake event can cause a dam to fail or overflow to the surrounding area. Levees are especially susceptible to rapid settlement due to liquefaction or horizontal spreading of underlying soils.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

### Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to exacerbate future heavy rain conditions and associated impacts and vulnerability of the County to levee failure flooding.
- Population growth in the City of Colusa has recently slowed; however, additional growth within the recently decertified levee protected areas, including the LFPZs would place additional populations at

risk to flood. Additional population growth would likely bring continued diversity to the County. Vulnerable population groups could face disproportionate effects from flooding and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions

- Land use planning should be proactive to address future hazard conditions. Locating new development, structures and critical facilities and infrastructure within or near areas of levee failure risk may put additional development at risk. Future development built behind levees are subject to being built to the standards in the City of Colusa Floodplain Ordinance. However, City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future conditions. Thus, depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Future development will be affected by this hazard as most of the Colusa area relies upon the protection of levees, not only directly adjacent to the City but also with the potential for levee failures upstream as far north as the Colusa Casino. Thus, it will always be some level of concern. Some areas of the City of Colusa, namely, west where future development is planned, are protected by a current levee, the Shattenger Levee, which, once certified will mitigate the flood risk, and the County is planning to install a new levee called the Powell Slough Levee that will protect against back water flooding the entire southwest quadrant of town.

Future development areas and their vulnerability to levee failure are discussed further in the below GIS analysis.

### *GIS Analysis*

The City provided 7 future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Figure A-26 show the locations of the future development areas overlayed on the LFPZs. Table A-41 shows each future development area in the City in these zones.

*Figure A-26 City of Colusa – Future Development in LFPZs*

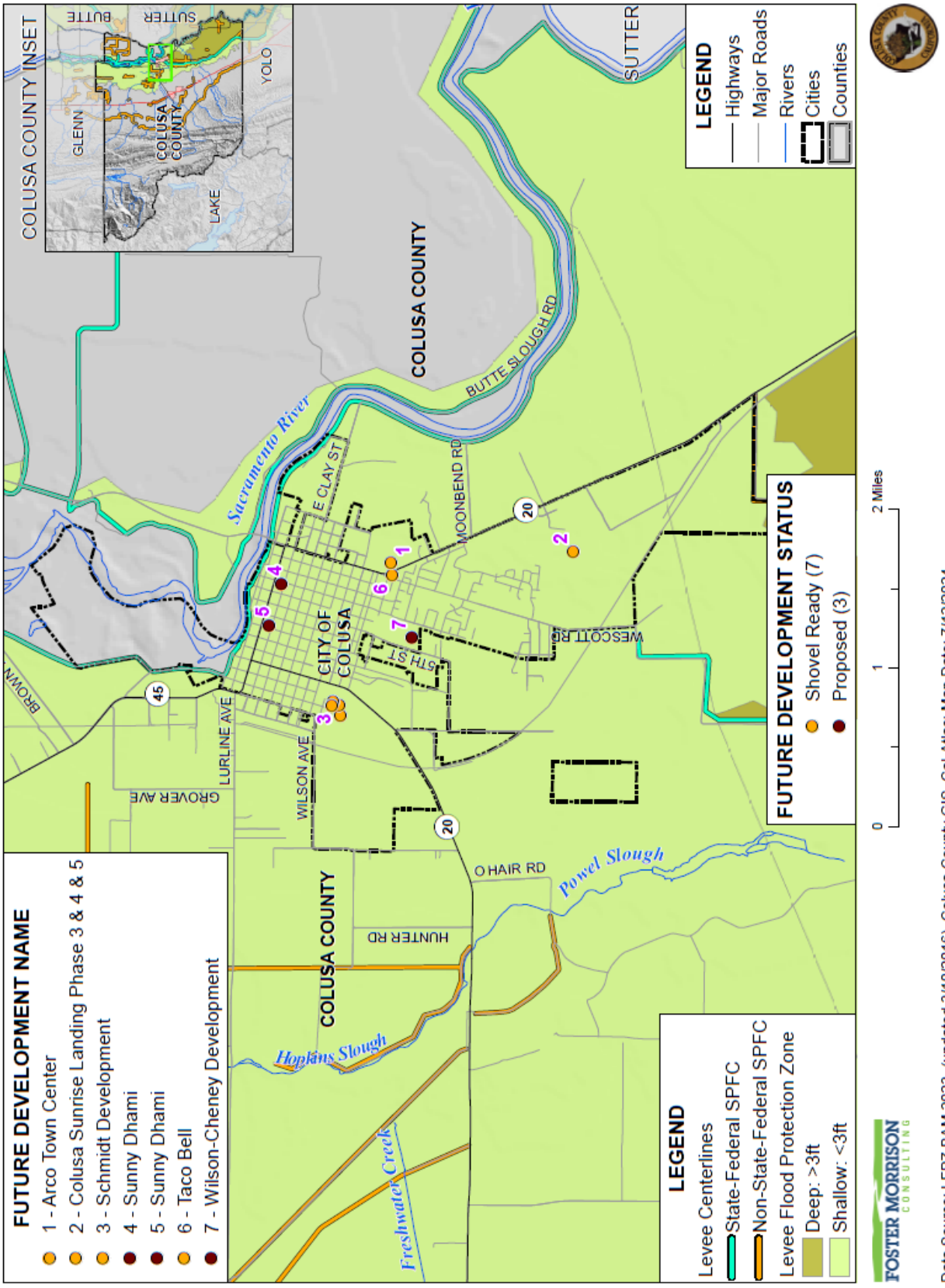


*Table A-41 City of Colusa – Future Development in LFPZs*

| Levee Flood Protection Zone | Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|---|
| Shallow: <3ft | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | | Proposed Total | | 3 | 10.61 |
| | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | | 3 | Schmidt Development | 4 | 8.4 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **7** | **33.24** |
| | **Shallow: <3ft Total** | | | **10** | **43.85** |
| | | | | | |
| **Grand Total** | | | | **10** | **43.85** |

Source: LFPZ BAM 2023, City of Colusa

## *Severe Weather: Heavy Rains and Storms*

**Likelihood of Future Occurrence**–Highly Likely
**Vulnerability**–Medium

### Hazard Profile

Storms in the City occur annually and are generally characterized by heavy rain often accompanied by strong winds and sometimes lightning and hail. Approximately 10 percent of the thunderstorms that occur each year in the United States are classified as severe. A thunderstorm is classified as severe when it contains one or more of the following phenomena: hail that is three-quarters of an inch or greater, winds in excess of 50 knots (57.5 mph), or a tornado. Heavy precipitation in the City falls mainly in the fall, winter, and spring months. Wind often accompanies these storms; hail and lightning are rare in the City.

### Location and Extent

Heavy rain events occur on a regional basis. Rains and storms can occur in any location of the City. All portions of the City are at risk to heavy rains and storms. Most of the severe rains occur during the fall, winter, and spring months in the City as discussed below (with problem flooding areas associated with heavy rains and storms shown in Table A-36 in the Flood: Localized Stormwater section). There is no scale by which heavy rains and severe storms are measured. Magnitude of storms is measured often in rainfall

and damages. The speed of onset of heavy rains can be short, but accurate weather prediction mechanisms often let the public know of upcoming events. Hail and lightning are rarer in the City and Colusa County. Duration of severe storms in the City can range from minutes to hours to days. Information on precipitation extremes can be found in Section 4.3.4 of the Base Plan.

### Past Occurrences

#### *Disaster Declaration History*

According to historical hazard data, severe weather, including heavy rains and storms, is an annual occurrence in the City. This contributes to many of the federal disaster declarations related to flooding. Disaster declarations from flooding are shown on Table A-42.

#### *Table A-42 Colusa County – Federal and State Disaster Declarations from Flood (Heavy Rain and Storms) 1950-2024*

| Disaster Type | Federal Declarations | | State Declarations | |
|---|---|---|---|---|
| | Count | Years | Count | Years |
| Flood (including heavy rains and storms) | 17 | 1955, 1958, 1963 (twice), 1970, 1983, 1986, 1995 (twice), 1997, 1998, 2005/2006, 2017, 2019 (twice), 2023 (twice) | 19 | 1950, 1955, 1958 (twice), 1963 (twice), 1973, 1978, 1983, 1986, 1995 (twice), 1997, 1998, 2005/2006, 2008, 2017, 2019 (twice) |

Source: Cal OES, FEMA

#### *NCDC Events*

The NCDC data recorded 30 hail, heavy rain, and winter weather incidents for Colusa County since 1950.

#### *City of Colusa Events*

The City noted that heavy rains and storms are an annual occurrence. Events causing issues are listed in the Past Occurrences section of the Flood: 1%/0.2% Annual Chance and Flood: Localized Stormwater Flooding discussions above.

### Climate Change and Heavy Rains and Storms

It is likely that climate change will increase the chance of future occurrence as well as future impacts from heavy rains and storms. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

According to the CAS, while average annual rainfall may increase or decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century. It is unlikely that hail will become more common in Colusa County and the City of Colusa. The amount of lightning is not projected to change.

Cal-Adapt noted that, on average, the projections show little change in total annual precipitation in California. Furthermore, among several models, precipitation projections do not show a consistent trend during the next century. Cal-Adapt modeled scenarios are shown in Section 4.3.4 of the Base Plan.

## Vulnerability to Heavy Rain and Storms

Heavy rain and severe storms are the most frequent type of severe weather occurrences in the City. These events can cause both significant and localized flooding. Flooding can be worse during times where the ground is already saturated. Wind often accompanies these storms and has caused damage in the past. Hail and lightning are rare in the City, but also can cause damage, with lightning occasionally igniting wildfires.

The whole of the City is at some measure of vulnerability to heavy rain and storms. An assessment of a community's vulnerability to heavy rains and storms begins with an understanding of local exposure to heavy rain and storms. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

The primary concern of the City from heavy rains and storms is the flooding that occurs during storm events. These heavy rains and storms can cause damages from localized flooding. This was discussed in the Flood: Localized Stormwater Flooding section above.

The City also experiences short power outages annually when severe weather occurs. In the past, these outages did not last long and did not cause an interruption in critical services. Most city facilities have standby generators and were able to operate without issue.

The City also noted that heavy rains and storms cause localized flooding in the City. The problem areas area shown on Table A-36 above.

### Assets at Risk

Assets at risk from heavy rain and storms include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

All populations (including vulnerable populations) in the City have some measure of risk to heavy rains and storms. Those populations that work or recreate outside and unhoused individuals are more vulnerable to impacts from heavy storm events. Heavy rains and storms occur every year and do not generally cause significant adverse impacts to individuals; it is the secondary hazard, flooding, which poses the biggest impact to people. Populations at risk to flooding resulting from heavy rains and storm events include those who live in floodplains (discussed in further detail in the Flood: 1%/0.2% Annual Chance section above) and those who live in and near localized flooding areas (discussed in further detail in the Flood: Localized Stormwater Flooding section above).

### *Structures*

Structures in the City have some risk to heavy rains and storms. Structures built to modern building codes are built to withstand heavy rains and storms (including high winds and lightning). During a heavy storm, localized flooding may cause water intrusion into buildings from the outside. Trees can be downed causing impacts to structures. Older homes and buildings may be at increased risk to heavy rains and storms. Power outages during severe storm events can occur, impacting the use of structures until the power is back online.

### *Critical Facilities and Infrastructure,*

Heavy rain and storms can affect critical facilities and infrastructure during large events. Power outages may occur taking facilities offline. High winds can down power lines and trees impacting facilities. Water intrusion into facilities and infrastructure can impact operations. City roads, streets, and bridges can be impacted resulting in closures restricting traffic flow in the City. In certain areas, large storms can cause erosion and localized landslides which can impact affected facilities. Many critical facilities are built to modern design standards that take heavy rains and storms into account when siting and building these structures, and others may need to be retrofitted to better withstand these events.

### *Community Lifelines*

Community lifelines are likely to have some vulnerability to heavy rains and storms. Many of the City's community lifelines are the same as or similar to Colusa County's. These were discussed in greater detail in Section 4.3.4 of the Base Plan.

Short-term, heavy rains and storms can cause both widespread flooding as well as extensive localized drainage issues throughout the City. As storms continue to increase in intensity, existing drainage and stormwater systems may be overwhelmed at least temporarily contributing to an increase in flooding related impacts. While components of these lifelines may be damaged or otherwise impacted, it is unlikely that large storm events would overwhelm and take out any of these lifelines in the City as a whole.

### *Natural, Historic, and Cultural Resources*

Large rain and storm events and associated flooding can affect natural, historic, and cultural resources. Silt and sediment can damage natural areas. Trees can be uprooted and downed by high winds. Extended periods of rainfall can erode natural banks along waterways and degrade soil stability for terrestrial species. While some natural systems can be adversely impacted during these large storms, heavy rain events can also provide benefits. Groundwater and wetland areas can be recharged and water supplies replenished. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to structures affected by large storm events, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged, and lost during extreme rain and storm and events.

### *Economic Assets and Community Activities of Value*

Heavy rain and storm events can cause direct damage to economic assets such as businesses and commercial centers. During extreme events, the economy may slow as people stay home or inside. Business revenue

may be reduced during extended storm events. Community activities of value may see a reduction in attendance, impacting revenues associated with these events, especially those that occur outdoors. Events may be cancelled or rescheduled. Along with this, a heavy rain and storm event could shut down schools and businesses, causing interruptions to education and economic areas of the City.

### Impacts from Heavy Rain and Storms

Impacts from heavy rains and storms include damage to property, critical facilities and infrastructure, and the natural landscape. This includes: erosion; downed trees; damaged utility structures and infrastructure; power outages; road damage and blockages; and even lightning strikes to critical infrastructure and people. Lightning can also cause wildfires and urban fires to occur. Landsliding and erosion occur when the soil on slopes becomes oversaturated and fails. Climate change may cause these impacts to worsen.

Actual damage associated with the primary effects of severe storms and heavy rains has been somewhat limited. It is the secondary hazards caused by these severe weather events, such as floods and erosion that would likely have the greatest impact.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

## Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City Colusa include the following:

- Climate change is likely to exacerbate future heavy rain and storm conditions and associated impacts and vulnerability of the City to flooding.
- Population is expected to decrease for the City of Colusa; however, the vulnerability may change depending on changes to the makeup of more vulnerable populations. Certain vulnerable populations, such as the unhoused, could experience disproportional effects from this hazard. and should be addressed as the County continues to grow. Thus, changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. Changes in land use may also amplify the impacts of heavy rains and storms, as additional impervious surfaces can cause additional runoff and localized flooding throughout the City. Building codes in the City ensure that new development is built to current building standards, which should reduce the risk to future development in the City from heavy rains and storms. With adherence to development standards, future losses to new development should be minimal.

Building codes in the City ensure that new development is built to current building standards, which should reduce the risk to future development in the City from heavy rains and storms. New critical facilities such as communications towers and others should be built to withstand hail damage, lightning, and thunderstorm winds. With adherence to development standards, future losses to new development should be minimal. Changes in population could increase the number of people impacted by heavy rains and storms, including an increase in vulnerable populations such as AFN, low-income families, the elderly, children, and the unhoused. Changes in land use may also amplify the impacts of heavy rains and storms, as additional impervious surfaces can cause additional runoff and localized flooding throughout the City.

## *Wildfire*

**Likelihood of Future Occurrence**–Highly Likely
**Vulnerability**–Low

***Note***: Though a low priority hazard for the City, due to its importance in the County and State of California, wildfire is profiled here. It is a low priority hazard for mitigation planning purposes.

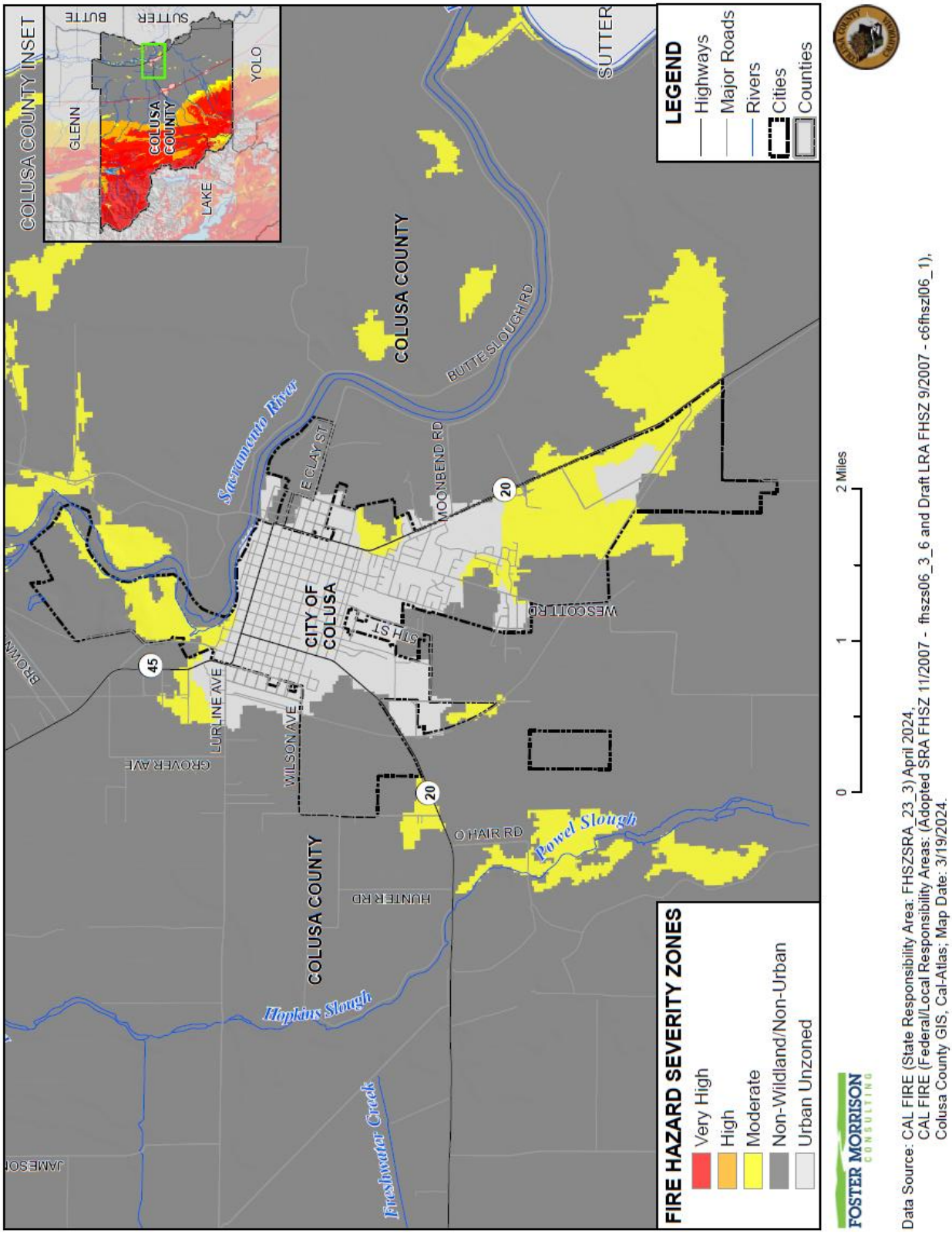
### Hazard Profile

Wildland fire and the risk of a conflagration is an ongoing concern for the City of Colusa. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of fire regimes. Wildland fires affect grass, forest, and brushlands, as well as structures. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These weather conditions can result in red flag (e.g., fire weather) days, and can result in PSPS/ESPS events in the City. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urban areas. There is also the concern of wildfires occurring in these more remote, forested areas that under certain weather conditions, can extend into areas not generally considered at a high risk to wildfire. Smoke and air quality also become an issue, both from fires occurring inside and outside of the Colusa County Planning Area and the City.

#### Location and Extent

Wildfire can affect all areas of the City. CAL FIRE has estimated that the risk varies across the City and has created maps showing risk variance. Following the methodology described in Section 4.3.17 of the Base Plan, wildfire maps for the City of Colusa were created. Figure A-27 shows the CAL FIRE Fire Hazard Severity Zone (FHSZ) in the City. As shown on the maps, FHSZs within the City range from Urban Unzoned to Moderate.

*Figure A-27 City of Colusa – CAL FIRE Fire Hazard Severity Zones*



Wildfires tend to be measured in structure damages, injuries, and loss of life as well as on acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time or may have durations lasting for a week or more. Geographical FHSZ extent from CAL FIRE is shown in Table A-43.

### *Table A-43 City of Colusa – CAL FIRE Fire Hazard Severity Zone Geographical Extents*

| Fire Hazard Severity Zones | Total Acres | % of Total Acres | Improved Acres | % of Total Improved Acres | Unimproved Acres | % of Total Unimproved Acres |
|---|---|---|---|---|---|---|
| Very High | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| High | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| Moderate | 507 | 21.03% | 168 | 12.13% | 339 | 33.10% |
| Non-Wildland/Non-Urban | 1,113 | 46.17% | 544 | 39.18% | 569 | 55.65% |
| Urban Unzoned | 791 | 32.81% | 676 | 48.69% | 115 | 11.25% |
| **City of Colusa Total** | **2,412** | **100.00%** | **1,388** | **100.00%** | **1,023** | **100.00%** |

Source: CAL FIRE

## Past Occurrences

### *Disaster Declaration History*

There has been one federal and two state disaster declaration due to fire, as shown in Table A-44.

### *Table A-44 Colusa County – Federal and State Wildfire Disaster Declarations 1950-2024*

| Disaster Type | Federal Declarations | | State Declarations | |
|---|---|---|---|---|
| | Count | Years | Count | Years |
| Wildfire | 1 | 2018 | 2 | 1987, 2018 |

Source: Cal OES, FEMA

### *NCDC Events*

The NCDC has tracked 13 wildfire events in the County dating back to 1993.

### *City of Colusa Events*

The City noted that 2021 and 2022 experienced unprecedented fires in the riparian areas of the State Park and properties that border the Sacramento River and the City of Colusa.

- **2021** - The "Jungle Fire" happened on the night of the 4th of July during the City's fireworks show. The cause was undetermined. The fire was primarily contained in the riparian area of the state park with minimal slope over to private property near Roberts Road. The estimated acreage affected was approximately 30 acres.

- **2022** – A fire started west of Roberts Road on private property. The fire was caused by a pan-head mower operated in and around dry brush. The fire started in the Sacramento River Fire Protection District service area and passed through the City's jurisdictional area. This fire was much more active than previous years and experienced ember-cast 1-2 miles from the fire edge.
  - ✓ In the City residential area, there was one related 911 call for gutters on fire at a single-family home near 1st Street and Clay Street.
  - ✓ The CIP area had a spot fire related to the fire.
  - ✓ Due to smoke, it was difficult to carry out normal activities, especially for the more vulnerable residents.

### Climate Change and Wildfire

It is likely that climate change will increase the chance of future occurrence as well as future impacts from wildfire. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Warmer temperatures can exacerbate drought conditions. Drought often kills plants and trees, which serve as fuel for wildfires. Warmer temperatures could increase the number of wildfires and pest outbreaks, such as the western pine beetle. Cal-Adapt's wildfire tool predicts the potential increase in the amount of burned areas for the year 2090-2099, as compared to recent (2010) conditions. This is shown in Section 4.3.17 of the Base Plan. Based on this model, Cal-Adapt predicts that wildfire risk in Colusa County will increase moderately at the end of the century. However, wildfire models can vary depending on the parameters used. Cal-Adapt does not take landscape and fuel sources into account in their model. In all likelihood, in the Colusa County Planning Area, precipitation patterns, high levels of heat, topography, and fuel load will determine the frequency and intensity of future wildfire.

## Vulnerability to Wildfire

Risk and vulnerability to the City from wildfire is of concern. Wildfires that occur in the City occur from a variety of both natural and manmade causes. The City can be affected both by fires that start on or near City lands as well as those that start elsewhere and move into the City. In addition to burning large areas of land, air quality can be affected in the City by fires occurring inside the City as well as those from many miles away. As growth continues and populations increase in the City, the potential for wildfires will also increase.

The whole of the City is at some measure of vulnerability to wildfire. An assessment of a community's vulnerability to wildfire begins with an understanding of local exposure to wildfire. This is included in the Local Concerns section below. After that section, assets at risk are discussed.

### Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce vulnerabilities to this hazard.

As discussed in the Past Occurrences section above, dry conditions can cause fires to start in or near the City. The City has areas of moderate wildfire hazard, as defined by CAL FIRE.

### Wildfire Smoke and Air Quality

Smoke from wildfires is made up of gas and particulate matter, which can be easily observed in the air. Air quality standards have been established to protect human health with the pollutant referred to as PM2.5 which consists of particles 2.5 microns or less in diameter. These smaller sizes of particles are responsible for adverse health effects because of their ability to reach the lower regions of the respiratory tract.

Wildfire smoke can have negative effects to those who live in or near a fire burn area. Smoke and air pollution from wildfires can be a severe health hazard. Significant wildfires occurring in both Colusa County and nearby northern California communities since the 2018 LHMP Update have created significant air pollution affecting area residents. This was the case during the 2020 North Complex Fire, as well as others that affected the nearby areas.

### Assets at Risk

Assets at risk from wildfire include people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; economic assets; and community activities of value. These are discussed in the following sections.

#### *People and Populations*

All populations are at some vulnerability to wildfire. Certain vulnerable populations are at greater risk to the effects of wildfire as well as smoke and air quality issues that wildfires bring. Vulnerable populations include:

- Unhoused
- Infants and children under age five and their caregivers
- Elderly (65 and older)
- Individuals with disabilities
- Individuals' dependent on medical equipment
- Individuals who exercise, recreate, or work outdoors
- Individuals with impaired mobility

To further evaluate the impact to the residential population within the City, the CAL FIRE FHSZ dataset was overlayed on the parcel layer. Those residential parcel centroids that intersect the FHSZs were counted and multiplied by the 2022 Census Bureau average household factors for the City of Colusa – 2.55. According to this analysis, there is a total population of 508 residents of the City of Colusa at risk to moderate or higher FHSZs. This is shown in Table A-45.

### *Table A-45 City of Colusa – Improved Residential Parcels and Population by CAL FIRE Fire Hazard Severity Zone*

| Jurisdiction | Very High | | High | | Moderate | |
|---|---|---|---|---|---|---|
| | Improved Residential Parcels | Population at Risk | Improved Residential Parcels | Population at Risk | Improved Residential Parcels | Population at Risk |
| City of Colusa | 0 | 0 | 0 | 0 | 175 | 508 |

Source: CAL FIRE, Colusa County 2023 Parcel/Assessor Data, US Census Bureau American Community Survey 2022 Household Size Estimates.

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

#### *Structures*

All structures in the City have some risk to wildfire. GIS was used to determine the possible impacts of wildfire within the City of Colusa. The methodology described in Section 4.3.17 of the Base Plan was followed in determining structures and values at risk in CAL FIRE's Fire Hazard Severity Zone layer. Summary analysis results for the City of Colusa are shown in Table A-46, which summarizes total parcel counts, improved parcel counts and their structure values by fire hazard severity zone. Table A-47 breaks out the Table A-46 by adding the property use details by fire hazard severity zone for the City.

### *Table A-46 City of Colusa – Count and Value of Parcels (and Structures) by CAL FIRE Fire Hazard Severity Zone*

| Fire Hazard Severity Zone | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Moderate | 271 | 205 | $26,303,908 | $100,956,400 | $20,126,336 | $78,616,901 | $226,003,545 |
| Non-Wildland/Non-Urban | 109 | 66 | $21,782,513 | $18,275,854 | $7,091,405 | $15,337,734 | $62,487,506 |
| Urban Unzoned | 1,954 | 1,806 | $96,217,123 | $324,535,533 | $22,010,802 | $215,541,328 | $658,304,786 |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

Source: CAL FIRE, Colusa County 2023 Parcel/Assessor Data

### *Table A-47 City of Colusa – Count and Value of Parcels (and Structures) by CAL FIRE Fire Hazard Severity Zone and Property Use*

| Fire Hazard Severity Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| **Moderate** | | | | | | | |
| Agricultural | 2 | 0 | $106,121 | $0 | $0 | $0 | $106,121 |

| Fire Hazard Severity Zone / Property Use | Total Parcel Count | Improved Parcel Count | Total Land Value | Improved Structure Value | Other Value | Estimated Contents Value | Total Value |
|---|---|---|---|---|---|---|---|
| Commercial | 26 | 16 | $4,655,038 | $16,536,493 | $2,454,172 | $16,536,493 | $40,182,196 |
| Government | 17 | 3 | $1,598,240 | $12,603,396 | $13,416,418 | $12,603,396 | $40,221,450 |
| Industrial | 30 | 10 | $5,703,369 | $13,066,387 | $3,853,036 | $19,599,581 | $42,222,373 |
| Institutional | 0 | 0 | $0 | $0 | $0 | $0 | $0 |
| Miscellaneous | 1 | 1 | $57,740 | $1,004,742 | $0 | $1,004,742 | $2,067,224 |
| Residential | 195 | 175 | $14,183,400 | $57,745,382 | $402,710 | $28,872,689 | $101,204,181 |
| **Moderate Total** | **271** | **205** | **$26,303,908** | **$100,956,400** | **$20,126,336** | **$78,616,901** | **$226,003,545** |
| Non-Wildland/Non-Urban | | | | | | | |
| Agricultural | 17 | 8 | $13,575,300 | $371,644 | | $371,644 | $14,318,588 |
| Commercial | 8 | 3 | $928,464 | $1,005,421 | $151,733 | $1,005,421 | $3,091,039 |
| Government | 5 | 0 | $1,253,620 | | | | $1,253,620 |
| Industrial | 26 | 4 | $3,301,172 | $4,914,780 | $6,138,700 | $7,372,170 | $21,726,822 |
| Institutional | 1 | 1 | $188,346 | $610,371 | $798,717 | $610,371 | $2,207,805 |
| Miscellaneous | 1 | 1 | $12,294 | $582,611 | $0 | $582,611 | $1,177,516 |
| Residential | 51 | 49 | $2,523,317 | $10,791,027 | $2,255 | $5,395,517 | $18,712,116 |
| **Non-Wildland/Non-Urban Total** | **109** | **66** | **$21,782,513** | **$18,275,854** | **$7,091,405** | **$15,337,734** | **$62,487,506** |
| Urban Unzoned | | | | | | | |
| Agricultural | 4 | 3 | $256,657 | $180,786 | $495,940 | $180,786 | $1,114,169 |
| Commercial | 215 | 171 | $14,961,211 | $39,662,230 | $3,706,427 | $39,662,230 | $97,992,098 |
| Government | 85 | 48 | $3,133,642 | $20,957,393 | $5,103,414 | $20,957,393 | $50,151,842 |
| Industrial | 9 | 8 | $3,414,430 | $16,656,256 | $5,455,470 | $24,984,383 | $50,510,539 |
| Institutional | 33 | 19 | $2,098,445 | $5,590,449 | $5,240,932 | $5,590,449 | $18,520,275 |
| Miscellaneous | 10 | 3 | $545,309 | $6,843,768 | $0 | $6,843,768 | $14,232,845 |
| Residential | 1,598 | 1,554 | $71,807,429 | $234,644,651 | $2,008,619 | $117,322,319 | $425,783,018 |
| **Urban Unzoned Total** | **1,954** | **1,806** | **$96,217,123** | **$324,535,533** | **$22,010,802** | **$215,541,328** | **$658,304,786** |
| | | | | | | | |
| **City of Colusa Total** | **2,334** | **2,077** | **$144,303,544** | **$443,767,787** | **$49,228,543** | **$309,495,963** | **$946,795,837** |

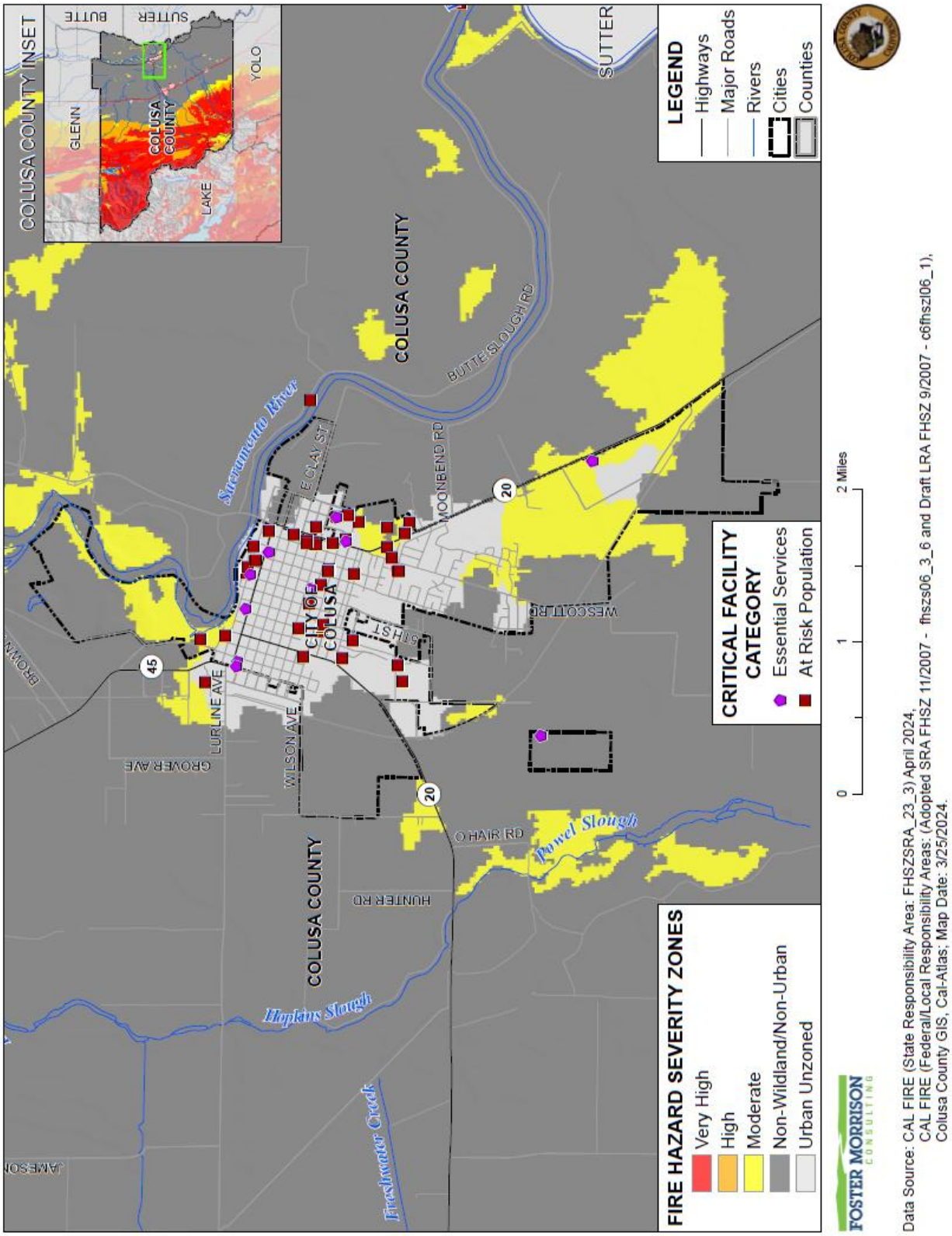
Source: CAL FIRE, Colusa County 2023 Parcel/Assessor Data

### *Critical Facilities and Infrastructure*

Wildfire presents a threat to critical facilities and infrastructure. The following analysis identifies critical facilities and infrastructure at risk to wildfire.

An analysis was performed on the critical facility inventory in the City of Colusa in identified Cal Fire's FHSZ mapping. Critical facilities in CAL FIRE FHSZs in the City of Colusa are shown in Figure A-28 and detailed in Table A-48. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

*Figure A-28 City of Colusa – Critical Facilities in Fire Hazard Severity Zones*



### *Table A-48 City of Colusa – Critical Facilities by Fire Hazard Severity Zone*

| Fire Hazard Severity Zone | Critical Facility Category | Facility Type | Facility Count |
|---|---|---|---|
| Moderate | Essential Services Facilities | Public Services | 1 |
| | | **Total** | **1** |
| | At Risk Population Facilities | Apartment Complex | 2 |
| | | Mobile Home Park | 1 |
| | | **Total** | **3** |
| **Moderate Total** | | | **4** |
| Non-Wildland/Non-Urban | Essential Services Facilities | Utility Facility | 1 |
| | | **Total** | **1** |
| | At Risk Population Facilities | Apartment Complex | 1 |
| | | Mobile Home Park | 1 |
| | | **Total** | **2** |
| **Non-Wildland/Non-Urban Total** | | | **3** |
| Urban Unzoned | Essential Services Facilities | Emergency Response | 1 |
| | | Fire Station | 2 |
| | | Medical | 1 |
| | | Police Station | 1 |
| | | Public Services | 2 |
| | | Utility Facility | 1 |
| | | **Total** | **8** |
| | At Risk Population Facilities | Apartment Complex | 19 |
| | | Assisted-Living | 1 |
| | | Hotel or Motel | 2 |
| | | Jail | 1 |
| | | Mobile Home Park | 3 |
| | | School | 8 |
| | | Senior Living Facility | 1 |
| | | **Total** | **35** |
| **Urban Unzoned Total** | | | **43** |
| | | | |
| **City of Colusa Total** | | | **50** |

Source: CAL FIRE, City of Colusa GIS

### *Community Lifelines*

Wildfire presents a threat to life and property, including to community lifelines in the City. Many of the City's community lifelines are the same as or similar to Colusa County's. These were discussed in greater detail in Section 4.3.17 of the Base Plan. A large wildfire near the City could overwhelm community lifelines.

### *Natural, Historic, and Cultural Resources*

Natural, historic, and cultural resources located within areas at risk to wildfire would be vulnerable. Should a wildfire occur in the City, the impacts to natural, historic and cultural resources could be extensive and include air pollution, contamination from water runoff containing toxic products, and other environmental discharges or releases from burned materials affecting soils, habitat areas, wildlife, and aquatic resources. Historic and cultural resources can be affected and are often more vulnerable due to their older age, construction type, and lack of fire prevention infrastructure such as sprinklers.

### *Economic Assets and Community Activities of Value*

Wildfires in the City can cause direct damage to economic assets such as businesses and commercial centers located in affected areas. During extreme events, the economy may slow while recovery efforts are prioritized. Business revenue may be reduced during extended events. Community activities and events in areas affected by wildfire (and smoke and air quality issues) may be cancelled or rescheduled. As shown on the maps, the areas of moderate FHSZ in the City are in areas that have minimal development. There are few economic assets or community activities of value in these areas.

## Impacts from Wildfire

Potential impacts from wildfire include loss of life and injuries; damage to structures (commercial, industrial, and residential) and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Wildfires can cause short-term and long-term disruption to the City. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the City by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the City; smoke and air pollution from wildfires can be a severe health hazard. Smoke impacts may come from wildfires outside the City, as well as from within.

Although the physical damages and casualties arising from wildland-urban interface fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. Recently, the threat of wildfire, combined with the potential for high winds, heat, and low humidity, has caused PG&E to initiate a PSPS which can also significantly impact a community through loss of services, business closures, and other impacts associated with loss of power for an extended period. In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

The impacts of a fire are felt long after the fire is extinguished. In addition to the loss of property in fires, the loss in vegetation and changes in surface soils alters the environment. When supporting vegetation is burned, hillsides become destabilized and prone to erosion. The burnt surface soils are harder and absorb less water. When winter rains come, this leads to increased runoff, erosion, and landslides in hilly areas.

Impacts that are not quantified, but can be anticipated in large future events, include:

- Injury and loss of life;
- Commercial and residential structural and property damage;
- Disruption of and damage to public infrastructure, utilities, and services;
- Damage to roads/bridges resulting in loss of mobility;
- Significant economic impact (jobs, sales, tax revenue) to the community; and
- Negative impact on commercial and residential property values

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Changes in population patterns and land use, and the extent to which they affect this hazard, are discussed in the Future Conditions/Future Development discussion below.

### Future Conditions/Future Development

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Colusa include the following:

- Climate change is likely to exacerbate future wildfire conditions and associated impacts and vulnerability of the City to wildfire.
- Population growth in the City of Colusa has recently slowed. Additional population growth would likely bring continued diversity to the City. Vulnerable population groups could face disproportionate effects from wildfire and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. Locating new development, structures and critical facilities and infrastructure within or near areas of wildfire risk may put additional development at risk. However, City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future wildfire conditions. It should be noted that most of the growth in the City is occurring in areas outside the moderate or higher fire hazard severity zones. Thus, depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Additional growth and development within moderate or higher fire hazard severity zones in the City would place additional values at risk to wildfire. More vulnerable populations may experience a disproportionate impact from wildfire, and this should be considered as development continues. However, City building codes are in effect and should continue to be updated as appropriate to reduce this risk.

Future development areas and their vulnerability to wildfire are discussed further in the below GIS analysis.

### *GIS Analysis*

The City provided 7 future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Figure A-29 show the locations of the future development areas overlayed on the CAL FIRE FHSZs. Table A-49 shows each future development area in the City in these zones.

*Figure A-29 City of Colusa – Future Development in FHSZs*

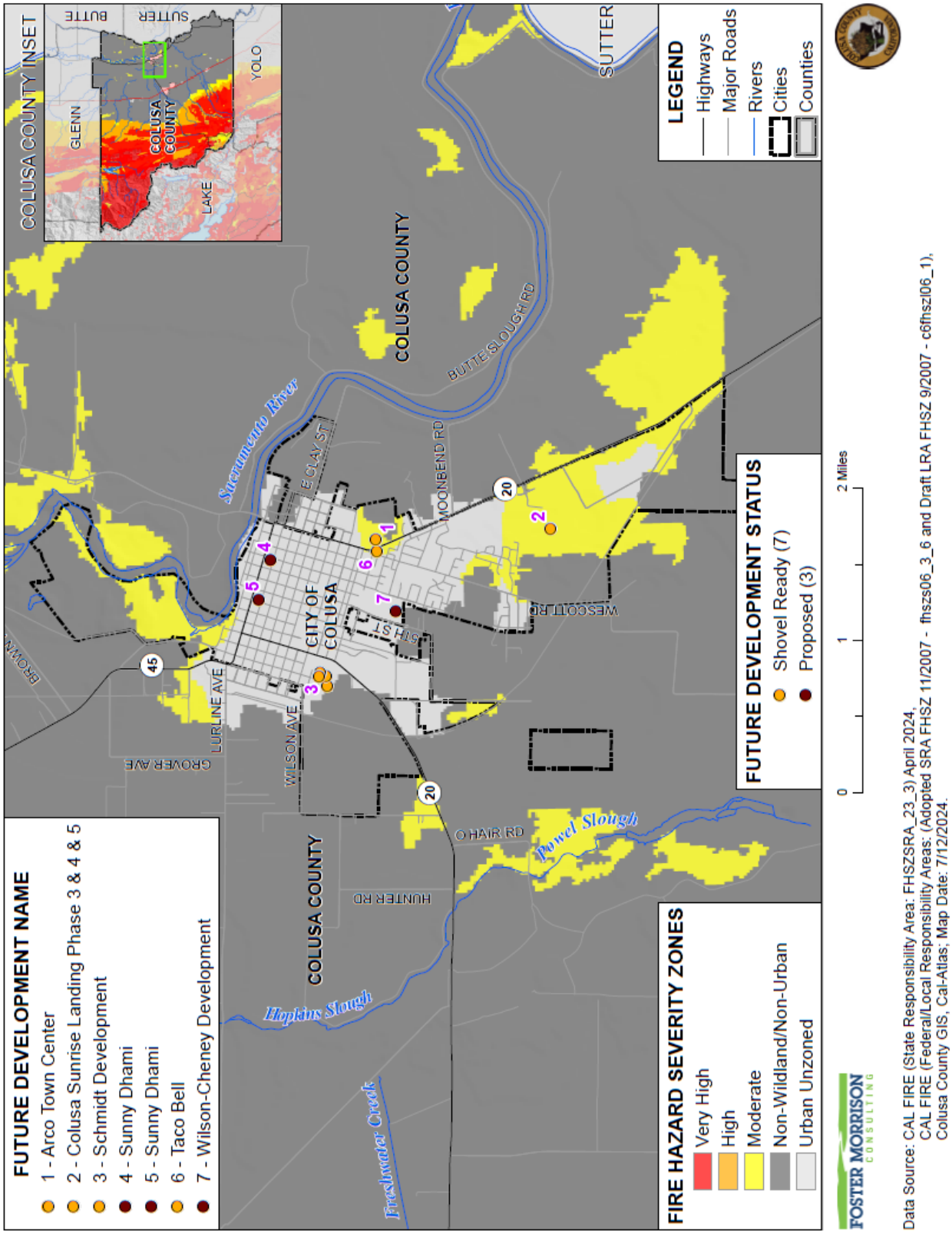


*Table A-49 City of Colusa – Future Development in FHSZs*

| Fire Hazard Severity Zone | Future Development Status | Future Development Site Number | Future Development Name | Total Parcel Count | Total Acres |
|---|---|---|---|---|---|
| Moderate | Shovel Ready | 1 | Arco Town Center | 1 | 4.58 |
| | | 2 | Colusa Sunrise Landing Phase 3 & 4 & 5 | 1 | 19 |
| | | 6 | Taco Bell | 1 | 1.26 |
| | | **Shovel Ready Total** | | **3** | **24.84** |
| | **Moderate Total** | | | **3** | **24.84** |
| Urban Unzoned | Proposed | 4 | Sunny Dhami | 1 | 1 |
| | | 5 | Sunny Dhami | 1 | 0.25 |
| | | 7 | Wilson-Cheney Development (temporary name) | 1 | 9.36 |
| | | **Proposed Total** | | **3** | **10.61** |
| | Shovel Ready | 3 | Schmidt Development | 4 | 8.4 |
| | | **Shovel Ready Total** | | **4** | **8.4** |
| | **Urban Unzoned Total** | | | **7** | **19.01** |
| | | | | | |
| **Grand Total** | | | | **10** | **43.85** |

Source: FEMA 3/27/2024 DFIRM, City of Colusa

## A.5 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation education, outreach, and partnerships, and other mitigation efforts.

### A.5.1. Regulatory Mitigation Capabilities

Table A-50 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Colusa.

*Table A-50 City of Colusa's Regulatory Mitigation Capabilities*

| Plans | In Place Y/N | Does the plan address hazards? Can the plan be used to carry out mitigation actions? When was it last updated?? |
|---|---|---|
| Capital Improvements Plan | N | |

| | | |
|---|---|---|
| Climate Change Adaptation Plan | | |
| Community Wildfire Protection Plan | N | |
| Comprehensive/Master Plan | Y | The General Plan addresses various hazards but does not identify any mitigation projects. The General Plan does not implement mitigation. 2007 |
| Continuity of Operations Plan | | |
| Economic Development Plan | N | |
| Land Use Plan | | |
| Local Emergency Operations Plan | | |
| Stormwater Management Plan | | |
| Transportation Plan | Y | |
| Other | | |
| **Land Use Planning and Ordinances** | **Y/N** | **Is the ordinance an effective way to reduce hazard impacts?<br>Is the ordinance adequately administered and enforced?** |
| Acquisition of land for open space and public recreation use | | |
| Building code | Y | |
| Flood insurance rate maps | Y | Yes and n/a |
| Floodplain ordinance | Y | Yes and Yes |
| Natural hazard-specific ordinance (stormwater, steep slope, wildfire) | N | |
| Subdivision ordinance | Y | Yes and Yes |
| Zoning ordinance | Y | Yes and Yes |
| Other | | |
| **How can these capabilities be expanded and improved to reduce risk?** | | |
| Increase capacity through enhanced education and training. Along with this, seeking after funding opportunities like grants, building our social media presence, and making the community more aware of the training, education, and emergencies.<br>The 2028 General Plan that is currently being produced will feature future mitigation. | | |

Source: City of Colusa

## *The City of Colusa General Plan Program, 2007*

The City of Colusa General Plan Program serves as the blueprint for future growth and development and provides comprehensive planning for the future. It encompasses what the City is now, and what it intends to be, and provides the overall framework of how to achieve this future condition (see the discussion in Section 4.3.1 Growth and Development Trends).

The General Plan includes a Safety Element that focuses on safety issues to be considered in planning for the present and future development of the Colusa Planning Area. Identified hazards include wildfire,

geologic/seismic, flooding, and other natural and man-made hazards (such as hazardous materials). Mitigation-related actions and objective summaries are as follows:

- Flooding – 3 policies and 9 actions
- Seismic and Geologic Hazards – 2 policies and 4 actions

## *City of Colusa Drainage Master Plan (2009)*

In order to reduce flooding in the City from localized flooding, a drainage master plan was put in place in 2009. The City continues to work through the actions put together in this plan to mitigate localized flooding.

## *Mitigation Related Ordinances*

### Building Regulations (Chapter 6)

or the purpose of decreasing the hazard from fire and for the protection of property therefrom the entire city is hereby declared to be, and is hereby established as, a fire district, and such fire district is divided into zones designated fire zones one, two and three.

- Fire Zone One. Fire zone one shall include all areas in the city designated C-2 central business district and C-3 general commercial district as such districts are defined and specified in the zoning regulations of the city.
- Fire Zone Two. Fire zone two shall include all areas in the city designated R-3 neighborhood apartment district, R-4 general apartment district, C-1 neighborhood business district, C-2-F central business district (special highway frontage district), C-3-F general commercial district (special highway frontage district), and M-1 light industrial district, as such districts are defined and specified in the zoning regulations of the city.
- Fire Zone Three. Fire zone three shall include all areas in the city designated as R-1 single-family residence district and R-2 two-family residence district, as such districts are defined and specified in the zoning regulations of the city.

Buildings or structures hereafter erected, constructed, moved within or into any of such fire zones shall be subject to the provisions and restrictions set forth in Chapter 16 of Part IV of the Uniform Building Code, as adopted by this chapter/

This Chapter adopts the following codes:

- 2013 California Building Standards Code, Title 24 - Part 1 - Administrative Code, Part 2.5 Residential Code, Part 6 - Energy Code, Part 8, Historical Code, Part 10 Existing Building Code, Part 11 - Green Building Standards Code, and Part 12 - Referenced Standards Code, as adopted by the California Building Standards Commission.
- The 2013 California Building Code
- The 2013 California Mechanical Code
- The 2013 California Electrical Code
- The California Plumbing Code, 2013

## Civil Emergencies (Chapter 7)

The declared purposes of this chapter are to provide for the preparation and carrying out of plans for the protection of persons and property within this city in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of this city with all other public agencies, corporations, organizations and affected private persons.

It shall be the duty of the city disaster council, and it is hereby empowered to develop and recommend for adoption by the city council, emergency and mutual aid plans and agreements and such ordinances and resolutions and rules and regulations as are necessary to implement such plans and agreements. The disaster council shall meet upon call of the chairman or, in his absence from the city or inability to call such meeting, upon call of the vice-chairman.

All officers and employees of this city, together with those volunteer forces enrolled to aid them during an emergency, and all groups, organizations and persons who may by agreement or operation of law, including persons impressed into service under the provisions of subsection (a)(6)c of section 7-6, be charged with duties incident to the protection of life and property in this city during such emergency, shall constitute the emergency organization of the city.

The city disaster council shall be responsible for the development of the city emergency plan, which plan shall provide for the effective mobilization of all of the resources of this city, both public and private, to meet any condition constituting a local emergency, state of emergency or state of war emergency; and shall provide for the organization, powers and duties, services and staff of the emergency organization. Such plan shall take effect upon adoption by resolution of the city council.

## Fire Protection (Chapter 9)

The 2013 California Fire Code, including all state-adopted appendices, including its Appendix Chapters 1—4 and Appendices B—H, is hereby adopted as the Fire Code of the City of Colusa, in regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said fire code on file in the office of the city clerk are hereby referred to, adopted, and made a part hereof, as if fully set out in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in this chapter.

A fire department for the city is hereby established. The fire department shall be under the charge of a chief, who shall have had previous training and experience as a fireman. The other members of the fire department shall consist of paid firemen or such companies of volunteer firemen as the city council may determine.

## Zoning (Appendix A)

here is hereby adopted a Zoning Ordinance for the City of Colusa, as provided by Section 65000 et seq. of the Government Code of the State of California. This ordinance constitutes a precise plan for the use of land in conformity with the adopted City of Colusa General Plan.

This ordinance shall be known and cited as the "Zoning Ordinance of the City of Colusa." In any administrative action taken by any public official under the authority set forth in the ordinance the use of the term "zoning ordinance," unless further modified shall also refer to and mean this ordinance.

The plan is adopted to provide reasonable protective regulations designed to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare, and:

- To protect the established character and the social and economic stability of agricultural, residential, commercial, industrial and other types of improved areas, and:
- To assist in providing a definite comprehensive plan for sound and orderly development, and to guide and regulate such development in accordance with the General Plan and the objectives and standards set forth therein.

The Zoning Plan consists of the establishment of various districts within same, all of which shall it be lawful, and within same, all or none of which it shall be unlawful to erect, construct, alter, move, locate or maintain certain buildings or to carry on certain trades or occupations or to conduct certain uses of land or buildings; within which the heights and bulk of future buildings, shall be limited; within which certain open spaces shall be required about future buildings and consisting further of appropriate additional regulations to be enforced in such districts, all as set forth in this ordinance.

The Zoning Plan is intended to apply to all private, public, quasi-public, institutional, and public utility properties and all other lands, buildings and structures within the incorporated area of the City of Colusa.

### Floodplain Management (Appendix A - Article 39)

The flood hazard areas of the City of Colusa are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss. It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- Protect human life and health.
- Minimize expenditure of public money for costly flood control projects.
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- Minimize prolonged business interruptions.
- Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in areas of special flood hazard.
- Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage.
- Ensure that potential buyers are notified that property is in an area of special flood hazard.
- Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

In order to accomplish its purposes, this ordinance includes methods and provisions to:

- Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities.
- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
- Control filling, grading, dredging, and other development which may increase flood damage.
- Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

A new development in Colusa, Sunrise Landing, has Five Phases. Phase 1 and Phase 2 have been completed, and Phase 3 is shovel ready. FEMA created the new Flood Plain Map before Phase 1 was started and did not consider the rise in elevation during construction and mapped this entire development as BFE. This area should be reconsidered by FEMA as not being below the Flood Plain Elevation.

## A.5.2. Administrative/Technical Mitigation Capabilities

Table A-51 identifies the City department(s) responsible for activities related to mitigation and loss prevention in the City of Colusa.

***Table A-51 City of Colusa's Administrative and Technical Mitigation Capabilities***

| Administration | In Place Y/N | Describe capability Is coordination effective? |
|---|---|---|
| **Staff** | | **Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?** |
| Chief Building Official | Y | |
| Civil Engineer, including dam and levee safety | Y | |
| Community Planner | **Y** | |
| Emergency Manager | Y | |
| Floodplain Administrator | Y | |
| GIS Coordinator | N | We do not currently have a GIS plan in place, but will be exploring this in the near future |
| Planning Commission | Y | Planning Commission capability / defined roles are limited to land use planning, development, and flood plain variances. Mitigation review is on limited projects only. |
| Other | | |
| **Technical** | **Y/N** | **Has capability been used to assess/mitigate risk in the past?** |
| Grant writing | | |
| Hazard data and information | Y | |
| GIS analysis | | |

| | | |
|---|---|---|
| Mutual aid agreements | Y | The City has the capability to assist and received assistance for mutual aid with the County and the State. |
| Other | | |
| **How can these capabilities be expanded and improved to reduce risk?** | | |
| Increase capacity through enhanced education and training. Along with this, seeking after funding opportunities like grants, building our social media presence, and making the community more aware of the training, education, and emergencies. | | |

Source: City of Colusa

## A.5.3. Fiscal Mitigation Capabilities

Table A-52 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

*Table A-52 City of Colusa's Fiscal Mitigation Capabilities*

| Funding Resource | In Place Y/N | Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions? |
|---|---|---|
| Capital improvements project funding | Y | Yes – Infrastructure Upgrades. Yes |
| Community Development Block Grant | Y | No – Applications made not funded |
| Federal funding programs (non-FEMA) | Y | Unknown |
| Fees for water, sewer, gas, or electric services | Y | No |
| Impact fees for new development | Y | Yes – Combine with street projects |
| State funding programs | Y | Yes – Partnership with other agencies |
| Stormwater utility fee | Y | No |
| Other | | |
| **How can these capabilities be expanded and improved to reduce risk?** | | |
| Increase capacity through enhanced education and training. Along with this, seeking after funding opportunities like grants, building our social media presence, and making the community more aware of the training, education, and emergencies. | | |

Source: City of Colusa

## A.5.4. Mitigation Education, Outreach, and Partnerships

Table A-53 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information.

*Table A-53 City of Colusa's Mitigation Education, Outreach, and Partnerships*

| Program/Organization | In Place Y/N | How widespread are each of these in your community? |
|---|---|---|
| Community newsletters | | |

| Program/Organization | In Place Y/N | How widespread are each of these in your community? |
|---|---|---|
| Hazard awareness campaigns (such as Firewise, Storm Ready, Severe Weather Awareness Week, school programs, public events) | Y | Fire prevention, risk management and worker safety training and CPR training is offered regularly by/through the City Fire Dept. |
| Local news | | |
| Organizations that interact with underserved and vulnerable communities | | |
| Social media | | |
| **How can these capabilities be expanded and improved to reduce risk?** | | |
| Increase capacity through enhanced education and training. Along with this, seeking after funding opportunities like grants, building our social media presence, and making the community more aware of the training, education, and emergencies. | | |

Source: City of Colusa

### A.5.5. Other Mitigation Efforts

The City has many other completed or ongoing mitigation projects/efforts that include the following:

- City road and drainage maintenance has seen improvements, and the City now has additional staff employed to better prepare for the severe weather.
- Annual Fire department training on flood related emergencies and is working with Colusa County fire agencies when providing pre-Positions for high water or severe weather. The pre-position task force is staffed with fire department personnel that are trained in swift water rescue and flood water emergencies.
- Street project currently bid and beginning construction to install underground storm drain in Harris Street and 6th Street. The City noted that there have been visible improvements from these repairs.
- Bridge Street partnership project, where the City has partnered with Cal Trans for the installation of two 48" storm drain pipes to travers Bridge Street between Main and Wescott Road.

## A.6 Mitigation Strategy

### A.6.1. Mitigation Goals and Objectives

The City of Colusa adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

### A.6.2. NFIP Mitigation Strategy

The City of Colusa joined the National Flood Insurance Program (NFIP) as an emergency entrant on February 9, 1973. The City followed up with a regular entry on June 30, 1976. As a participant of the NFIP, the City of Colusa has administered floodplain management regulations that meet the minimum requirements of the NFIP. The management program objective is to protect people and property within the City. The City of Colusa will continue to comply with the requirements of the NFIP in the future.

The City's regulatory activities apply to existing and new development areas of the City; implementing flood protection measures for existing structures and new development and maintaining drainage systems. The goal of the program is to enhance public safety and reduce impacts and losses while protecting the environment. The City's Municipal Code has a Flood Damage Prevention Section under the Zoning Ordinance that regulates construction in the floodplain. The City intends to continue to implement the ordinance and participate at the regional level with Colusa County implementing appropriate measures to mitigate exposure and damages within designated flood prone areas.

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS which are to reduce flood losses, facilitate accurate insurance rating, and promote the awareness of flood insurance. The City of Colusa is not a current participant in the CRS program.

More information about the floodplain administration in the City of Colusa can be found in Table A-54.

### *Table A-54 City of Colusa Compliance with NFIP*

| NFIP Topic | Comments |
|---|---|
| **Staff Resources** | |
| Who is responsible for floodplain management in your community? Provide Department/Title. Do they serve any roles other than Community Floodplain Administrator (FPA)? | The City manager or his or her designee shall serve as City's floodplain administrator and shall administer, implement, and enforce this ordinance by granting or denying development permits in accord with its provisions. The City manager does server other roles. |
| Is the Community FPA or NFIP Coordinator a Certified Floodplain Manager? | No |
| Is floodplain management an auxiliary function? | Yes |
| Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability) | This is discussed in the cell titled "Provide an explanation of the permitting process" below. |
| What are the barriers to running an effective NFIP program in the community, if any? | Recent additions of multiple properties to the NFIP floodplain may cause staffing issues. |
| **Insurance Summary** | |
| How many NFIP policies are in the community? What is the total premium and coverage? | 75 policies<br>$42,482 in annual premiums<br>$26,650,000 of insurance in force |
| How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage? | 13 paid losses<br>$101,045.82 in paid claims.<br>$0 substantial damage claims |
| How many structures (residential and non-residential) are exposed to flood risk within the community? | 355 in 1% annual chance flood zone<br>15 in 0.2% annual chance flood zone |
| Are there Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL) structures in the community? | 2 RL (FEMA PIVOT database shows these have been mitigated)<br>0 SRL |

| NFIP Topic | Comments |
|---|---|
| Describe any areas of flood risk with limited NFIP policy coverage | County was recently remapped by FEMA resulting in a base BFE approx. 2.5ft higher than the previous Flood Plain Mapping, resulting in expanded SFHA's being created throughout the city and county. |
| How does the community teach property owners or other stakeholders about the importance flood insurance? | Completes education and outreach by sending letters |
| What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does the community use? | DFIRMs are used. |
| **Compliance History** | |
| Is the community in good standing with the NFIP? | Yes |
| Are there any outstanding compliance issues (i.e., current violations)? | No |

| NFIP Topic | Comments |
|---|---|
| Who is responsible (Department, Title) for making substantial damage/improvement determinations? How does the community identify substantially damaged/improved structures? What is the process to make sure these structures are brought into compliance? | For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the floodplain administrator, in coordination with the building official, shall:<br>Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made.<br>Compare the cost to perform the improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, when applicable, to the market value of the building or structure.<br>Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage.<br>Notify the applicant when it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the building code is required and notify the applicant when it is determined that work does not constitute substantial improvement or repair of substantial damage.<br>Map determinations. Make interpretations where needed, as to the location of the boundaries of the areas of special flood hazard. Where there appears to be a conflict between a mapped boundary and actual field condition, grade and base flood elevations shall be used to determine the boundaries of the special flood hazard area. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in section 39.06.<br>Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the flood insurance rate maps when the analyses indicate changes in base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within six months of such data becoming available. The analyses shall be prepared by a qualified registered professional engineer in a format required by FEMA. |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | CAV – 5/1/2015 |
| Is a CAV or CAC scheduled or needed? | N |

| NFIP Topic | Comments |
|---|---|
| **Regulation** | |
| When did the community enter the NFIP? | 6/30/1976 |
| Are the FIRMs digital or paper? | Digital |
| Has the community adopted the NFIP minimum floodplain management criteria via local regulation? Date of current local regulation? | Meets, we just adopted a new Flood Plain Ordinance in Feb 2024 |
| Has the community adopted the latest effective FIRM? Date adopted? | Yes. |
| How does the community enforce local floodplain regulations and monitor compliance? | This is discussed in the cell titled "Provide an explanation of the permitting process" below. |
| Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways? | The City's regulations meet the minimum requirements of the NFIP and the CRS. |
| How are Letters of Map Change (LOMCs) tracked and compiled? | New DFIRMs are downloaded regularly which include the latest LOMCs, LOMRs, and CLOMRs. |
| Provide an explanation of the permitting process. | When building permits are being pulled, if it is eligible, the property is flagged as being in the flood plain. |
| **Community Rating System** | |
| Does the community participate in CRS? If so, what is the community's CRS Class Ranking? | No |
| What categories and activities provide CRS points and how can the class be improved? | N/A |
| Does the plan include CRS planning requirements? | N/A |

Source: City of Colusa

## A.6.3. Mitigation Actions

The Planning Team for the City of Colusa identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

- Dam Failure
- Drought & Water shortage
- Earthquake
- Floods: 1%/0.2% annual chance
- Floods: Localized Stormwater
- Levee Failure
- Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning)

Low priority hazards for mitigation planning include:

- Ag Hazards: Severe Weather/Invasive Species (Pests and Weeds)
- Climate Change

- Landslide, Mudslide, and Debris Flow
- Severe Weather: Extreme Cold and Freeze
- Severe Weather: Extreme Heat
- Severe Weather: High Winds and Tornados
- Stream Bank Erosion
- Subsidence
- Wildfire

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each priority hazard for the five year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement and would like to preserve their hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement.

## *Mitigation Actions*

### *Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan*

**Hazards Addressed**: Multi-hazard (Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Levee Failure, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning))

**Goals Addressed**: 1, 2, 3, 4, 5, 6

**Issue/Background**: Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (AB 2140). Specifically, this section requires that each jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

**Other Alternatives**: No action

**Existing Planning Mechanisms through which Action will be Implemented**: Safety Element of General Plan

**Responsible Office**: City of Colusa Planning Department

**Priority (H, M, L)**: High

**Potential Funding**: Local budgets

**Benefits (avoided Losses)**: Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

**Schedule**: As soon as possible

### *Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness*

**Hazards Addressed**: Multi-hazard (Dam Failure, Drought & Water shortage, Earthquake, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Levee Failure, Severe Weather: Heavy Rain and Storms (Wind, Hail, Lightning))

**Goals Addressed**: 1, 2, 3, 4, 5, 6

**Issue/Background**: The City and County play a key role in public outreach/education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural disaster event.

**Project Description**: A comprehensive multi-hazard outreach program will ascertain both broad and targeted educational needs throughout the community. The City will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to the community. This includes measures the public can take to be better prepared and to reduce the damages and other impacts from a hazard event. The public outreach effort will leverage and build upon existing mechanisms, and will consider:

- Using a variety of information outlets, including websites, local radio stations, news media, schools, and local, public sponsored events;
- Creating and distributing (where applicable) brochures, leaflets, water bill inserts, websites, and public service announcements;
- Displaying public outreach information in County office buildings, libraries, and other public places and events;
- Developing public-private partnerships and incentives to support public education activities.

**Other Alternatives**: Continue public information activities currently in place.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Existing County outreach programs will be reviewed for effectiveness and leveraged and expanded upon to reach the broader region.

**Responsible Office**: City of Colusa in partnership with the County

**Participating Jurisdictions**: County and all cities.

**Priority (H, M, L)**: High

**Benefits (Losses Avoided)**: Increase residents' knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damages, relatively low cost to implement.

**Potential Funding**: Local budgets, grant funds (like CA DWR, Cal OESPDM, HMGP, FMA, BRIC, or other sources).

**Timeline:** Ongoing/Annual public awareness campaign

### *Action 3. Evacuation Training for the Community of Colusa*

**Hazards Addressed**: Dam Failure

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: The pump stations are critical for preventing interior flooding of the District. If the pump stations were to lose power, interior flooding may occur. Generators have been installed, but if they were unable to keep up, or access to them was prohibited, a greater evacuation plan should be in place for the community.

**Project Description**: Colusa is situated on the southern bank of a bend in the Sacramento River, which drains the northern half of the Central Valley. No other major bodies of water are located within the Planning Area. The river levee that protects the City from catastrophic flooding falls under the jurisdiction of Reclamation District No. 108 and is maintained by the Sacramento West Levee District. The main channel for the Colusa Drain is an excavated earthen channel. The channel has levees on both sides for the most part, and levee height varies to a maximum of approximately six feet. Additional levees along tributary drains connect to the Colusa Drain. The information presented above shall be used for emergency planning and is based on worst case scenarios. The time factors indicated appear to allow for safe evacuation out of the Colusa area both to the south and west. Also, it should be noted that the probability of dam failure at any given time is low. The Division of Safety of Dams, a division of the California Department of Water Resources, inspects dams under state jurisdiction on a periodic basis for structural integrity. Responsibility for the safety of dams under federal jurisdiction belongs to the agency constructing the dam. Federal agency programs to maintain dam safety are based on the Federal Guidelines for Dam Safety prepared by FEMA

**Other Alternatives**: The City will continue to train City public safety employees in the Safety Assessment Program offered by the Governor's Office of Emergency Services.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Safety Element of General Plan

**Responsible Office/Partners**: City of Colusa Planning Department, City of Colusa Fire Department

**Benefits (Losses Avoided)**: In the event of generator failure, an evacuation plan is in place

**Potential Funding**: Local budgets/Grants (like CA DWR, Cal OESPDM, HMGP, FMA, BRIC, or other sources).

**Timeline**: Ongoing

**Project Priority (H, M, L)**: High

### *Action 4. Fire and sanitation water is needed in case of emergency in the City of Colusa during a drought.*

**Hazards Addressed**: Drought & Water Shortage & Fire Risk

**Goals Addressed**: 1, 3, 4

**Issue/Background**: Fires can be significant hazards in developed areas. Even well-constructed buildings may suffer damage from fires started accidentally or intentionally. In addition, structures located adjacent to fields and wildlands may be vulnerable to fires started on such lands. In addition to property damage, fires pose a threat to human life. The City of Colusa, surrounded by agricultural fields, is in an area of low potential for wildfires. Cultivated and irrigated fields have a low incidence of fire, unless these fields are burned as part of agricultural operations. Such burning would pose a threat only to City structures adjacent to these fields. However, in recent years the State of California has sought to discourage burning of agricultural fields, particularly rice fields that are widespread in Colusa County. The City of Colusa Fire Chief has expressed concern that this could lead to a greater potential for vegetation fires, as fields are not maintained. This could become more of a concern as the City annexes agricultural fields that may not be developed immediately. Fires originating in these fields could threaten adjacent existing buildings. The riparian area adjacent to the Sacramento River is a potential source of wildland fires, started by either natural or human causes. This hazard would be greatest during the summer and early autumn. Lack of rain lowers river levels, and low humidity and high temperatures cause some vegetation to lose moisture. Given its proximity to the Sacramento River, the riparian area is unlikely to go completely dry, except during times of severe drought. Most of the riparian area is separated from the City by the levee in the downtown area. However, it is possible that fires in the riparian area would jump over the levee and threaten adjacent buildings. In summary, the potential fire hazard to Colusa from adjacent open space and agricultural areas is not considered significant. Fires started in buildings and other structures in the City are considered a more significant threat.

**Project Description**: Water storage tanks sizable to fit the needs of the Fire Department for fires and sanitation. Currently there are tanks on the Cortina Rancheria, and new larger storage is still needed. CIP has a 2 wells that we currently have an emergency inter-tie agreement that we would use.

**Other Alternatives**: The Cortina Rancheria seeks to enlarge this tank and desires to build a 50,000 water tank up the hill from the existing tank.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Safety Element Plan, Fire Prevention Programs and Fire Plans.

**Responsible Office/Partners**: City of Colusa Fire Department and County

**Benefits (Losses Avoided)**: Provide for fire protection and increase water supply for residents in case of emergency.

**Potential Funding**: Local budgets/Grants(like CA DWR, Cal OESPDM, HMGP, FMA, BRIC, or other sources)/WUI Funds

**Timeline**: When funding is available

**Project Priority (H, M, L)**: High

### *Action 5. URM Mapping and Identification*

**Hazards Addressed**: Earthquake

**Goals Addressed**: 1, 3, 4

**Issue/Background**: The City will consider a plan to identify older masonry structures that could be significantly impacted due to an earthquake including an inventory of un-reinforced masonry buildings and an assessment of their damage potential, a program to retrofit un-reinforced masonry buildings or to take other actions to reduce the potential risk, and funding sources for the adopted program

**Project Description**: This project would map URM buildings in the City.

**Other Alternatives**: No action

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Safety Element of General Plan

**Responsible Office/Partners**: City of Colusa Planning Department

**Benefits (Losses Avoided)**: Reduced risk to people and property from building collapse during earthquake.

**Potential Funding**: Local budgets/Grants (like CA DWR, Cal OESPDM, HMGP, FMA, BRIC, or other sources).

**Timeline**: On Going

**Project Priority (H, M, L)**: High

### *Action 6. Project improvements to Decrease Flooding*

**Hazards Addressed**: Flood: 1%/0.2% annual chance; Levee Failure; Flood: Localized/Stormwater

**Goals Addressed**: 1, 3, 4, 5

**Issue/Background**: The City of Colusa is vulnerable to flooding from both the east and the west; to the east the existing levees experience seepage during high water events. To the west, the Colusa Basin Drain is partially leveed using levees with insufficient freeboard and inadequate levee geometry profiles.

**Project Description**: The City shall continue to regulate all uses and development in areas subject to potential flooding through land use planning, zoning and other appropriate actions.

The City will review and revise its Zoning and Subdivision Ordinances as needed to incorporate specific data and design requirements related to flooding hazards that are contained in this General Plan update and other future flood hazard studies.

The City will pursue mechanisms to finance flood prevention and storm maintenance programs, including local, state, and federal sources. If necessary, the City will consider alternative funding sources, including development impact fees and the establishment of a drainage utility and assessment district

**Other Alternatives**: No action.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: The Public Works Department will take the lead with support from OES, other county departments, California Department of Water Resources (CA DWR), Sacramento River West Side Levee District (SRWSLD), and the City of Colusa

**Responsible Office/Partners**: City Public Works, City Planning

**Benefits (Losses Avoided)**: Life safety from flooding and improved drainage

**Potential Funding**: Local budgets/Grants (like CA DWR, Cal OESPDM, HMGP, FMA, BRIC, or other sources).

**Timeline**: Ongoing

**Project Priority (H, M, L)**: High

### *Action 7. Levee Mitigation*

**Hazards Addressed**: Levee Failure

**Goals Addressed**: 1, 3, 4, 5

**Issue/Background**: The City of Colusa is vulnerable to flooding from both the east and the west; to the east the existing levees experience seepage during high water events. To the west, the Colusa Basin Drain is partially leveed using levees with insufficient freeboard and inadequate levee geometry profiles.

**Project Description**: Mitigate against seepage on the Sacramento River Right Bank Levees near the City of Colusa through the installation of seepage prevention measures (e.g. Bentonite Slurry Cut-off Wall) along a reach approximately 22,000 feet in length. Construct new levees to the north and south totaling 12,000 feet in length. Rehabilitate existing levees to the west totaling 19,000 feet in length and construct a new levee to the west totaling 18,000 feet in length.

**Other Alternatives**: No action

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: The Public Works Department will take the lead with support from OES, other county departments, California Department of Water Resources (CA DWR), Sacramento River West Side Levee District (SRWSLD), and the City of Colusa

**Responsible Office/Partners**: County Department of Public Works, County OES, CA DWR, SRWSLD, City of Colusa

**Benefits (Losses Avoided)**: Life safety from levee failure; levee damage; improved drainage

**Potential Funding**: Federal grant funds: FEMA HMGP, CIP funding, Mitigation Grant Funding

**Timeline**: 2028

**Project Priority (H, M, L)**: High

### *Action 8. Colusa Basin Drain*

**Hazards Addressed**: Severe Weather: Heavy Rains and Storms

**Goals Addressed**: 1, 3, 4, 5

**Issue/Background**: The Colusa Basin Drain levees are prone to instability issues due to the clay levee construction during severe weather.

**Project Description**: Stability repairs would be designed and constructed. Typical fixes include stability berms, slope flattening or levee realignment.

**Other Alternatives**: No action

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: None

**Responsible Office/Partners**: City of Colusa Planning Department, City of Colusa Fire Department

**Benefits (Losses Avoided)**: Reduced risk of levee failure. Life safety and property protection.

**Potential Funding**: DWR grant, PDM, HMGP

**Timeline**: As soon as possible/ Work in progress

**Project Priority (H, M, L)**: High

# Chapter 7 Plan Implementation and Maintenance

**44 CFR §201.6(c)(4): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.**

Implementation and maintenance of this 2024 Colusa County LHMP Update is critical to the success of hazard mitigation in the Colusa County Planning Area. Plan implementation and maintenance is Planning Step 10 of the 10-step planning process. Accordingly, this chapter provides an overview of the overall strategy for Plan implementation and maintenance and outlines the method and schedule for monitoring, updating, and evaluating the Plan. The chapter also discusses incorporating the Plan into existing planning mechanisms and how to address continued public involvement in local hazard mitigation planning.

Chapter 3, Planning Process, includes information on the implementation and maintenance process since the adoption of the 2018 LHMP Update. This chapter includes information on the implementation and maintenance process for the development of this Plan, the 2024 Colusa County LHMP Update.

## 7.1 Implementation

Once adopted, this 2024 Colusa County LHMP Update faces the truest test of its worth: implementation. While the Plan contains many worthwhile actions, the County and all participating jurisdictions will need to decide which action(s) to undertake first. Two factors should be considered when making that decision: the priority assigned to the mitigation actions in the Plan and funding availability. Low or no-cost actions most easily demonstrate progress toward successful Plan implementation.

An important implementation mechanism that is highly effective and low-cost is incorporation of the hazard mitigation plan recommendations and their underlying principles into other plans and mechanisms such as local general plans, stormwater plans, Emergency Operations Plans (EOPs), evacuation plans, and other hazard and emergency management planning efforts by the participating jurisdictions. These jurisdictions already implement policies and programs to reduce losses to life and property from hazards. This 2024 LHMP Update builds upon the momentum developed through prior, related planning and mitigation programs and recommends implementing actions, where possible, through other programs.

Mitigation is most successful when it is incorporated into the day-to-day functions and priorities of government and development. Implementation can be accomplished by adhering to the schedules identified for each action through sustained collaborative efforts, highlighting the mutual benefits of proposed mitigation actions, and the Colusa County jurisdictions, its stakeholders, and the public. This is achieved through the routine actions of monitoring agendas, attending meetings, and promoting mitigation initiatives to enhance the safety and sustainability of the community. Additional mitigation strategies may include consistent and ongoing enforcement of existing policies and the vigilant review of programs for coordination and multi-objective opportunities to enhance mitigation.

Simultaneously, it is important to continuously monitor potential funding opportunities to finance mitigation actions. This may include identifying funding sources to meet local matching funds requirements under FEMA pre- and post-disaster mitigation grant programs, and other sources. When funding does become available, the participating jurisdictions will be better positioned to capitalize on the opportunity.

### *Responsibility for Implementation of Goals and Activities*

The elected officials, executive leadership teams, responsible staff and departments, and emergency management offices of the participating jurisdictions are charged with implementation of various activities in the 2024 LHMP Update. During annual reviews as described later in this section, each participating jurisdiction should conduct an assessment of progress toward meeting the goals and activities of the LHMP Update. At that time, recommendations may be made to modify timeframes for the completion of identified mitigation actions, identify funding sources, and work with responsible entities to implement the actions. On an annual basis, the priority of various mitigation actions may be adjusted. Some activities that are found not to be feasible may be removed from the Plan entirely, while other mitigation actions unforeseen during the Plan development process may be added.

## 7.1.1. Role of the LHMP Update Planning Committee in Implementation and Maintenance

With adoption of this Plan, each participating jurisdiction will be responsible for LHMP implementation and maintenance. The HMPC identified in Chapter 3 (or a similar committee) will reconvene annually to ensure mitigation strategies are being implemented and the County and Cities continue to maintain compliance with the NFIP. The Colusa County, Office of Emergency Services (County OES), will continue in its role as project lead for LHMP implementation and maintenance. As such, County OES, as LHMP project lead, and all participating jurisdictions will continue their relationship, and will plan to convene the same or similar HMPC when preparing the subsequent LHMP Update. The County OES project lead, with support from participating jurisdictions and the LHMP Update HMPC will:

- Act as a forum for hazard mitigation issues;
- Disseminate hazard mitigation ideas and activities to all participants;
- Pursue the implementation of high-priority, low/no-cost recommended actions;
- Ensure hazard mitigation remains a consideration for community decision makers;
- Maintain a vigilant monitoring of multi-objective cost-share opportunities to help the community implement the Plan's recommended actions for which no current funding exists;
- Monitor and assist in the implementation and update of this Plan;
- Report on Plan progress and recommended changes to the governing boards for all participating jurisdictions; and
- Inform and solicit input from the public.

The primary duty of the County and all participating jurisdictions and the HMPC is to see the LHMP Update successfully carried out and to report to their governing boards and the public on the status of LHMP implementation and mitigation opportunities. Other duties include reviewing and promoting mitigation

proposals, considering stakeholder concerns about hazard mitigation, passing concerns on to appropriate entities, and posting relevant information about the LHMP on the websites of participating jurisdictions.

## 7.2 Maintenance

Plan maintenance implies an ongoing effort to monitor and evaluate LHMP implementation and to update the Plan as progress, roadblocks, or changing circumstances are encountered.

### 7.2.1. Maintenance Schedule

Colusa County OES, as project lead, in conjunction with the LHMP leads for all participating jurisdictions, is responsible for initiating Plan reviews. In order to monitor progress and update the mitigation strategies identified in the mitigation action plan, County OES, LHMP leads from other participating jurisdictions, and the HMPC will revisit this Plan annually each year and following a hazard event to review and document progress on Plan implementation. Colusa County OES will also submit a five-year written update to the State and FEMA Region IX, unless disaster or other circumstances (e.g., changing regulations) require a change to this schedule. With this 2024 LHMP Update anticipated to be fully approved and adopted in late-2024, the next required written update of the Plan must be completed by late 2029. Colusa County OES will initiate the Plan update – which may include applying for grant funding to hire professional services to assist in preparing the 2029 LHMP Update. The 2029 LHMP Update development process should be initiated in 2026 to ensure the 2029 LHMP Update can be funded and completed by this 2024 Colusa County LHMP's expiration date.

### 7.2.2. Maintenance Evaluation Process

Evaluation of progress can be achieved by monitoring changes in vulnerabilities identified in the Plan. Changes in vulnerability can be identified by noting:

- Decreased vulnerability as a result of implementing recommended actions;
- Increased vulnerability as a result of failed or ineffective mitigation actions;
- Increased vulnerability as a result of new development (and/or annexation); and/or
- Increased vulnerability resulting from unforeseen or new circumstances.

Updates to this Plan will:

- Consider changes in vulnerability due to action implementation;
- Document success stories where mitigation efforts have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Incorporate new data or studies on hazards and risks;
- Incorporate new capabilities or changes in capabilities;
- Incorporate growth and development-related changes to infrastructure inventories; and
- Incorporate new action recommendations or changes in action prioritization.

Changes will be made to this Plan to accommodate for actions that have failed or are not considered feasible after a review of their consistency with established criteria, time frame, community priorities, and/or

funding resources. All mitigation actions will be reviewed during the monitoring and update of this Plan to determine feasibility of future implementation. Updating of this LHMP will be by written changes and submissions, as the participating jurisdictions and HMPC deem appropriate and necessary, and as approved by the governing boards of each participating jurisdiction. In keeping with the five-year update process, the HMPC will convene public meetings to solicit public input on this LHMP Update and its routine maintenance, and the final product will be again adopted by the governing boards of each participating jurisdiction.

## *Annual Plan Review Process*

For the LHMP Update review process, the County OES lead and the LHMP leads for each of the participating jurisdictions, will be responsible for facilitating, coordinating, and scheduling reviews and maintenance of the LHMP. ***The LHMP is intended to be a living document.*** The review of the 2024 LHMP Update will normally occur on an annual basis each year and will be conducted by the HMPC as follows:

- County OES will place an advertisement in the local newspaper and will utilize other public outreach mechanisms, such as e-newsletters, social media blasts, and others, advising the public of the date, time, and place for each annual review of the LHMP Update and will be responsible for leading the meeting to review the Plan.
- Notices will be mailed to the members of the HMPC, federal, state, and local agencies, non-profit groups, local planning agencies, representatives of business interests, neighboring communities, and others advising them of the date, time, and place for the review.
- County/City/District/Tribal officials will be noticed by email and telephone or personal visit and urged to participate.
- Members of any participating jurisdiction's planning commissions and other appointed commissions and groups will also be noticed by email and either by telephone or personal visit.
- Prior to the review, department heads and others tasked with implementation of the various activities will be queried concerning progress on each activity in their area of responsibility and asked to present a report at the review meeting.
- The local news media will be contacted, and a copy of the current LHMP will be available for public comment at Colusa County OES as project lead.
- After the review meeting, minutes of the meeting and an annual report will be prepared by the participating jurisdictions and the HMPC and forwarded to the news media (public).
- A copy of the 2024 LHMP Update will be continually posted on the LHMP website for the participating jurisdictions.

## *Criteria for Annual Reviews*

The criteria recommended in 44 CFR 201 and 206 will be utilized in reviewing and updating the 2024 LHMP Update. More specifically, the reviews should include the following information:

- Community growth or change in the past year.
- The number of substantially damaged or substantially improved structures by flood zone.
- The renovations to public infrastructure including water, sewer, drainage, roads, bridges, gas lines, and buildings.

- Natural hazard occurrences that required activation of the Emergency Operations Center(s) (EOC) and whether or not the event resulted in a federal disaster declaration.
- Natural hazard occurrences that were not of a magnitude to warrant activation of the EOC or a federal disaster declaration but were severe enough to cause damage in the community or closure of businesses, schools, or public services.
- The dates of hazard events and descriptions.
- Documented damages due to the events.
- Closures of places of employment or schools and the number of days closed.
- Road or bridge closures due to the hazard and the length of time closed.
- Assessment of the number of private and public buildings damaged and whether the damage was minor, substantial, major, or if buildings were destroyed. The assessment will include residences, mobile homes, commercial structures, industrial structures, and public buildings, such as schools and public safety buildings.
- Review of the status of implementation of projects (mitigation strategies) including projects completed will be noted. Projects behind schedule will include a reason for delay of implementation.
- Review of any changes in federal, state, and local policies to determine the impact of these policies on the community and how and if the policy changes can or should be incorporated into the next LHMP Update.

### 7.2.3. Incorporation into Existing Planning Mechanisms

Another important implementation mechanism that is highly effective and low-cost is incorporation of the 2024 LHMP Update recommendations and their underlying principles into other jurisdictional plans and mechanisms. Where possible, Plan participants will use existing plans and/or programs to implement hazard mitigation actions. As previously stated in Section 7.1 of this Plan, mitigation is most successful when it is incorporated into the day-to-day functions and priorities of government and development. The point is re-emphasized here. As described in this LHMP's capability assessment, the participating jurisdiction's already implement policies and programs to reduce losses to life and property from hazards. This Plan builds upon the momentum developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through these other program mechanisms. These existing mechanisms include:

- General and master plans
- Emergency Operations Plans and other emergency management efforts
- Jurisdictional ordinances
- Flood/stormwater management/master plans
- Climate Plans
- Capital Improvement Plans and budgets
- Tribal Plans (for Kletsel Dehe Wintun Nation)
- 5-year plans (for levee districts)
- Other plans and policies outlined in the capability assessment
- Other plans, regulations, and practices with a mitigation focus

Participating jurisdictions and HMPC members involved in these other planning and program mechanisms will be responsible for integrating the findings and recommendations of this LHMP with these other plans,

programs, etc., as appropriate. As described in Section 7.1 Implementation, incorporation into existing planning mechanisms will be done through the routine actions of:

- monitoring other planning/program agendas;
- attending other planning/program meetings;
- participating in other planning processes; and
- monitoring community budget meetings for other community program opportunities.

The successful implementation of this mitigation strategy will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community.

Examples of incorporation of the 2024 LHMP Update into existing planning mechanisms include:

1. As recommended by Assembly Bill 2140, the County and Cities should adopt (by reference or incorporation) this LHMP into the Safety Element of their General Plans. Evidence of such adoption (by formal, certified resolution and text within the body of the Safety Element) shall be provided to CAL OES and FEMA.
2. Integration of flood actions identified in this mitigation strategy with implementation priorities in existing Watershed, Flood, and Stormwater Drainage Plans. Key people responsible for development and implementation of Flood Plans and Stormwater Master and Drainage Plans participated on the HMPC. Key projects were identified and integrated specifically into this LHMP, while others currently of lessor priority should be referenced in their source document. Actual implementation of these projects will likely occur through the flood and stormwater plans' processes through the efforts of each responsible jurisdiction and department.
3. Integration of wildfire actions identified in this mitigation strategy with the actions and implementation priorities established in existing and new Community Wildfire Protection Plans and other fire plans.
4. Integration of many of the infrastructure, roads, and facility improvement projects with the jurisdictional Capital Improvement Programs.
5. Use of risk assessment information to inform future updates of the hazard analysis in the Emergency Operations Plans and related emergency management efforts for all participating jurisdictions.

Each jurisdiction will consider incorporation of the LHMP into planning mechanisms listed on Table 7-1.

### *Table 7-1 LHMP Incorporation into other Planning Mechanisms*

| Jurisdiction | Safety Element / Master Plans/ Strategic Plans/ 5-Year Plans | EOP / Emergency Plans | CWPP / Fire Plans | CIP | Flood / Stormwater / Watershed Plans | Other Plans |
|---|---|---|---|---|---|---|
| Colusa County | X | X | X | X | X | SGMA Action Plan<br>Streambank Erosion Plan<br>Public Outreach |

| Jurisdiction | Safety Element / Master Plans/ Strategic Plans/ 5-Year Plans | EOP / Emergency Plans | CWPP / Fire Plans | CIP | Flood / Stormwater / Watershed Plans | Other Plans |
|---|---|---|---|---|---|---|
| City of Colusa | X | X | X | X | X | Public Outreach |
| City of Williams | X | X | X | X | X | Public Outreach |
| Colusa County RCD | X | X | X | X | X | SGMA Action Plan<br>Streambank Erosion Plan |
| Cortina Community Services District | X | | | | | X |
| Kletsel Dehe Wintun Nation | X | X | X | X | | Environmental Regulatory Plans and Programs<br>Drought Plan<br>Public Outreach |
| RD 108 | X | X | | | X | X |
| RD 479 | X | | | | X | X |
| Sacramento River Westside Levee District | X | X | | | X | X |

In addition, the mitigation actions included within each jurisdictions' mitigation strategy contain a category identifying "Existing Planning Mechanism(s) through which Action will be Implemented" that contains how each mitigation action is related to other planning mechanisms and jurisdictional programs. Those can be found in Chapter 5 of the Base Plan for the County and within each jurisdictions' annex to this Base Plan.

Efforts should continuously be made to monitor the progress of mitigation actions implemented through these other planning mechanisms and, where appropriate, their priority actions should be incorporated into updates of this LHMP.

### 7.2.4. Continued Public Involvement

Continued public involvement is a crucial element of successful Plan implementation. The update process provides an opportunity to solicit participation from new and existing stakeholders and to publicize success stories from the 2024 LHMP implementation and seek additional public comment. The Plan maintenance and update process will include continued public and stakeholder involvement and input through attendance at designated committee meetings, web postings, press releases to local media, and through public hearings.

#### *Public Involvement Process for Annual Reviews*

The public will be noticed by placing an advertisement in the newspaper and will utilize other public outreach mechanisms, such as e-newsletters, social media blasts, and others specifying the date and time

for the review and inviting public participation. The HMPC, local, state, and regional agencies will be notified and invited to attend and participate.

## *Public Involvement for Five-year Update*

When the participating jurisdictions and HMPC reconvenes for the next LHMP Update, they will coordinate with all stakeholders participating in the planning process—including those that joined the committee since the planning process began—to update and revise the Plan. In reconvening, the HMPC will identify a public outreach subcommittee, which will be responsible for coordinating the activities necessary to involve the greater public. The subcommittee will develop a plan for public involvement and will be responsible for disseminating information through a variety of media channels detailing the LHMP update process. As part of this effort, public meetings will be held, and public comments will be solicited on the LHMP Update draft. In addition, continued public involvement and outreach efforts will place an emphasis on identifying and inviting representatives from underserved and vulnerable populations to be part of the next, 2029 Colusa County LHMP Update. As a starting point the underserved and vulnerable population groups identified for this 2024 LHMP Update will be contacted to invite them to the 2029 LHMP Update process with additional groups identified and added to meet the ongoing goal of mitigation planning for the whole community.

# City of Colusa California

## STAFF REPORT

**DATE:** Jume 15, 2025

**TO:** Mayor and Members of the City Council

**FROM:** Joshua Fitch, Police Chief, via Jesse Cain, City Manager

**AGENDA ITEM:** Consideration of a professional services agreement with Endemic Architecture

**Recommendation:** That the City Council authorize the City Manager to enter into a professional services agreement with Endemic Architecture, based in Alameda, California, for preliminary design and planning services for a new police department facility, in an amount not to exceed $50,000.

**BACKGROUND ANALYSIS:**

The City of Colusa Police Department currently operates out of a facility that no longer meets the operational needs of the department. The building is undersized, outdated, and insufficient for the City's current and future law enforcement functions. The need for a modern, appropriately sized police facility has been recognized for many years.

In an effort to begin addressing this need, the City previously issued a Request for Qualifications (RFQ) seeking comprehensive proposals for design and construction of a new police department facility. Unfortunately, all proposals received in response to the RFQ significantly exceeded the City's financial capacity. As a result, staff rejected all RFQ responses.

To maintain momentum and begin planning efforts in a phased and budget-conscious manner, the City issued a Request for Proposals (RFP) limited to preliminary design and planning services, not to exceed $50,000. This scaled approach focuses on concept development, site planning, and accurate cost estimating to support future funding efforts.

The Colusa Indian Community Council generously donated $50,000 to the Colusa Police Department to fund this planning effort. With this donation, the City can now move forward without using General Fund resources for this initial phase.

Following evaluation of proposals received in response to the RFP, staff recommends contracting with **Endemic Architecture**, a qualified design and planning firm based in Alameda, California. Endemic Architecture demonstrated the necessary experience and understanding of the City's needs and budget constraints.

The City intends to enter into a professional services agreement with Endemic Architecture in an amount not to exceed $50,000 to carry out the initial planning and design services.

This effort will produce the foundational materials needed for the City to pursue grants and loan opportunities to fund the full design and construction of a new police department facility.

This project is a long overdue investment in public safety and community infrastructure. The generosity of the Colusa Indian Community Council and the partnership with Endemic Architecture allow the City to take the first step toward realizing a new police department facility that will serve the needs of the community and our officers for years to come. Staff will continue pursuing funding opportunities to complete the design and construction of the new facility.

**BUDGET IMPACT:**

There is no impact to the City's General Fund. The $50,000 contract with Endemic Architecture will be fully funded through a donation from the Colusa Indian Community Council.

**STAFF RECOMMENDATION:** Adopt resolution 25-

**ATTACHMENT:**

- Endemic Proposal

# RESOLUTION NO. 25-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLUSA AUTHORIZING THE CITY MANAGER TO ENTER INTO A PROFESSIONAL SERVICES AGREEMENT WITH ENDEMIC ARCHITECTURE FOR PRELIMINARY DESIGN AND PLANNING SERVICES FOR A NEW POLICE DEPARTMENT FACILITY, IN AN AMOUNT NOT TO EXCEED $50,000

**WHEREAS**, the City of Colusa Police Department currently operates out of a facility that is outdated, undersized, and no longer meets the operational needs of the department or the growing needs of the City; and

**WHEREAS**, the City of Colusa previously issued a Request for Qualifications (RFQ) for full design and construction services for a new police department facility, but all proposals received exceeded the City's budget constraints and were rejected; and

**WHEREAS**, the City subsequently issued a more targeted Request for Proposals (RFP) for preliminary design and planning services, not to exceed $50,000, to develop conceptual designs, site plans, and cost estimates necessary to support future funding applications; and

**WHEREAS**, the Colusa Indian Community Council has generously donated $50,000 to the City of Colusa Police Department to fund this critical first phase of the project; and

**WHEREAS**, Endemic Architecture, based in Alameda, California, submitted a qualified response to the RFP and was selected to perform the preliminary planning and design work; and

**WHEREAS**, entering into a contract with Endemic Architecture will allow the City to begin meaningful progress toward the eventual construction of a modern police department facility.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Colusa as follows:

1. The City Council hereby finds the above recitals to be true and correct and incorporates them herein by this reference.
2. The City Council authorizes the City Manager to enter into a professional services agreement with Endemic Architecture for preliminary police department planning and design services, in an amount not to exceed $50,000.
3. The City Council acknowledges and expresses its appreciation for the $50,000 donation from the Colusa Indian Community Council, which will fully fund this phase of the project.
4. The City Council directs staff to continue pursuing grant and loan opportunities to fund the full design and construction of a new police department facility.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Colusa held on June 17, 2025, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
RYAN CODORNIZ, MAYOR

**ATTEST:**

_____
SHELLY KITTLE, CITY CLERK

# CITY OF COLUSA PRELIMINARY DESIGN AND CONCEPT ART BID SHEET

| Bidder Information | |
|---|---|
| Name | Endemic Architecture |
| Address | 2424 Blanding Ave. Suite 205, Alameda, CA. 94501 |
| Phone | 303-548-7806 |
| Main Contact | Clark Thenhaus |
| Main Contact Email | Clark@endemicarchitecture.com |

**Total Bid Amount (not to exceede $50,000)** **$45,000.00**

*Bidders must complete all required fields in this document. Additional details may be provided in the designated areas, but they are not required. Only the specified sections highlighted in the form are mandatory for submission.*

| Bid Item No. | Description of Bid Item | Unit of Measure | Estimated Qty | Unit Price | Extended Total Amount |
|---|---|---|---|---|---|
| 2.1* | Prelim: Project Kick off & Research | Hours | 16 | $ 250.00 | $ 4,000.00 |
| | Existing Facility Tours & Research | | 6 | $ 250.00 | $ 1,500.00 |
| | Preliminary Research, Interviews & Meetings with City & Stakeholders | | 12 | $ 250.00 | $ 3,000.00 |
| 2.2* | Conceptual Design | Hours | 116 | $ 250.00 | $ 29,000.00 |
| | Upto 3 design options w/ stakeholder input and revisions *(Schematic Site Plan, Code Analysis, Floor Plans w/ furniture & equipment, and Elevations).*<br><br>*This phase includes additional research in the form of applied research within the conceptual design work.* | | 116 | $ 250.00 | $ 29,000.00 |
| | **In our experience developing 3 related by distinct options yields much better results and increases opportunities for stakeholder input as compared to 1 option.* | | - | $ - | $ - |
| 2.3* | Concept Art & Visual Renderings | Hours | 48 | $ 250.00 | $ 12,000.00 |
| | 4 Exterior Renderings | | 24 | $ 250.00 | $ 6,000.00 |
| | 4 Interior Renderings | | 24 | $ 250.00 | $ 6,000.00 |
| | **If needed we can also write project description for marketing / fundraising purposes* | | 0 | $ - | $ - |
| | | | 0 | $ - | $ - |
| | | | 0 | $ - | $ - |

* required field

| Total Bid | $ 45,000.00 |
|---|---|

# City of Colusa California

## STAFF REPORT

**DATE:** June 17, 2025

**TO:** Mayor and Members of the City Council

**FROM:** Ishrat Aziz-Khan, through Jesse Cain, City Manager

**AGENDA ITEM:**

Consideration of Resolution approving the Use Agreement Between City of Colusa and County Office of Education for Storage of Records.

**Recommendation:**

Council to adopt the Resolution to sign an agreement between the City of Colusa and Colusa County Office of Education to use the Room 15 and Room 16 at the City Hall.

**BACKGROUND ANALYSIS:**

The City of Colusa and the County Office of Education entered into an agreement in October 2014. The rent amount and the term of condition remained the same from 2014 until now. The contract was renewed several times in the past. It is time to renew the contract again.

**BUDGET IMPACT:**

The County Office of Education pays $825.00 per quarter, totaling $3,300 annually. The rent remained the same with no budget impact

.

**STAFF RECOMMENDATION:**

The staff recommends approving the resolution for the Use Agreement between the City of Colusa and the Colusa County Office of Education

.

**ATTACHMENTS:**

Use Agreement, Standard Agreement, and Resolution

# RESOLUTION NO. 25 –

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLUSA
TO RENEW THE EXISTING USE AGREEMENT WITH THE COLUSA COUNTY OFFICE OF EDUCATION

**WHEREAS**, the City of Colusa and Colusa County Office of Education has had a use agreement since 2014 and renewed it several times since then

**WHEREAS**, both parties agree to renew the contract on existing terms and conditions for two more years, with the option to extend one more year after that date

**Therefore,** the staff recommends extending the contract with the Colusa County Office of Education.

**PASSED AND ADOPTED** as a Resolution of the City Council of the City of Colusa, at its regular meeting duly held on the 17th day of June 2025, by the following vote.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
RYAN CODORNIZ, MAYOR

ATTEST:

_____
SHELLY KITTLE, CITY CLERK

**USE AGREEMENT BETWEEN CITY OF COLUSA AND COUNTY OFFICE OF EDUCATION FOR STORAGE OF RECORDS**

This Use Agreement is entered into this 17th day of June 2025 by and between the CITY OF COLUSA, a municipal corporation and the COUNTY OF COLUSA OFFICE OF EDUCATION, a political subdivision of the State of California in Colusa County for the use of a portion of space at the building located at 425 Webster Street, owned by City and commonly known as City Hall.

**RECITALS**

**WHEREAS,** the City is the owner of certain real property located at 425 Webster Street, Colusa, California 95932, commonly known as City Hall; and

**WHEREAS,** the City has storage space available on the second floor of City Hall; and

**WHEREAS,** allowing the County to use storage space at City Hall on the terms and Conditions set out herein will be beneficial to the City and County.

In consideration of the foregoing, the parties mutually agree as follows:

**1. Recitals.**

**2. Premises**. City hereby agrees that the County may use on an exclusive basis storage space in Rooms 15 and 16, located on the second floor of the building known as City Hall, 425 Webster Street, Colusa, California 95932.

**3. Use of the Premises**. County shall use the Premises for record storage purposes only, unless prior written consent from City is obtained.

**4. Term.** This Agreement shall be for a term of two (2) years, beginning on the 17th day of June, 2025 and ending on the 30th day of June 2027, unless terminated earlier pursuant to the provisions of this Agreement. The Agreement shall automatically renew for one (1) year periods on the same terms and conditions set forth herein.

**5. Condition of Premises.** County acknowledges that it has fully inspected the Premises and accepts the same in its existing condition, and agrees that no demands for alterations, repairs or additions are to be made upon City.

If it shall become necessary to close City Hall, or prevent access to the Premises, due to an unforeseen event outside of City's control including, but not limited to, earthquake, flood,

explosion or other act of God, City shall not be liable to County or any third party for damages due to loss of business, loss of revenue, loss of property or any additional costs.

**6. Use Fee.** County shall pay City a use fee, for the possession and use of the Premises, a total annual payment of Three Thousand Three Hundred Dollars ($3,300)Use Fee. Such payment shall be made on a quarterly basis, payable in advance on the first day of each calendar quarter, in the sum of Eight Hundred Twenty-Five Dollars ($825) per quartet. County will incur a twenty-five dollar ($25.00) late charge in the event that the Use Fee, or any portion of the Use Fee, is not received by City within fifteen (15) days after the due date. County shall pay an insufficient funds charge, consistent with the charge currently imposed by City for insufficient checks, for each check that is returned for lack of sufficient funds.

**7. Access to Premises**. County shall have access to the Premises during standard City Hall working hours, unless otherwise agreed to in writing in advance. Currently, standard working hours are Monday thru Thursday 7:30 a.m. to 5:00 p.m., holidays excluded.

**8. Security of Premises.** The Premises are currently equipped with a standard lock, and City will provide County a key to the Premises. City will also retain a key to the Premises, to be used if necessary for inspections or if County needs access to the Premises. City reserves the right to enter into the Premises at any reasonable time for the purpose of inspecting the Premises. County shall not interfere with this right in any way including, but not limited to, installing new door locks or utilizing padlocks or any other type of security measure without providing City with any keys and/or security codes required to access the Premises.

**9. Improvements.** County shall obtain City's written consent prior to making any alterations or improvements to the Premises. City shall have the right to remove any of County's alterations and improvements prior to the expiration of the Agreement. County shall repair any damage caused by attaching any items to, or removing them from, the Premises.

**10. Utilities and Services.** City shall pay for all utilities and at City's expense.

**11. Maintenance.** County shall maintain the Premises, and keep the Premises free of trash and debris. County shall return the Premises to City in broom clean condition, and in same or better shape than when County began using the Premises.

**12. Insurance.** City agrees to obtain and maintain during the Term of this Agreement, fire and extended coverage insurance, or its equivalent, for City Hall. Such insurance shall not be

cancelled without providing advance notice to the County of such cancellation, and it shall be the responsibility of the City to notify County of such change or cancellation.

County agrees to obtain and maintain during the Term of this Agreement public liability and property insurance protecting County and County's property in an amount not less than One Million Dollars ($1,000,000.00). Such insurance, or its equivalent, shall name the City as an additional insured and the policy shall be so endorsed. Such insurance shall not be cancelled without providing advance notice to the City of such cancellation, and it shall be the responsibility of the County to notify City of such change or cancellation. County shall provide City with a copy of all insurance policies that are required by this Agreement.

**13. Assignment and Subletting.** County shall not assign or sublet the Premises or any part of the Premises.

**14. Destruction and/or Damage to Premises**. In the event the Premises shall be totally or partially destroyed or damaged through fire or any other cause not the fault of the County, County will owe no Use Fee for any period during which the County is substantially deprived of the use of the Premises.

**15. Limitation on City's Liability; Waiver of Claims.** City shall not be responsible for or liable to County, and County hereby assumes the risk of, and waives and releases City from any and all claims arising out of or related to the storage of records at the Premises, including but not limited to damage or destruction of the records. Nothing in this Section shall relieve City from liability caused solely and directly by the gross negligence or willful misconduct of City, but City shall not be liable under any circumstances for any consequential, incidental or punitive damages.

This Section 15 shall constitute a separate agreement between County and City and shall survive any termination of this Agreement.

**16. Indemnification.** County agrees to indemnify, defend and hold harmless City, its officials, officers, employees, agents and consultants from any and all claims that arise out of the storage of the records at the Premises, except for those arising from the sole or gross negligence of the City.

This Section 16 shall constitute a separate agreement between County and City and shall survive any termination of this Agreement.

**17. Termination of Agreement**. Either Party may terminate this Agreement, with or

without cause, upon ninety (90) days written notice to the other Party. County shall not be responsible for payment of Use Fee for the remainder of the Term when this Agreement.

**18. Default.** City shall provide County written notice of any default under this Agreement. Upon receipt of the notice of default, County shall have ten (10) days to cure such default. If County does not cure the default; City may institute legal action to recover possession of the Premises.

**19. Taxes**. This Agreement may create a possessory interest which is subject to property taxation. The Party in whom the possessory interest is vested may be subject to the payment of any property tax levied on such interest. See Revenue and Taxation Code Section 107.6.

20. Compliance with Law. County shall comply with all applicable laws, ordinances, and codes of federal, state and local governments when conducting any activities at the Premises pursuant to this Agreement.

**21. Miscellaneous.**

**A. Governing Law and Forum.** This Agreement shall be construed in accordance with the laws and judicial decisions of the State of California and venue for any legal or equitable action shall be in the County of Colusa.

**B. Notices.** All notices required by this Agreement shall be in writing and shall be deemed to have been given if delivered personally or enclosed in a properly addressed envelope and deposited in the United States Mail for delivery by registered or certified mail addressed to the parties at the following addresses:

| CITY: | COUNTY: |
|---|---|
| City of Colusa | Colusa County of Board of Education |
| Jesse Cain, City Manager | _____ |
| 425 Webster Street | _____ |
| Colusa, CA 95932 | _____ |

**C. Severability**. If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall not be affected thereby and the Agreement shall be read and construed without the invalid, void or unenforceable provision or provisions.

**D. Interpretation of Agreement.** The headings within this Agreement are solely for reference purposes and shall not limit or otherwise affect any of the terms of this Agreement. The parties have had an equal opportunity to participate in the drafting of this Agreement; therefore, the normal construction as against the drafting party shall not apply to this Agreement.

**E. Relationship of Parties.** The parties do not intent that this Agreement constitute, and this Agreement shall not be interpreted under any circumstances as, a partnership, joint venture or other business association. This Agreement does not, and is not intended to create any rights for parties who are not signatories hereto.

**F. Amendments.** This Agreement may only be amended by mutual written consent of both Parties, signed by both Parties to this Agreement.

**22. Entire Agreement.** This Agreement contains the entire agreement between the Parties with respect to the matters contained herein and supersedes all prior or contemporaneous understandings, whether written or oral, with respect thereto.

**WHEREFORE**, the parties have executed this Agreement as of the Effective Date set forth above.

| | |
|---|---|
| CITY OF COLUSA | COLUSA COUNTY BOARD OF EDUCATION |
| BY:_____ | By:_____ |
| Ryan Codorniz, ( Mayor) | _____ |
| Attest: | Attest: |
| By:_____ | By:_____ |
| Shelly Kittle, City Clerk | _____ |
| Approved: | Approved: |
| By:_____ | _____ |
| Ryan Jones, City Attorney | |

# City of Colusa California

## STAFF REPORT

**DATE:** June 17th, 2025

**TO:** Mayor and Members of the City Council

**FROM:** Ishrat Aziz-Khan, through Jesse Cain, City Manager

**AGENDA ITEM:**

Consideration of a Resolution approving the proposed budget and GANN Limit, as City Manager and City Staff recommended.

**Recommendation:** Council to adopt the Resolution approving the proposed Fiscal Year 2025-26 budget and approve the appropriation Limit for the fiscal year 2025-26.

**BACKGROUND ANALYSIS:**

The GANN limit is calculated based on the information provided by the Department of Finance, the increase or decrease in population at the local level, and the state level.

The City of Colusa annually prepares a budget for the fiscal operations of all departments. The budget serves as the city's financial plan for the fiscal year beginning July 1, 2025, and ending June 30, 2026. The proposed Budget FY 2025-26 was prepared before the fiscal year 2024-2025 closing, and the annual audit was conducted. The City policy allows sixty days to post the revenue and expenditure from the prior year at the year-end closing. The updated fund balance will be available at Mid-Year updates after closing the year and completing the audit.

The city staff met with the Ad Hoc Committee, Mayor, and Vice Mayor to review and complete the annual budgeting process for FY 2025-26. The budget reflects the city's continuous efforts to maintain fiscal responsibilities and deliver essential services most efficiently to the community.

This report outlines the key elements of the proposed budget and summarizes anticipated revenue and expenditures.

The budgeted beginning balance for the General Fund on June 30, 2025, is $3,348,239.

The General Fund's projected revenue and expenditure for the proposed FY 2025-26 budget are $11,442,176 and $11,718,580, resulting in a $276,404 deficit. To balance the budget, the Mayor and Vice Mayor is proposing the strategic use of funds from the Cannabis Revenue Fund. These funds, accumulated through local cannabis tax revenues, will be allocated in the

amount necessary to offset the projected shortfall. With this allocation, the General Fund budget for FY 25/26 is balanced with no deficit.

The use of $276,404 from the Cannabis Revenue Fund will bring the FY 25/26 General Fund budget to balance. The City retains sufficient reserves within the Cannabis Fund to cover this allocation without compromising its long-term stability.

The projected tax increase in revenue is $58,468, a slight increase in taxes, with a $2,000 decrease in TOT as compared to the Mid-Year budget 2024-25. The franchise fee increased by $12,000, and the businesses' license fee by $1000. The rent income is increased by $17,500, Motor vehicle fee in-lieu of by $ 9,400, and revenue from other agencies is projected to increase by $6,500.

The Leap grant of $65,000, $113,150 EHCRP,$162,016 CalRecycle grant, $4.200,000 Wescott Road/STIP, and $500,000 from LTF and SBI funds towards the asphalt project are also included in the revenue.

The General Funds projected expenditures are $ 11,718,580, which includes the Leap grant of $65,000, the $113,150 EHCRP grant, the $162,016 CalRecycle grant, $4,200,000 Wescott Road grant.

.

The Water Fund's beginning budgeted balance on June 30th, 2025, is $5,662,045 with an increase of $86,203, excluding the grants. The Walnut Ranch water project was budgeted for $3,846,984, and the Water Well Consolidated grant $$6,87,600 is also included in the revenue. The expenditure was increased by $950,954, including the Well 6 drilling expense, as compared to the Mid-Year budget. In Mid-Year, $500,000 was budgeted for Well #6. The Water Well grant of $6,876,000 and the Walnut Ranch project of $3,654,244 are also included in the expenditures.

The Sewer Fund's beginning budgeted balance on June 30th, 2025, is $8,433,333. The projected increase in revenue is $140,453, excluding the grant amounts. The $2,186,194 for the Walnut Ranch Sewer Project and the $4,880,256 for the Wastewater Recycle grant are also included in the revenue. The expenditure has increased by $261,553 compared to the Mid-year budget. The main increase is in indirect personnel costs and operating costs. The expenditure also included the grant expenditures of $2,568,401 for Walnut Ranch and $2,593,44 for the wastewater recycle grant. The three percent rate increase is added to the revenue per Prop 218 study recommendations.

The cannabis fund's beginning budgeted balance on June 30th, 2025, is $1,543,215. The budgeted amount in FY 2024-25 for the asphalt project was used from LTF fund and the Arco Project $800,000 was changed to $434,000 per the new DA agreement with ARCO. The projected ending balance on June 30th, 2026, is $1,296,715.

The ARPA fund has a $217,500 fund balance as of June 30th, 2025, and it will be used for the accounting software, server upgrade, and $25,000 for recreation programs.

The beginning budgeted balance for SELF was $426,058, on June 30th, 2025, with a $24,500 increase in revenue and a $31,000 increase in expenditure compared with the mid-year budget 2024-25

The new fund (220) was created to keep track of Prop 64 related revenue and expenditure. This fund covers the cost of the Code Enforcement Officer. The $80,000 is budgeted for the police officers' expenses related to Prop 64 programs. The fund has a negative balance because the city receives reimbursement for the expenditure after it has incurred.

The Gas tax fund has projected an increase of $21,614 compared to the Mid-Year budget from the adopted budget to the Mid-Year budget. The city plans to pay $250,000 towards the asphalt project in FY 2025-26.

.

LTF fund is a reimbursable account. The County allocates the money from LTF fund and RSTP on an annual basis. The city requests the expenditure report to utilize those funds. There is a plan to pay $250,000 towards the asphalt project for FY 2025-26.

The Park/ Pool & Tree has a budgeted beginning balance of $9,429. There was no significant change in revenue and expenses in this fund compared to the Mid-Year budget.

CDBG home rehab and CDBG Home Buyer budgets don't have any significant changes compared to the Mid-Year budget 2024-25.

The state park budget does not have any changes from the Mid-year budget to the proposed budget for FY 2025-26. The LOSSP grant of $642,950 added to the revenue and $124,596 to the expenditure. The city has paid the bill and is waiting for the reimbursement; therefore, the full amount is budgeted under revenue and has no expenditure.

There is no change in the Boat ramp revenue, but the expenditure increased by 35,000 due to the contract with NV5 approved by the council on January 21st, 2025, in the Mid-Year budget. The budgeted amount of $15,000 for NV5 payment is added to the expenditure.

The impact fee budgeted balances as of June 30th, 2025, is Street $ 556,574, Law Enforcement $ 160,797, Fire $351,125, Drainage Development $120,008, Park &Rec $152,520, City Hall $108,609, and Community Center $58,234. These funds are used and allocated to various projects upon council approval.

Additionally, the FY 2025-26 budget includes financial provisions for the City Manager's exit plan, in line with the succession planning process. These provisions ensure that the transition will be professionally managed, minimizing disruption to city operations and maintaining continuity in leadership.

**BUDGET IMPACT:**

None

**STAFF RECOMMENDATION:**
Adopt Resolution 25-

**ATTACHMENT:**

- Proposed Budget 2025-26

# RESOLUTION NO. 25-

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLUSA
ADOPTING THE PROPOSED BUDGET
FOR FISCAL YEAR 2025-26

**WHEREAS**, the proposed budget for the City of Colusa is entitled "Proposed Budget FY 2025-26"; and

**WHEREAS**, the proposed expenditure shown in the Proposed Budget FY 2025-26 is hereby appropriated to the departments, offices, and operations in the amount and for the objects and purposes as outlined in the budget document; and

**WHEREAS**, it is ordered that one copy of this resolution and the budget document be made available for public review at Colusa City Hall and that the budget document be certified by the City Clerk and filed in the Office of the City Clerk; and

**WHEREAS**, this resolution is required for the orderly operation and maintenance of municipal activities and the usual and current expenses of the City during the 2025-26 Fiscal Year.

**THEREFORE, BE IT RESOLVED AND ORDERED** by the City Council of the City of Colusa, after consideration and review, the Proposed Budget for Fiscal Year 2025-26 is hereby adopted as proposed.

1. Recitals Made Findings. The above recitals are hereby declared to be true and correct, and findings of the City Council of the City of Colusa.
2. Effective Date. This Resolution shall be effective as of June 17th, 2025.

**PASSED AND ADOPTED** as a Resolution of the City Council of the City of Colusa, at its regular meeting duly held on the 17th day of June 2025, by the following vote.

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
RYAN CODORNIZ, MAYOR

ATTEST:

_____
SHELLY KITTLE, CITY CLERK

# City of Colusa
## Budget Summary
## Fiscal Year 2025-2026 Proposed Budget

| Fund - Description | Undesignated Fund Balance 6/30/2024 | FY 2024-25 MiD-Year Budget Fiscal Year 2024-2025 Revenues | FY 2024-25 MiD-Year Budget Fiscal Year 2024-2025 Expenditures | Undesignated Fund Balance 6/30/2025 | FY 2025-26 Proposed Budget Fiscal Year 2025-26 Revenues | FY 2025-26 Proposed Budget Fiscal Year 2025-26 Expenditures | Undesignated Fund Balance 6/30/2026 |
|---|---|---|---|---|---|---|---|
| 101 - General Fund | $ 3,479,128 | $ 7,616,701 | $ 7,747,591 | $ 3,348,239 | $ 11,442,176 | $ 11,718,580 | $ 3,071,835 |
| 410 - Water Enterprise Fund | 6,855,514 | 5,460,451 | 6,094,398 | 6,855,514 | 12,413,787 | 13,182,931 | 6,086,369 |
| 430 / 436 - Sewer Enterprise Fund | 5,922,973 | 7,807,939 | 7,208,397 | 5,922,973 | 10,834,238 | 9,069,963 | 7,687,249 |
| *Special Revenue Funds* | | | | | | | |
| 102 - Cannabis Revenue Fund | 1,593,215 | 386,000 | 973,200 | 1,593,215 | 188,000 | 434,500 | 1,346,715 |
| 211 - Traffic Safety Fund | (2,231) | 3,625 | 4,000 | (2,606) | 3,625 | 4,000 | (2,981) |
| 214 - State Law Enforcement Grant Fund | 366,325 | 172,500 | 285,500 | 426,058 | 197,000 | 316,500 | 306,558 |
| 220 - Prop 64 Public Health & Safety Grant | (41,224) | 133,054 | 133,054 | (41,224) | 155,524 | 155,524 | (41,224) |
| 221 - Strike Team | 131,919 | 341,500 | 271,863 | 201,556 | 263,701 | 272,802 | 192,455 |
| 241 - Gas Tax Fund | 425,256 | 296,386 | 200,000 | 521,642 | 296,386 | 480,330 | 337,698 |
| 246 - Country Transportation Fund (LTF) | 752,725 | 260,000 | 442,000 | 570,725 | 290,000 | 512,000 | 348,725 |
| 253 - Parks/ Tree Improvement District Fund | 3,097 | 541,400 | 538,068 | 6,429 | 538,200 | 533,397 | 11,233 |
| 261 - CDBG Program Income Fund | 270,444 | 11,500 | 117,082 | 164,862 | 19,000 | 9,600 | 174,262 |
| 262 - CDBG HOME Program Income Fund | 172,296 | 14,500 | 14,700 | 172,096 | 18,500 | 15,500 | 175,096 |
| 263- Micro Enterp Devl/ COVI | 48,570 | 182,482 | 170,000 | 61,052 | 20,000 | 100 | 80,952 |
| 271 - Street Dvlpmt Impact Fee Fund | 481,964 | 63,000 | 470,622 | 481,964 | 53,000 | 448,173 | 86,791 |
| 272 - Police Dvlpmt Impact Fee Fund | 242,851 | 45,000 | 175,000 | 112,851 | 30,000 | 180,000 | 92,851 |
| 273 - Fire Dvlpmt Impact Fee Fund | 241,360 | 136,117 | 195,000 | 182,477 | 50,000 | 250,000 | 41,360 |
| 274 - Storm Drain Impact Fee Fund | 100,482 | 7,500 | 100,000 | 100,482 | 9,500 | 105,000 | 4,982 |
| 275 - Park/Rec Dvlpmt Impact Fee Fund | 104,320 | 11,200 | 90,000 | 25,520 | 28,000 | 100,000 | 32,320 |
| 276 - City Hall Dvlpmt Impact Fee Fund | 120,629 | 7,500 | 97,500 | 120,629 | 46,500 | 97,500 | 69,629 |
| 277 - Comm Ctr Dvlpmt Impact Fee Fund | 51,785 | 2,800 | 50,500 | 4,085 | 3,800 | 55,500 | 85 |
| 281 - State Recycling Fund | 14,132 | 5,060 | 4,500 | 14,692 | 5,060 | 4,500 | 14,692 |
| 310 - State Park Fund | (66,542) | 671,550 | 675,930 | (70,922) | 671,450 | 157,576 | 442,952 |
| 311 - Boat Launch Fund | 91,515 | 14,000 | 8,050 | 97,465 | 22,000 | 23,550 | 95,915 |
| 422 - Corp Yard Dvlpmt Impact Fee Fund | 24,760 | 14,150 | 25,000 | 13,910 | 14,150 | 25,000 | 3,060 |
| 610 - Colusa Meadows Assmt Dist Fund | 4,467 | 8,514 | 8,550 | 4,431 | 8,514 | 8,550 | |
| 620 - Hoblit Lighting Assmt Dist Fund | 68 | 6,503 | 5,975 | 596 | 6,503 | 5,975 | |
| 640 - Colusa CFD2 -2020 | 45,562 | 37,500 | 32,000 | 51,062 | 37,500 | 32,000 | 5 |
| 660 - Walnut Ranch Assmt Dist Fund | 19,455 | 24,100 | 10,045 | 19,455 | 24,100 | 10,045 | 33,510 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Capital Projects Funds* | | | | | | | - |
| 101 - American Rescue Plan Act (ARPA) | 1,025,563 | 475,000 | 530,290 | 970,273 | 217,500 | 217,500 | - |
| 310 - LOSSP Grant | - | | | - | 642,950 | 642,950 | - |
| 220- Prop 64 Grant (2of 5 Years) | | | | | 155524 | 155524 | - |
| 253- Clean California Grant (48K MB) | | | | | 381000 | 429000 | |
| 410< 430 (Walnut Ranch Projects) | | | | | 8036455 | 8036455 | |

# City of Colusa
# Fiscal Year 2025-26 Proposed Budget
# General Fund Revenue and Expenditure Detail

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-2025 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **REVENUES** | | | | | |
| Taxes | 4,136,995 | 4,931,602 | 5,032,334 | 4,862,092 | 4,920,560 |
| Franchises | 302,349 | 322,899 | 300,000 | 308,000 | 320,000 |
| Licenses & Permits | 451,090 | 200,296 | 217,000 | 213,500 | 208,700 |
| Fines & Forfietures | 31,577 | 29,868 | 13,500 | 13,500 | 13,500 |
| Interest Income | 49,968 | 100,523 | 45,000 | 75,000 | 75,000 |
| Property Rents & Leases | 50,442 | 60,418 | 57,500 | 57,500 | 75,000 |
| Other Government Agencies | 80,387 | 64,667 | 62,300 | 62,300 | 71,700 |
| Service Charges | 273,235 | 147,939 | 215,100 | 215,100 | 221,600 |
| Other Revenues | 27,165 | 88,685 | 25,550 | 66,600 | 60,950 |
| Other Financing Sources | - | 2,102,986 | 1,236,984 | 1,743,109 | 5,257,666 |
| American Relief American Act (ARPA) | (4,419) | - | - | - | 217,500 |
| **Total Revenues** | 5,398,788 | 8,049,884 | 7,205,268 | 7,616,701 | 11,442,176 |
| **EXPENDITURES** | | | | | |
| City Council | 7,542 | 6,954 | 7,594 | 23,823 | 21,869 |
| City Clerk | 36,548 | 34,432 | 27,122 | 32,791 | 27,486 |
| City Treasurer | $3,075 | $3,074 | $3,128 | $3,128 | $3,074 |
| Fire Department | 893,621 | 994,036 | 1,143,349 | 1,151,384 | 1,198,024 |
| Police Department | 1,562,348 | 1,736,289 | 1,743,354 | 1,802,706 | 1,829,350 |
| Code Enforcement | - | 21,908 | 131,584 | - | - |
| Administrative Services - Administration | 173,471 | 3,350,334 | 137,740 | 140,064 | 219,621 |
| Administrative Services - Finance | 533,330 | 567,069 | 726,878 | 738,449 | 750,629 |
| Administrative Services - Attorney | 32,447 | 31,014 | 40,000 | 40,000 | 40,000 |
| Administrative Services - Recreation | 73,438 | 140,470 | 174,051 | 175,164 | 185,569 |
| Community Development -Economic Devlp. | 143,720 | 83,233 | 102,756 | 102,756 | 204,190 |
| Community Development - Planning | 122,541 | 141,469 | 188,117 | 188,117 | 212,750 |
| Community Development - Building | 122,080 | 99,946 | 110,400 | 110,400 | 105,200 |
| Community Development - Engineering | 62,466 | 32,112 | 67,150 | 67,150 | 40,150 |
| Public Works - City Hall | 55,414 | 48,549 | 22,056 | 22,506 | 22,440 |
| Public Works - Streets | 478,354 | 658,752 | 1,965,114 | 2,167,704 | 6,256,857 |
| Public Works -Perilie Building | - | - | 61,432 | 76,432 | 72,932 |
| Public Works - Parks | 237,899 | 313,027 | 297,424 | 299,617 | 310,939 |
| American Relief Program Act (ARPA) | 18,292 | 587,591 | 605,400 | 605,400 | 217,500 |
| **Total Expenditures** | $ 4,556,586 | $ 8,850,257 | $ 7,554,649 | $ 7,747,591 | $ 11,718,580 |
| Excess / (Deficit) of Revenues over Expenditures | 842,202 | (800,373) | (349,381) | (130,889) | (276,404) |
| Non-Budgetary Gen. Liability / Work. Comp. Adj. | | | | | |
| One-time Transfers (to)/ from Reserves | - | (29,538) | | | |
| Annual Net Excess / (Deficit) | 842,202 | (800,373) | (349,381) | (130,889) | (276,404) |
| Beginning Fund Balance | 3,430,066 | 4,218,789 | 3,388,878 | 3,388,878 | 3,039,497 |
| Ending Fund Balance | 4,218,789 | 3,388,878 | 3,039,497 | 3,257,988 | 2,763,093 |
| Amount Not Obligated at Year End | 4,218,789 | 3,388,878 | 3,039,497 | 3,257,988 | 2,763,093 |

# City of Colusa
## Fiscal Year 2025-26 Proposed Budget
## General Fund Revenue Account Detail

| Description | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| Property Taxes | 1,148,547 | 1,261,671 | 1,248,369 | 1,368,369 | 1,395,183 |
| Property Tax in Lieu of Vehicle License Fee | 721,520 | 795,590 | 820,515 | 832,723 | 849,377 |
| Sales Taxes | 2,217,893 | 2,824,775 | 2,910,450 | 2,610,000 | 2,630,000 |
| ERAF in Lieu of Sales Tax | - | - | - | - | - |
| Transient Occupancy Taxes | 32,093 | 31,339 | 35,000 | 33,000 | 28,000 |
| Documentary Stamps | 16,942 | 18,226 | 18,000 | 18,000 | 18,000 |
| **TOTAL TAXES** | **4,136,995** | **4,931,602** | **5,032,334** | **4,862,092** | **4,920,560** |
| Franchise - Gas & Electric | 98,269 | 102,034 | 105,000 | 108,000 | 105,000 |
| Franchise - Solid Waste | 161,009 | 167,758 | 155,000 | 160,000 | 180,000 |
| Franchise - Cable TV | 43,071 | 53,107 | 40,000 | 40,000 | 35,000 |
| **TOTAL FRANCHISES** | **302,349** | **322,899** | **300,000** | **308,000** | **320,000** |
| Business Licenses | 60,085 | 68,260 | 68,000 | 68,200 | 69,200 |
| **TOTAL LICENSES** | **60,085** | **68,260** | **68,000** | **68,200** | **69,200** |
| Other Permits | 20,825 | 23,300 | 19,000 | 15,300 | 9,500 |
| Building Permits | 301,980 | 107,735 | 130,000 | 130,000 | 130,000 |
| **TOTAL PERMITS** | **322,805** | **131,035** | **149,000** | **145,300** | **139,500** |
| Civil Fines | 30,894 | 29,015 | 12,000 | 12,000 | 12,000 |
| Other Fines | - | - | - | - | |
| Parking Tickets | 683 | 854 | 1,500 | 1,500 | 1,500 |
| **TOTAL FINES & FORFEITURES** | **31,577** | **29,868** | **13,500** | **13,500** | **13,500** |
| Building Rents and Leases | 50,442 | 60,418 | 57,500 | 57,500 | 75,000 |
| Interest Earnings | 49,968 | 100,523 | 45,000 | 75,000 | 75,000 |
| **TOTAL INTEREST & RENTALS** | **100,410** | **160,941** | **102,500** | **132,500** | **150,000** |
| Motor Vehicle In-Lieu | 6,543 | 7,940 | 800 | 800 | 10,200 |
| Public Safety - Proposition 172 | 31,108 | 29,271 | 30,000 | 30,000 | 30,000 |
| State Highway Maintenance Reimbursement | 41,994 | 22,573 | 30,000 | 30,000 | 30,000 |
| State Mandate Reimbursements | - | - | - | - | |
| POST Training Reimbursement | 742 | 4,883 | 1,500 | 1,500 | 1,500 |
| **TOTAL FROM OTHER AGENCIES** | **80,387** | **64,667** | **62,300** | **62,300** | **71,700** |
| Police Department Fees and Charges | 10,260 | 10,663 | 14,000 | 14,000 | 14,000 |
| Police Department DHHS Grant/SARB Grant | 20,589 | - | 10,100 | 10,100 | 10,100 |
| Fire Department Fees and Charges | 1,475 | 3,897 | 3,000 | 3,000 | 6,000 |
| Plan Check Fees | 186,714 | 44,753 | 110,000 | 110,000 | 112,000 |
| Planning & Zoning Fees | 19,951 | 44,313 | 32,000 | 32,000 | 32,000 |
| Recreation Fees and Charges | 33,390 | 44,313 | 45,000 | 45,000 | 47,500 |
| Economic Fees and Charges | 5,275 | - | 1,000 | 1,000 | - |
| ARPA Fund | (4,419) | - | | | 217,500 |
| **TOTAL SERVICE CHARGES** | **273,235** | **147,939** | **215,100** | **215,100** | **221,600** |
| **TOTAL OTHER REVENUES** | **27,165** | **88,685** | **25,550** | **66,600** | **60,950** |
| **TOTAL OTHER FINANCING SOURCES** | **-** | **2,102,986** | **1,236,984** | **1,119,749** | **5,257,666** |
| **TOTAL TRANSFERS IN** | **-** | **-** | **623,360** | **623,360** | |
| **TOTAL GENERAL FUND** | **5,330,588** | **8,048,884** | **7,828,628** | **7,616,701** | **11,442,176** |
| | | | | **1,648,417** | |

*Notes:*
*The Total Revnue also included*
*$217,500 From ARPA Fund*
*$1.24 M for street Project from Measure B $740K, SB1 $250K and LTF funds $250K*
*$65,000 LEAP Grant*
$113k EHCRP
$1.6 Calrecycle Grant
$4.2 M Wstcott Road grant

**Departmental Expenditure Account Detail**

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| ***Elected Officials*** | | | | | |
| **City Council** | | | | | |
| Personal Services | 6,588 | 6,265 | 6,588 | 20,863 | 20,863 |
| Services and Supplies | 954 | 689 | 1,006 | 2,960 | 1,006 |
| Capital Outlay | - | - | - | - | - |
| **Total:** | **7,542** | **6,954** | **7,594** | **23,823** | **21,869** |
| **City Clerk** | | | | | |
| Personal Services | 34,200 | 32,625 | 21,946 | 21,946 | 22,657 |
| Services and Supplies | 2,348 | 1,807 | 5,177 | 10,845 | 4,829 |
| Capital Outlay | - | - | | | |
| **Total:** | **36,548** | **34,432** | **27,122** | **32,791** | **27,486** |
| **City Treasurer** | | | | | |
| Personal Services | 3,075 | $3,074 | $3,074 | 3,074.48 | 3,074.48 |
| Services and Supplies | - | - | 54 | 54 | - |
| Capital Outlay | - | - | | | |
| **Total:** | **3,075** | **$3,074** | **$3,128** | **$3,128** | **$3,074** |
| ***Public Safety*** | | | | | |
| **Fire** | | | | | |
| Personal Services | 713,075 | 803,299 | 978,888 | 987,370 | 1,028,510 |
| Services and Supplies | 175,075 | 190,737 | 162,461 | 162,014 | 167,514 |
| Capital Outlay | 5,470 | - | 2,000 | 2,000 | 2,000 |
| **Total:** | **893,621** | **994,036** | **1,143,349** | **1,151,384** | **1,198,024** |
| **Police** | | | | | |
| Personal Services | 1,285,653 | 1,404,452 | 1,398,240 | 1,456,819 | 1,475,149 |
| Services and Supplies | 276,695 | 331,837 | 345,114 | 345,887 | 354,201 |
| Capital Outlay | - | - | | | |
| **Total:** | **1,562,348** | **1,736,289** | **1,743,354** | **1,802,706** | **1,829,350** |
| **Code Enforcement** | | | | | |
| Personal Services | - | 17,167 | 123,734 | - | - |
| Services and Supplies | - | 4,740 | 7,850 | - | - |
| Capital Outlay | - | | - | - | - |
| **Total:** | | **21,908** | **131,584** | **-** | **-** |
| ***Administrative Services Department*** | | | | | |
| **Administration** | | | | | |
| Personal Services | 107,790 | 109,573 | 108,677 | 109,070 | 199,151 |
| Services and Supplies | 65,681 | 34,549 | 29,062 | 30,994 | 20,470 |
| Capital Outlay | - | 3,206,211 | - | - | - |
| **Total:** | **173,471** | **3,350,334** | **137,740** | **140,064** | **219,621** |
| ***Administrative Services Department, cont.*** | | | | | |
| **Finance** | | | | | |
| Personal Services | 152,969 | 159,397 | 165,401 | 166,808 | 175,543 |
| Services and Supplies | 380,361 | 407,672 | 561,477 | 571,641 | 575,087 |
| Capital Outlay | - | - | - | - | - |
| **Total:** | **533,330** | **567,069** | **726,878** | **738,449** | **750,629** |
| **Attorney** | | | | | |
| Personal Services | - | | | | |
| Services and Supplies | 32,447 | 31,014 | 40,000 | 40,000 | 40,000 |
| Capital Outlay | - | - | - | - | - |
| **Total:** | **32,447** | **31,014** | **40,000** | **40,000** | **40,000** |
| **Recreation** | | | | | |
| Personal Services | 31,057 | 85,691 | 105,422 | 106,576 | 118,045 |
| Services and Supplies | 42,381 | 54,779 | 68,629 | 68,588 | 67,524 |
| Capital Outlay | - | - | - | - | - |
| **Total:** | **73,438** | **140,470** | **174,051** | **175,164** | **185,569** |
| ***Community Development Department*** | | | | | |
| **Grant Writer/Toursim Development** | | | | | |

**City of Colusa**
**Fiscal Year 2025-26 Proposed Budget**
**Water Enterprise Fund (Fund 410)**

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Water Service and Usage Fees | 1,389,388 | 1,390,499 | 1,416,500 | 1,439,100 | 1,495,303 |
| Water Connection, Installation Fees, Dev. Imp. | 59,219 | 47,079 | 55,000 | 66,000 | 80,000 |
| State and Federal Grants- Walnut Ranch | | 145,700 | 3,855,851 | 3,855,851 | 10,722,984 |
| Late Payments, Delinquencies, Check Svc. Chrg. | 70,032 | 28,174 | 60,000 | 44,000 | 45,000 |
| Interest | 61,064 | 105,079 | 35,000 | 55,000 | 70,000 |
| Other Income | 60,970 | 15,199 | 500 | 500 | 500 |
| *Total:* | 1,640,674 | 1,731,731 | 5,422,851 | 5,460,451 | 12,413,787 |
| **Expenditures:** | | | | | |
| Direct Salaries and Benefits | 270,548 | 275,759 | $447,191 | $524,569 | $374,200 |
| Indirect Salaries and Benefits | 267,933 | 277,022 | 335,532 | 362,895 | 312,964 |
| Operating Costs | 608,518 | 531,747 | 685,178 | 692,458 | 629,531 |
| Overhead Costs | 94,857 | 67,673 | 121,811 | 121,811 | 121,811 |
| Machinery & Equipment | - | 185,842 | - | - | - |
| Capital Projects -Walnut Ranch(61011) | 10,484 | 312,882 | 4,392,664 | 4,392,664 | 11,744,425 |
| Audit Adjustments/Comp. Absence./OPEB/Deprec. | (94,513) | (238,012) | | | |
| Reserve Transfer | - | - | - | - | - |
| *Total:* | 1,157,826 | 1,412,913 | $5,982,376 | $6,094,398 | $13,182,931 |
| Excess (deficit) of revenues over expenditures | 482,847 | 318,818 | (559,525) | (633,947) | (769,144) |
| Beginning Discretionary Fund Balance | 6,053,848 | 6,536,695 | 6,855,514 | 6,295,989 | 5,662,043 |
| Ending Discretionary Fund Balance | 6,236,695 | 6,555,514 | 5,995,989 | 5,362,043 | 4,592,899 |
| Restricted Reserve Balances: | | | | | |
| Meter Replacement Reserve | 300,000 | 300,000 | 300,000 | 300,000 | 300,000 |
| Total Fund Balance and Reserves | 6,536,695 | 6,855,514 | 6,295,989 | 5,662,043 | 4,892,899 |

*Notes:*
$11,744,425 cosist of:
$3,5 M for Walnut Ranch Project
1.24M -Re-drill Well # 6,
$6.8 M Consolidated Wells Grant

# City of Colusa
## Fiscal Year 2025-26 Proposed Budget
### Sewer Enterprise Fund (Fund 430 / 436)

| Revenues: | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| Sewer Charges | 3,064,836 | 3,286,830 | 3,291,735 | 3,341,735 | 3,437,188 |
| Interest/436/430 | 71,567 | 128,534 | 45,000 | 55,000 | 80,000 |
| Sewer Dev. Impact Fees | 56,794 | 52,267 | 55,000 | 60,000 | 80,000 |
| Miscellaneous Revenue - Land Lease | 149,595 | 194,121 | 170,000 | 170,000 | 170,000 |
| Transfer In - Loader Loan from General Fund | - | | 600 | 600 | 600 |
| Other Financing Sources -Walnut Ranch/WW Recycle | 1,052,497 | | 4,180,604 | 4,180,604 | 7,066,450 |
| *Total:* | 4,395,289 | 3,661,752 | 7,742,939 | 7,807,939 | 10,834,238 |
| **Expenditures:** | | | | | |
| Direct Salaries and Benefits | 366,856 | 469,380 | $506,159 | $516,413 | $505,377 |
| Indirect Salaries and Benefits | 277,982 | 286,145 | 348,547 | 367,325 | 468,855 |
| Operating Costs | 773,426 | 1,177,077 | 1,036,437 | 1,030,171 | 1,233,730 |
| Overhead Costs | 75,240 | 69,998 | 124,236 | 129,514 | 134,951 |
| Machinery & Equipment | 82,266 | 256,231 | 240,000 | 240,000 | 200,000 |
| Debt Service | 306,540 | 325,809 | 1,135,671 | 1,135,671 | 1,137,734 |
| Capital Projects / Outlay | - | 1,797,365 | 150,000 | 150,000 | 150,000 |
| Recology / OPEB Prefunding Allocation | 1,569,089 | | | | |
| Reserve Transfer - Capital Reserve | 77,500 | 77,500 | 77,500 | 77,500 | 77,500 |
| Reserve Transfer - Collection System | | | - | - | - |
| Capital Projects / Walnut Ranch Sewer Grant (62694) | - | - | 3,561,803 | 3,561,803 | 5,161,815 |
| Asset Capitalization - Use of Reserves for property | | | | | |
| Transfer In/Out - New loan reserve req. | | | | | |
| *Total:* | 3,528,898 | 4,459,505 | 7,180,353 | 7,208,397 | 9,069,963 |
| Excess (deficit) of revenues over expenditures | 866,391 | (797,753) | 562,586 | 599,542 | 1,764,276 |
| Beginning Discretionary Fund Balance | 9,538,662 | 10,193,596 | 10,193,596 | 9,289,243 | 9,289,243 |
| Ending Discretionary Fund Balance (30100) | 10,193,596 | 9,184,386 | 5,922,973 | 7,138,903 | 8,433,333 |
| Restricted Reserve Balance: | | | | | |
| REDIP Reserve | - | - | - | - | - |
| Capital Reserve (Fund 436) | 1,132,101 | 1,215,930 | 1,215,930 | 1,293,430 | 1,370,930 |
| Collection System Reserve (30153) | 0 | 0 | 1,892,300 | 1,892,300 | 1,892,300 |
| WWTP Upgrade (Depreciation) Reserve (30151) | 0 | 0 | 2,796,500 | 2,796,500 | 2,796,500 |
| USDA Reserve (30155) | 25,883 | 25,883 | 25,883 | 25,883 | 25,883 |
| New SRF loan reserve requirement | 185,574 | 185,574 | 185,574 | 185,574 | 185,574 |
| Total Fund Balance and Reserves | 8,551,424 | 5,922,973 | 7,138,903 | 8,433,333 | 9,804,263 |

*Notes:*
*$2.56M for Walnut Ranch Grant*
*$2.59 m for water Recycle Grant*

# City of Colusa
## Fiscal Year 2025-26 Proposed Budget
## American Relief Program Act (ARPA-Fund 101)

| Revenues: | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| Revenue-Federal Grant | 724,839 | | - | - | - |
| Interest Revenue | - | - | - | - | - |
| | - | - | - | - | - |
| *Total:* | 724,839 | - | - | - | - |
| **Expenditures:** | | | | | |
| Salaries (Employee Premium) | | | | - | - |
| Machinery & Equipment -Software /Server | 98,917 | 397,703 | 450,000 | 450,000 | 192,500 |
| Tourism Events (4 Events) | | | | | |
| Sick Leave paid by the City | - | - | - | - | - |
| Recreation Program | - | | 25,000 | 25,000 | 25,000 |
| Others | - | 158,708 | 130,400 | 130,400 | - |
| *Total:* | 98,917 | 556,412 | 475,000 | 605,400 | 217,500 |
| Excess (deficit) of revenues over expenditures | 625,922 | (556,412) | (475,000) | (605,400) | (217,500) |
| Beginning Fund Balance | 399,641 | 1,025,563 | 985,563 | 612,000 | 217,500 |
| Ending Fund Balance | 1,025,563 | 469,151 | 510,563 | 6,600 | - |

Notes:

# City of Colusa
# Fiscal Year 2025-26 Proposed Budget
# Cannabis Revenue Fund (Fund 102)

| Revenues: | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| Revenue | 212,806 | 161,658 | 150,000 | 150,000 | 135,000 |
| Interest Revenue | 17,941 | 38,544 | 15,000 | 15,000 | 35,000 |
| Permits | 14,500 | 26,000 | 17,500 | 22,000 | 18,000 |
| State Grant -SS4 | | | 199,000 | 199,000 | |
| *Total:* | 245,247 | 226,202 | 182,500 | 386,000 | 188,000 |
| **Expenditures:** | | | | | |
| Indirect Salaries and Benefits - Street Projects | | | | | |
| Operating Costs - Street Project | 7,707 | 475 | 2,200 | 2,200 | 500 |
| Safe Street for All -Grant Match | | 33,885 | 52,000 | 52,000 | - |
| PMP- SS4 | - | - | 199,000 | 199,000 | - |
| Asphalt Chip seal project -MB fund | - | - | 300,000 | 300,000 | - |
| ARCO - Professional Services | - | - | 800,000 | 800,000 | 434,000 |
| *Total:* | 7,707 | 34,360 | 1,353,200 | 1,353,200 | 434,500 |
| Excess (deficit) of revenues over expenditures | 237,540 | 191,842 | (1,170,700) | (967,200) | (246,500) |
| Beginning Fund Balance | 1,163,833 | 1,401,373 | 1,593,215 | 1,593,215 | 1,543,215 |
| Ending Fund Balance | 1,401,373 | 1,593,215 | 422,515 | 626,015 | 1,296,715 |

Notes:
50k match for SS4

**City of Colusa**
**Fiscal Year 2025-26 Proposed Budget**
**Traffic Safety Fund (Fund 211)**

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Fines and Forfeitures | 1,613 | 2,484 | 3,600 | 3,600 | 3,600 |
| Interest Revenue | - | 25 | 25 | 25 | 25 |
| *Total:* | 1,613 | 2,509 | 3,625 | 3,625 | 3,625 |
| **Expenditures:** | | | | | |
| Supplies and Materials Police | 244 | - | - | - | - |
| Professional Services Police | | - | - | - | - |
| Indirect Salaries Streets | | - | - | - | - |
| Street Signs | 97 | | 4,000 | 4,000 | 4,000 |
| Equipment Maintenance - Police | 954 | 846 | - | - | - |
| *Total:* | 1,295 | 846 | 4,000 | 4,000 | 4,000 |
| Excess (deficit) of revenues over expenditures | 318 | 1,663 | (375) | (375) | (375) |
| Beginning Fund Balance | (4,212) | (3,894) | (3,894) | (2,231) | (4,269) |
| Ending Fund Balance | (3,894) | (2,231) | (4,269) | (2,606) | (4,644) |

Notes:

# City of Colusa
# Fiscal Year 2025-26 Proposed Budget
# PROP 64 (220)

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Other Revenue | - | 89,546 | 117,500 | 133,054 | 155,524 |
| Miscellaneous Revenue | | | | | |
| Interest Revenue | - | 620 | - | - | - |
| *Total:* | - | 90,166 | 117,500 | 133,054 | 155,524 |
| **Expenditures:** | | | | | |
| Salaries | - | 58,854 | 123,500 | 124,858 | 142,524 |
| Supplies & Services | - | 2,943 | 5,196 | 5,196 | 9,399 |
| Professional Services | - | 4,536 | 3,000 | 3,000 | 3,600 |
| Capital Outlay | - | 65,057 | - | - | - |
| *Total:* | - | 131,389 | 131,696 | 133,054 | 155,524 |
| Excess (deficit) of revenues over expenditures | - | (41,224) | (14,196) | (0) | 0 |
| Beginning Fund Balance | - | - | (41,844) | (41,224) | (41,224) |
| | | | | - | - |
| Ending Fund Balance | - | (41,224) | (56,040) | (41,224) | (41,224) |

Notes:

# City of Colusa
# Fiscal Year 2025-26 Proposed Budget
# Strike Team (221)

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Other Revenue | 211,846 | 91,024 | 117,500 | 140,000 | 262,201 |
| Miscellaneous Revenue | | | | | |
| Interest Revenue | 2,716 | 4,020 | 1,500 | 1,500 | 1,500 |
| *Total:* | 214,562 | 95,045 | 119,000 | 141,500 | 263,701 |
| **Expenditures:** | | | | | |
| Salaries | 95,438 | 158,129 | 75,000 | 271,863 | 262,201 |
| Supplies & Services | 17,343 | 13,303 | - | - | - |
| Machinery & Equipment | 86,491 | 30,307 | - | - | 92,861 |
| Debt Service | - | - | - | - | - |
| *Total:* | 199,272 | 201,739 | 75,000 | 271,863 | 355,062 |
| Excess (deficit) of revenues over expenditures | 15,290 | (106,694) | 44,000 | (130,363) | (91,361) |
| Beginning Fund Balance | 223,324 | 238,614 | 131,919 | 131,919 | 252,947 |
| | | | (209,802) | (209,802) | |
| Ending Fund Balance | 238,614 | 131,919 | 175,919 | (208,246) | 161,586 |

Notes:

**City of Colusa**
**Fiscal Year 2025-26 Proposed Budget**
**Gas Tax Fund (Fund 241)**

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| CA Gax Tax Section 2105 | 36,335 | 38,995 | 33,000 | 33,000 | 50,000 |
| CA Gax Tax Section 2106 | 21,651 | 23,722 | 18,500 | 18,500 | 34,000 |
| CA Gax Tax Section 2107 | 49,518 | 52,783 | 40,886 | 40,886 | 21,000 |
| CA Gas Tax Section 2107.5 | 2,000 | 2,000 | 3,000 | 2,000 | 2,000 |
| Proposition 42 Funds (Section 2103) | 52,022 | 58,473 | 46,000 | 46,000 | 45,000 |
| Interest Income | 3,983 | 9,942 | 3,000 | 6,000 | 6,000 |
| Road Maint. Rehab Acct./loan repayment | 130,274 | 162,530 | 130,000 | 150,000 | 160,000 |
| *Total:* | 295,784 | 348,446 | 274,386 | 296,386 | 318,000 |
| Public Works Staff Allocations | 40,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Utilities | 97,504 | 172,423 | 122,000 | 130,000 | 180,330 |
| Other Costs / Equipment Maintenance | | - | - | - | - |
| SB1 Cap.Expend./Ashphalt Chip Seal Proj. | 281,939 | - | 200,000 | 200,000 | 250,000 |
| Transfers Out | - | - | - | - | - |
| *Total:* | 419,443 | 222,423 | 372,000 | 380,000 | 480,330 |
| Excess (deficit) of revenues over expenditure | (123,659) | 126,022 | (97,614) | (83,614) | (162,330) |
| Beginning Fund Balance | 422,894 | 299,234 | 425,256 | 425,256 | 327,642 |
| Ending Fund Balance | 299,234 | 425,256 | 327,642 | 341,642 | 165,312 |

# City of Colusa
# Fiscal Year 2025-26 Proposed Budget
# County Transportation - LTF/RSTP
# (Fund 246)

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| LTF/RSTP Revenues | 277,027 | 270,658 | 250,000 | 250,000 | 270,000 |
| Interest Income | 7,749 | 14,647 | 4,000 | 10,000 | 20,000 |
| Miscellaneous - Bridge Street Caltrans Coop Project | - | - | - | - | - |
| State Grant - STIP Road Project | | | | | |
| *Total:* | 284,776 | 285,305 | 254,000 | 260,000 | 290,000 |
| **Expenditures:** | | | | | |
| Salaries & Maintenance | - | 5,000 | 5,000 | 5,000 | 5,000 |
| Capital Expenditures - | 158,623 | | 185,000 | 185,000 | 185,000 |
| Professional Services | 81,006 | 7,803 | 20,000 | 20,000 | 20,000 |
| Equipment & Maitnenance | - | 106,874 | - | 100,000 | 10,000 |
| Street Maintenance | 35,864 | - | 42,000 | 32,000 | 292,000 |
| State Grant - Various Road Project STIP | - | - | - | - | - |
| Caltrans Bridge Street Coop Project | - | - | 100,000 | 100,000 | - |
| Transfers Out | | | | | |
| *Total:* | 275,494 | 119,677 | 347,000 | 442,000 | 512,000 |
| Excess (deficit) of revenues over expenditures | 9,282 | 165,628 | (98,000) | (182,000) | (222,000) |
| Beginning Fund Balance | 577,815 | 587,097 | 752,725 | 752,725 | 654,725 |
| Ending Fund Balance | 587,097 | 752,725 | 654,725 | 570,725 | 432,725 |

**Capital Expenditures**

# City of Colusa
## Fiscal Year 2025-26 Proposed Budget
## Pools/Trees/Parks
## Improvement District Fund
## (Fund 253)

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Improvement District Assessments | 83,901 | 87,732 | 85,100 | 85,100 | 85,400 |
| Pool / Other Revenues | 19,641 | 20,308 | 19,500 | 19,500 | 20,500 |
| Federal and other Grant/Swim | 7,100 | - | 7,500 | 7,500 | 3,000 |
| State Grant-Clean Ca. Local | 108,554 | 12,100 | 381,000 | 381,000 | 381,000 |
| Interest Revenue/ Other Source | 1 | 304 | 48,300 | 48,300 | 48,300 |
| *Total:* | 219,198 | 120,445 | 541,400 | 541,400 | 538,200 |
| **Expenditures:** | | | | | |
| Salaries - Streets / Parks | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Services - Streets / Parks | | 26,538 | 33,100 | 33,100 | 9,180 |
| Salaries - Pool | 31,426 | 37,502 | 37,678 | 37,678 | 42,678 |
| Services - Pool | 31,705 | 39,819 | 30,290 | 33,290 | 47,539 |
| Others/ Clean Cal Local Grant | 74,635 | 53,720 | 429,000 | 429,000 | 429,000 |
| *Total:* | 142,766 | 162,579 | 535,068 | 538,068 | 533,397 |
| Excess (deficit) of revenues over expendit | 76,432 | (42,135) | 6,333 | 3,333 | 4,804 |
| Beginning Fund Balance | (31,200) | 45,232 | 3,097 | 3,097 | 9,429 |
| Ending Fund Balance | 45,232 | 3,097 | 9,429 | 6,429 | 14,233 |

*Notes:*
Clean California Local Grant
48K is Macth from MB Moeis

**City of Colusa**
**Fiscal Year 2025-26 Proposed Budget**
**State Park Management Fund**
**(Fund 310)**

| | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| **Revenues:** | | | | | |
| Concessions Revenue | 22,424 | 21,930 | 28,600 | 28,600 | 28,500 |
| Interest Income | | | | | |
| LOSPP Grant | - | - | 642,950 | 642,950 | 642,950 |
| *Total:* | 22,424 | 21,930 | 671,550 | 671,550 | 671,450 |
| **Expenditures:** | | | | | |
| Indirect Salaries | 5,000 | 20,140 | - | - | - |
| Supplies and Materials | 14,959 | 20,523 | 26,980 | 26,980 | 26,980 |
| Professional Services | 6,389 | 6,000 | 6,000 | 6,000 | 6,000 |
| LOSSP Grant | - | - | 642,950 | 642,950 | 124,596 |
| Machinery & Equipment | 1,505 | - | - | - | - |
| *Total:* | 27,852 | 46,663 | 675,930 | 675,930 | 157,576 |
| Excess (deficit) of revenues over expenditures | (5,429) | (24,733) | (4,380) | (4,380) | 513,874 |
| Beginning Fund Balance | (56,903) | (62,332) | (66,542) | (66,542) | (70,922) |
| Ending Fund Balance | (62,332) | (66,542) | (70,922) | (70,922) | 442,952 |

*Notes:*

*LOSSP Grant for $ 642,950*

**City of Colusa**
**Fiscal Year 2025-26 Proposed Budget**
**Boat Launch Fund (311)**

| Revenues: | Actual FY 2022-23 | Actual FY 2023-24 | Adopted Budget FY 2024-25 | Mid-Year Budget FY 2024-2025 | Proposed Budget FY 2025-2026 |
|---|---|---|---|---|---|
| Fee Revenues | | 27,195 | 13,000 | 13,000 | 20,000 |
| Interest Income | 17,692 | 1,851 | 500 | 500 | 500 |
| Other Revenue | 734 | - | 500 | 500 | 1,500 |
| State Grant | | | | | |
| *Total:* | 18,426 | 29,046 | 14,000 | 14,000 | 22,000 |
| **Expenditures:** | | | | | |
| Fees & Permits | - | 399 | 2,100 | 2,100 | 2,100 |
| Maintenance/Services | 1,178 | 339 | 850 | 850 | 1,350 |
| Capital | - | - | - | - | - |
| Professional Service | - | - | 5,100 | 5,100 | 20,100 |
| | - | - | - | - | - |
| *Total:* | 1,178 | 738 | 8,050 | 8,050 | 23,550 |
| Excess (deficit) of revenues over expenditures | 17,248 | 28,308 | 5,950 | 5,950 | (1,550) |
| Beginning Fund Balance | 45,959 | 63,207 | 91,515 | 91,515 | 97,465 |
| Ending Fund Balance | 63,207 | 91,515 | 97,465 | 97,465 | 95,915 |

Robert's Ditch Fee $5000

# RESOLUTION NO. 25-____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLUSA ESTABLISHING THE PROPOSED BUDGET APPROPRIATION LIMIT FOR FISCAL YEAR 2025-2026

**WHEREAS**, Article XIII (B) of the California Constitution Proposition 4 establishes expenditure limits for cities;

**WHEREAS**, State-implementing legislation (Government Code Section 7910) requires the City of Colusa to annually adopt a resolution establishing its Appropriations Limit for the following year; and

**WHEREAS,** the City selected the Department of Finance population percentage change and the change in California per Capita Personal Income factors to compute the Appropriations Limit; and

**WHEREAS**, the City Finance Department has made the calculations specified in said Law and concludes that the appropriations subject to limitation are $12,103,064 for the fiscal year 2025-2026.

**NOW, THEREFORE**, the City Council finds and determines as follows:

**Section 1.**
The recitals set for are true and correct statements and hereby incorporated.

**Section 2.**
The City Council hereby authorizes and approves that the Proposed Budget Appropriations Limit for the City of Colusa is established at $11,996,834 by using the Department of Finance population change and the change in California per Capita Personal Income factors; and

**Section 3.**
This Resolution shall take effect immediately upon adoption.

**PASSED AND ADOPTED** by the City Council of the City of Colusa on the 17th of June 2025 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
RYAN CODORNIZ, MAYOR

_____
SHELLY KITTLE, CITY CLERK

# ATTACHMENT A

# City of Colusa
# Gann Appropriation Limit
# Calculation for FY 2025-26
# Adopted Budget

Gann Appropriations Limit

The Gann Limit was approved by California voters on November 6th, 1979. Under the Gann Limit, a maximum amount is established for tax-funded government services. That amount is to be adjusted each year depending on changes in population, inflation, and the transfer of financial responsibility for various government activities from one level of government to another. Any significant amount of state tax revenue received above the Gann Limit is to lead to future tax rebates or tax cuts.

| **Population** | **Percent Change** | **Factor** |
|---|---|---|
| Population 1/1/2024: 6.548 | | |
| Population 1/1/2025: 6,536 | -0.18 | 0.9982 |
| **Per Capita Personal Income** | | |
| State of California | 1.07 | 1.0107 |
| **Growth Factor** | | |
| Population percentage increase multiplied by the Per Capita Personal Income percentage increase (.9982*1.0107) | | 100885 |

**Calculation of FY 2025-2026 Appropriation Limit**

| | |
|---|---|
| FY 2024-2025 Appropriation Limit | $11,996,834 |
| Growth Factor | 1.0089 |
| ***FY 2025-26 Appropriation Limit*** | ***$12,103,064*** |