



**Parks and Recreation Commission - Special Meeting
Agenda
Thursday, June 29, 2023, 5:00 PM
Annex Building, 528 NE 4th Ave., Camas, WA. 98607**

CALL TO ORDER

ROLL CALL

PUBLIC COMMENTS

APPROVAL OF MINUTES

1. [APPROVE MINUTES OF MEETING HELD ON MAY 24, 2023](#)
[Presenter: Ellen Burton, Chair](#)
[Time Estimate: 5 Minutes](#)

MEETING ITEMS

2. [LAKES MANAGEMENT PLAN \(INFORMATIONAL\)](#)
[Presenter: Steve Wall, Public Works Director](#)
[Time Estimate: 30 Minutes](#)
3. [PARK RULES \(DECISION\)](#)
[Presenter: Trang Lam and Brittany Grahn](#)
[Time Estimate: 20 minutes](#)

PROJECT UPDATES

4. **PARKS & RECREATION UPDATES**
Presenter: Trang Lam, Parks & Recreation Director
Time Estimate: 10 minutes
5. **PUBLIC WORKS UPDATES**
Presenter: Steve Wall, Public Works Director
Time Estimate: 10 minutes

OTHER ITEMS

6. **COMMISSIONERS UPDATES**
Presenter: Parks & Rec Commissioners
Time Estimate: Remainder of Time

CLOSE OF MEETING



**Parks and Recreation Commission Meeting Agenda
Wednesday, May 24, 2023, 5:00 PM
Hybrid Meeting - Council Chambers, 616 NE 4th AVE
And Zoom**

ROLL CALL

Present: Ellen Burton, Katy Daane, David Dewey, Brittany Grahn, Jason Irving, Steve Lorenz, Jenny Wu, Council Liaison Leslie Lewallen

Staff: Trang Lam and Susan Palmer

PUBLIC COMMENTS

No Public comments made.

APPROVAL OF MINUTES

1. Approve the Minutes of the Parks & Recreation Commission meeting on March 22, 2023

Presenter: Ellen Burton

Time Estimate: 5 minutes

A motion was made by Lorenz, seconded by Irving, and carried to approve unanimously the minutes of the meeting of March 23, 2023 as written.

MEETING ITEMS

2. Skatepark Rules Update (Decision)

Presenter: Trang Lam, Parks & Recreation Director

Time Estimate: 15 minutes

Trang Lam presented an image of the new proposed skatepark signage. Discussion ensued on the proposed signage.

Lam presented an update on the Riverside Bowl Skatepark project. She displayed photos of the project status. Discussion ensued.

3. Water Safety Month (Informational)

Presenter: Trang Lam, Parks & Recreation Director

Time Estimate: 10 minutes

Lam provided an update on what the Parks & Recreation Department is doing for Water Safety Month. Tammy Connolly has been the lead staff to promote this to educating the public about water safety.

4. Department of Natural Resources site visit (Informational)

Presenter: Trang Lam, Parks & Recreation Director

Time Estimate: 20 minutes

Lam presented a long-term technical assistance program with the Department of Natural resources and provided a baseline assessment and next steps.

Jason Irving and Ellen Burton spoke about the focus group meeting. Discussion ensued.

5. Lower Lacamas Creek riparian area: Project Update & Educational Signage (Informational)

Presenter: Trang Lam, Parks & Recreation Director

Time Estimate: 10 minutes

Lam provided a project update on education signage for wetlands and stormwater for the Lower Lacamas Creek Riparian area. Discussion ensued.

Lam displayed images of the before and after of the restoration areas. Discussion ensued.

PROJECT UPDATES

6. Parks & Rec: Progress of Projects underway and Grants update

Presenter: Trang Lam, Parks & Recreation Director

Time Estimate: 20 minutes

Lam provided an update on grants that have been awarded to the Camas Parks & Recreation Department this year; Recreation & Conservation Office, Parks Foundation of Clark County and Department of Natural Resources.

Lam provided an update on Louis Bloch Park bleachers & ADA upgrades. Adjustments were made to restroom access and new bleachers will be added.

7. Public Works Updates

Presenter: Public Works Staff

Time Estimate: 10 minutes

Will Noonan thanked Camas Parks Foundation for coming out to clean the Camas Cemetery. There will be an Open House for the Lakes Management Plan on July 12th.

OTHER ITEMS

7. Commissioner's Updates (informational)

Presenter: Ellen Burton

Time Estimate: Remainder of Time

Parks Commissioners provided updates on the following; fire safety meeting, parks maintenance, turf fields, Clark County Parks Foundation luncheon and the boat dock at Heritage Park. They thanked Parks Maintenance for their hard work.

CLOSE OF MEETING

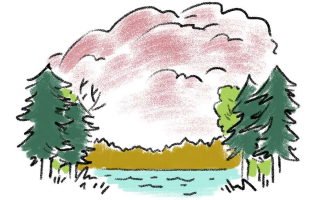
The meeting closed at 6:28 pm

Lake Management Plan Data Review and Management Discussion

Update to Camas Parks and Recreation Commission
June 29, 2023

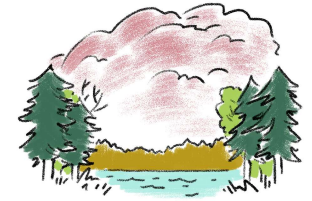


Project purpose

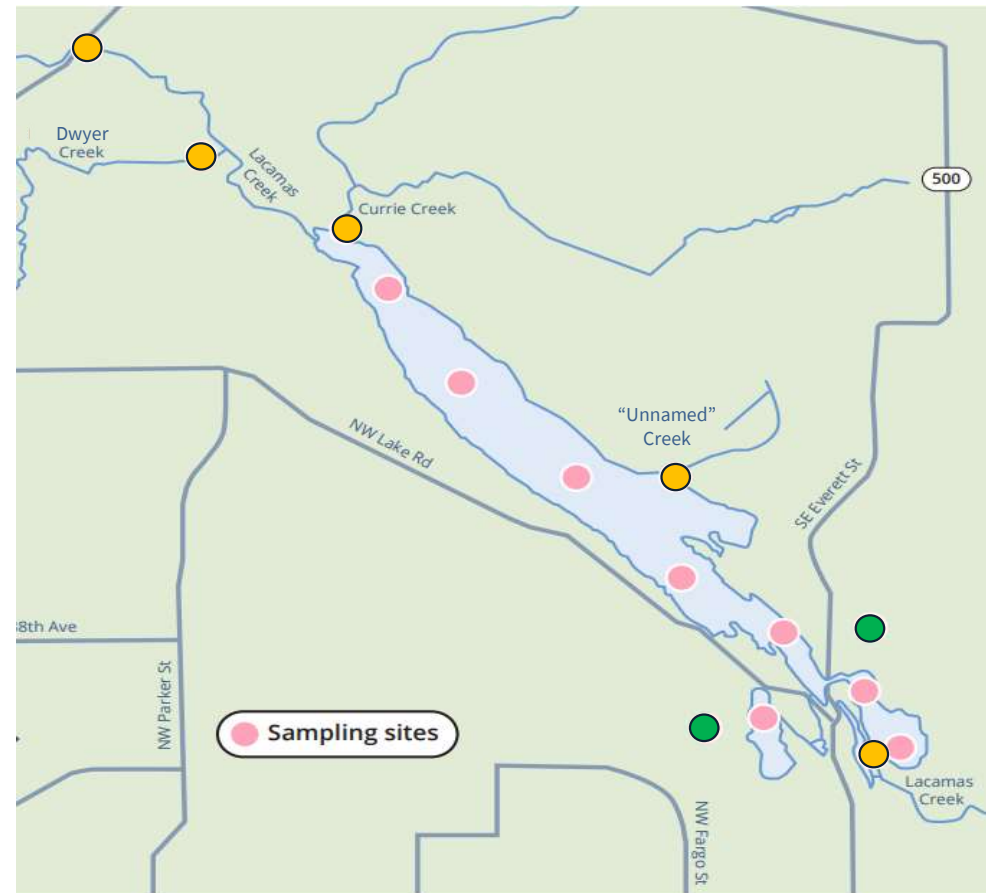


- The Lake Management Plan will outline actions to improve water quality in Lacamas, Fallen Leaf, and Roundlakes.
- This effort will address algae blooms and other water quality concerns that City Council has identified as top priorities.
- The plan will also identify the resources needed and the most appropriate party(s) for carrying out those actions.

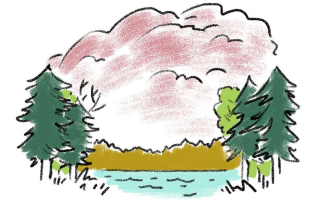
Overview of Sampling Activities



- Creeks ●
 - Lacamas (2)
 - Dwyer
 - Currie
 - “Unnamed”
- Lakes at different depths ●
- Sediment in Lakes
- Representative Stormwater sites ●
- Aquatic Vegetation

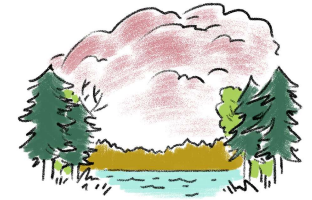


What we learned



- Lacamas Creek is still the main source of water and nutrients (like Total Phosphorous, TP) for Lacamas and Round Lakes.
- Concentrations of TP in the sediment and deeper waters were higher in Round and Lacamas Lakes than in the past years.
- The amount of TP near the surface, as well as Chlorophyll-a levels, in Lacamas and Round lakes was similar to past years.
- The types of algae in Lacamas and Round Lakes is similar, but the algae in Fallen Leaf Lake is different.

How the lake functions



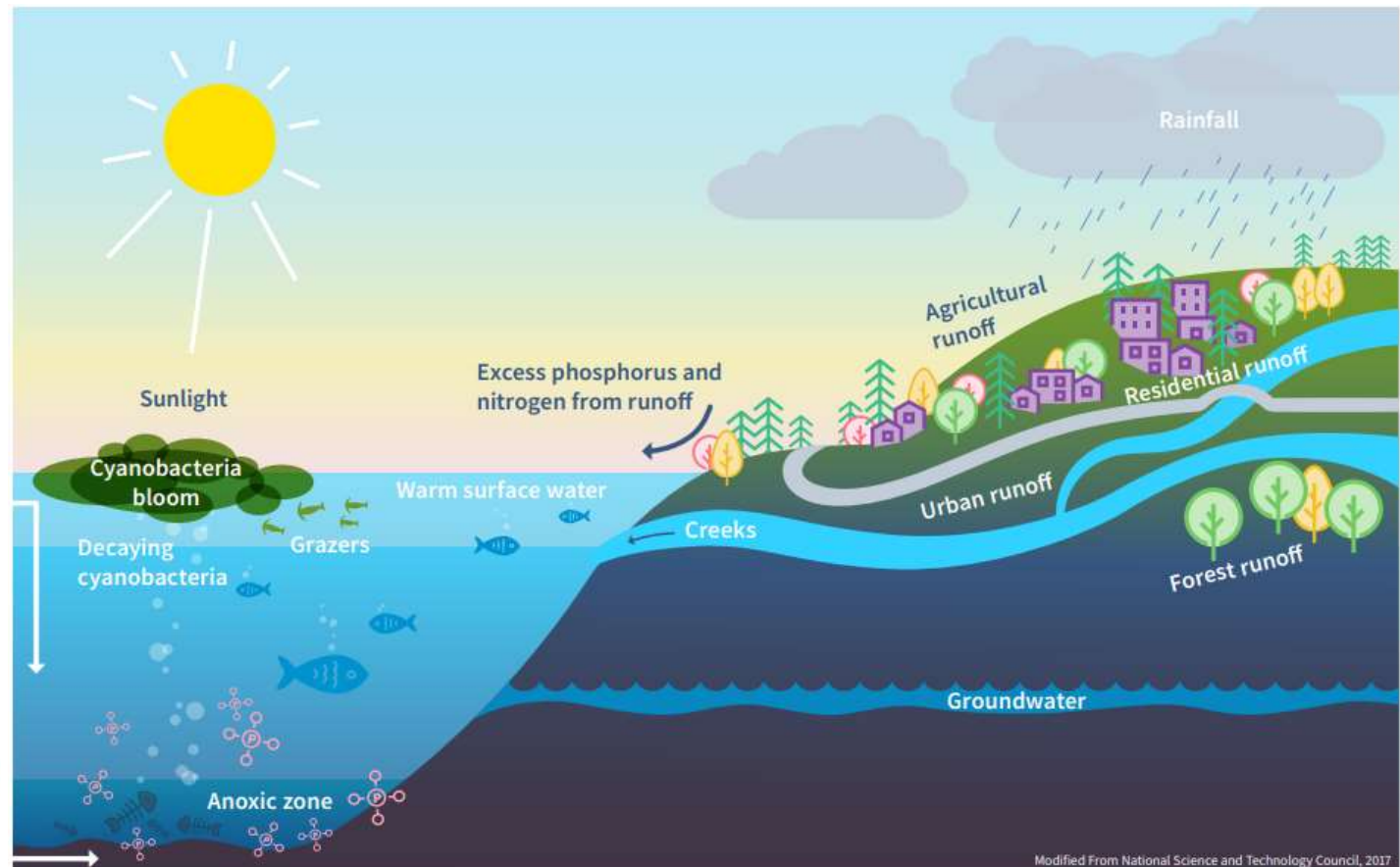
The water from Lacamas Creek does not mix a lot with the anoxic (oxygen deficient) water at the bottom of the lake.

This is especially true in the summer, when warmer, lighter water stays at the top, and the colder, denser water stays at the bottom.

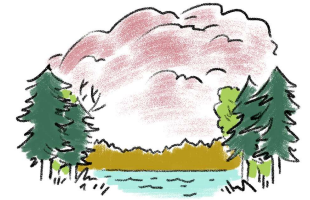
We call this stratification.

Some of the phosphorus stored in the sediment is released during the summer during summer stratification.

The bottom of the lake has a lot more phosphorus than water near the surface.

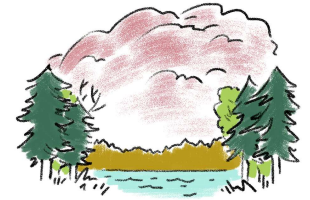


Overview of public outreach



- Hosted a project webpage on Engage to share project information and updates.
- Three (3) in-person open houses.
- Four (4) online surveys.
- Four (4) tabling events.
- Several meetings and workshops with Washington State and local agencies, local non-profits and volunteer organizations.
- Meetings with nearby property owners.

What we heard



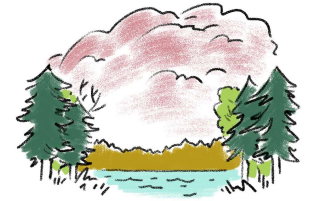
Community members want:

- Solutions and techniques that are backed by research and are as natural as possible.
- To be able to swim and fish in the lakes. It's also important that they are safe for children and pets to be around.

Questions?

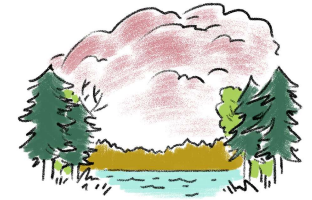
Potential solutions

In-lake solutions *not* being considered



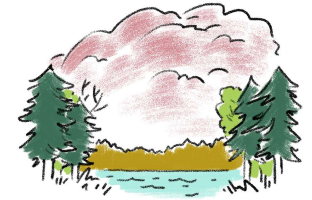
- Full water column mixing
- Physical Phosphorus filtration at Inflow
- Ultrasound
- Dredging
- Limiting of motor use in shallow areas of lake

In-lake solutions currently being considered



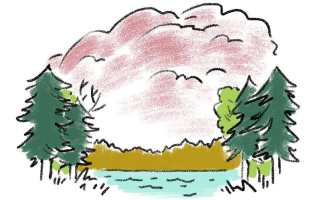
- Phosphorus Sequestration at Inflow
 - Alum injection at Lacamas Creek
 - Eutrosorb WC injection at Lacamas Creek
- Phosphorus Sequestration in Lake
 - Phoslock or Eutrosorb G (Lanthanum)
 - Alum
- Reduction of Internal Loading
 - Hypolimnetic aeration or oxygenation
 - Nanobubbler
 - Carp removal

Watershed solutions currently being considered



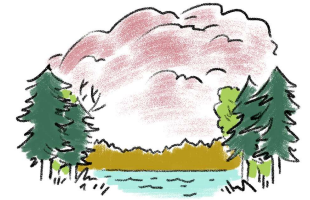
- Stormwater program optimization, like:
 - Upgrade bioretention facilities
 - Optimize detention ponds
 - Cartridge unit replacement
 - Upgrade media
 - Street Sweeping
- Septic system management
- Stream restoration
- Constructed wetlands
- Public education
- Agricultural BMPs, like:
 - Conservation Buffers
 - Streamside Management Areas
 - Detention or Retention Basins
 - Media Filtration
 - Reduced use of fertilizer or pesticides
 - Planting vegetation associated with reduced Phosphorus export

Watershed Mitigation: Data/Timeline Overview



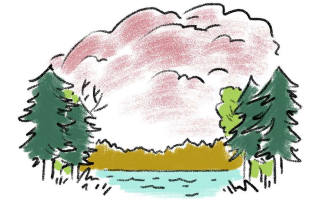
- Ecology and Clark County have both collected data within the past 2 years
 - Clark County collected nutrient data at Lacamas Creek (Goodwin Road) and 6 upstream tributary locations (China Ditch, Upper Fifth Plain Creek at 4th Plain Road, Lower 5th Plain Creek at NE Davis Road, Shanghai Creek, Matney Creek, Upper Lacamas Creek at 217th Ave)
 - China Ditch had consistently the highest TP
 - Lower Fifth Plain Creek (downstream of China Ditch) was consistently the second highest tributary location
 - The other tributary sites had consistently lower TP

Watershed Mitigation: Data/Timeline Overview



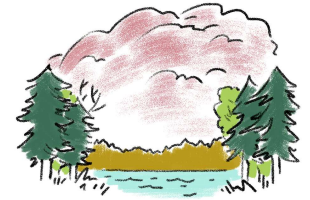
- Ecology will complete a Source Assessment Report in December 2023
- Following the Source Assessment Report, Ecology will develop an Alternative Restoration Plan, which will include stakeholder outreach
- Ecology's work will be highly relevant to the Lake Management Plan– mitigation alternatives for bacteria will also have benefits for reduced nutrient inputs
- Would likely be up to local agencies within the watershed (County and City with non-profit partners) to implement mitigation through direct projects, development standards, etc.

What do you think?



- What are the options that seem to be the most promising? Why?
- Are there other options that should be considered that aren't on the list? Why?
- Are there options that have been taken out of consideration that you feel should still be explored? Why?

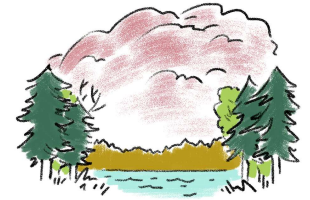
Next steps



- Evaluate costs for each solution
- Finalize recommend solutions
- Host an open house on July 12 to share recommended solutions with the community
- Update City Council
- Confirm solutions and finalize Lake Management Plan, and submit to Ecology

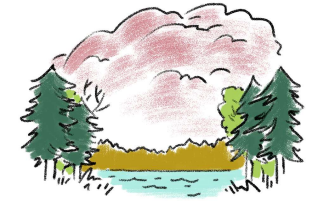
Parking garage

Key Takeaways



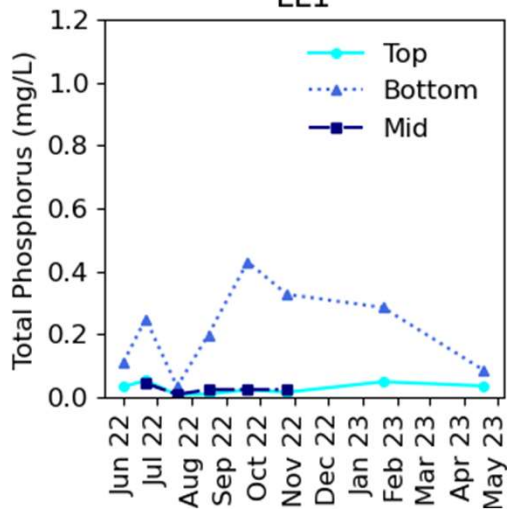
- Total Phosphorus at the bottom of Round (in particular) and Lacamas Lake was higher in 2022 than in previous years
- Total Nitrogen was also elevated at the bottom of Round Lake, and to a lesser extent Lacamas Lake, relative to past years
- Chlorophyll-a in Lacamas and Round Lakes was similar to past years
- Fallen Leaf Lake had similar Total Phosphorus and Chlorophyll-a Levels to Lacamas Lake in 2022
- Sediment data indicate substantial fraction of sediment Phosphorus is iron-bound (available under anoxic conditions)

Fallen Leaf Lake Had Similar Total Phosphorus Concentrations to Lacamas Lake

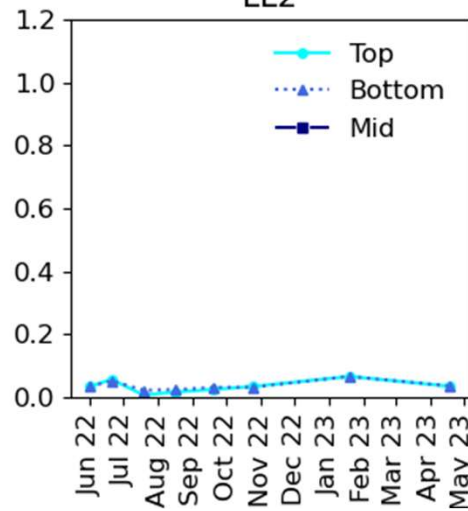


Lacamas Lake

LL1

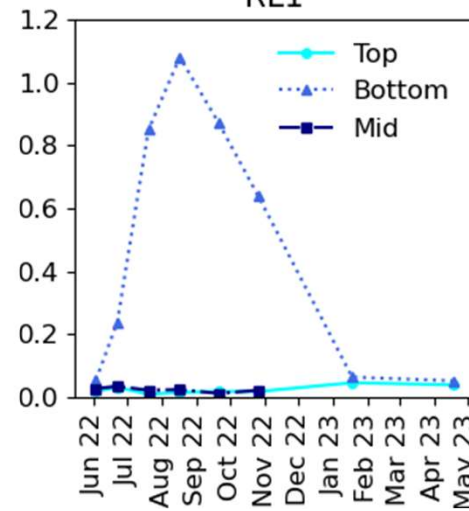


LL2



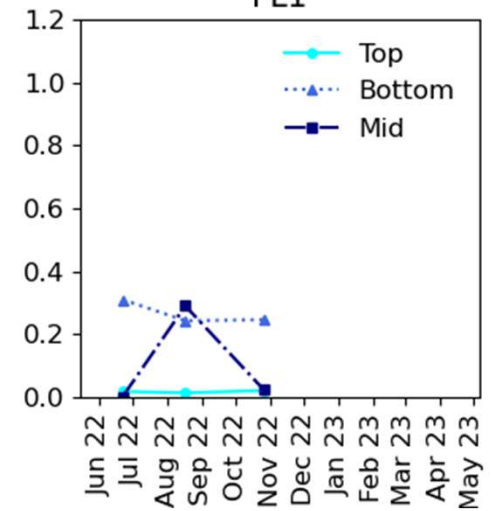
Round Lake

RL1

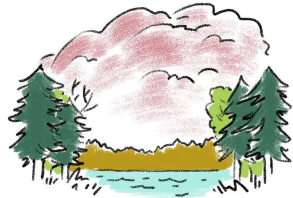


Fallen Leaf Lake

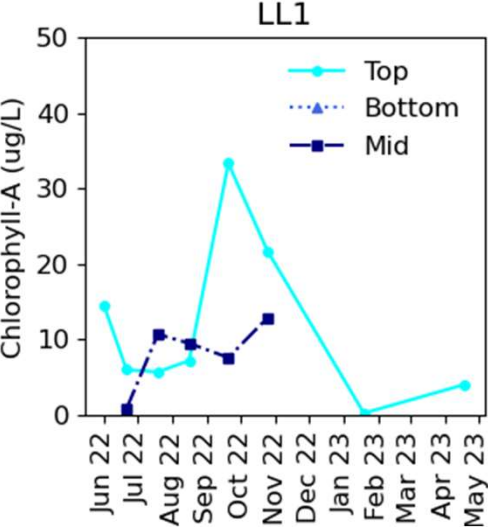
FL1



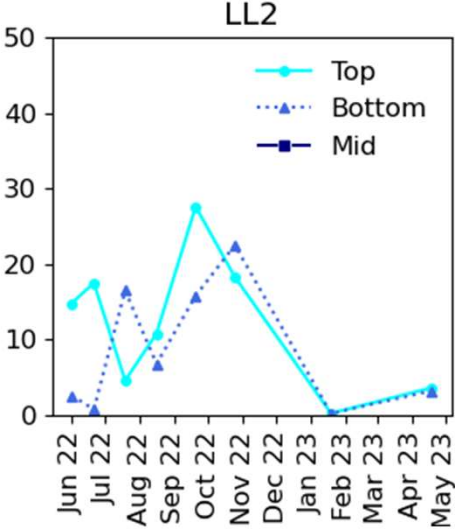
Fallen Leaf Lake Had Similar Chlorophyll-a Concentrations to Lacamas and Round Lakes



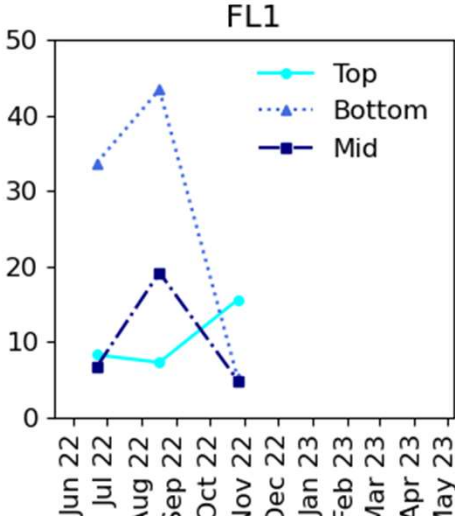
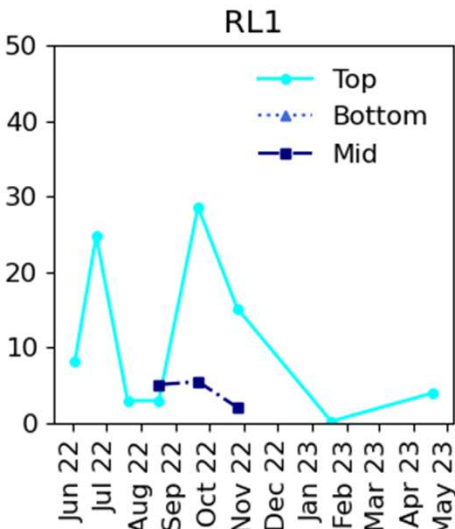
Lacamas Lake



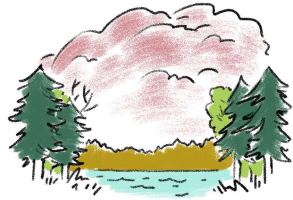
Round Lake



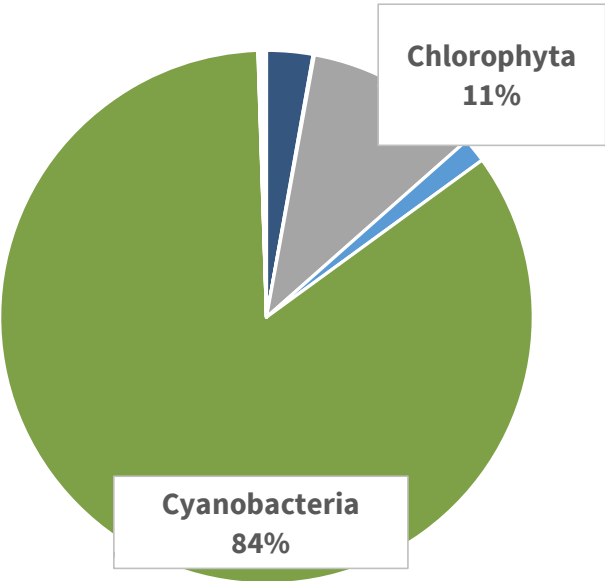
Fallen Leaf Lake



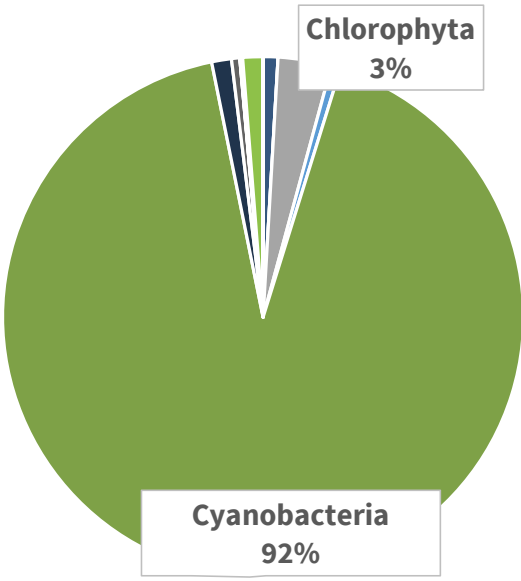
Lacamas and Round Lakes Had Similar Algae Taxonomy; Fallen Leaf Lake is Distinct



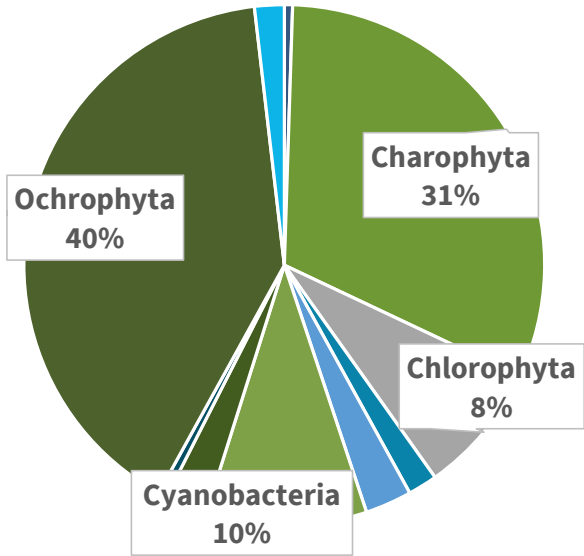
Lacamas Lake



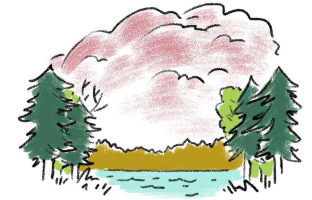
Round Lake



Fallen Leaf Lake

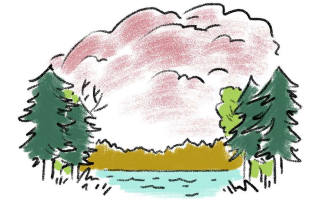


In-Lake Treatment Options, Phosphorus Sequestration at Inflow



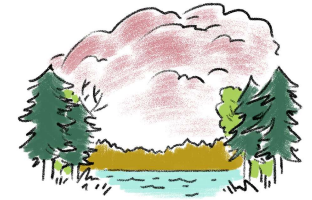
Option	Description	Recommended for detailed costing?
Alum injection at Lacamas Creek	Forms flocs, leading to Phosphorus settling to the bottom of the Creek	Yes, likely lower cost option, compared to others to see meaningful near-term improvements.
Eutrosorb WC injection at Lacamas Creek	Phosphorus-binding product designed for areas where good mixing occurs	Yes, likely lower cost option, compared to others to see meaningful near-term improvements.
Phosphorus Filtration at Inflow	Physical filter to remove Phosphorus from flowing water	No, external Phosphorus loading is large enough that numerous filters would be required. Could result in high cost and impractical constraints.

In-Lake Treatment Options, Phosphorus Sequestration in Lake



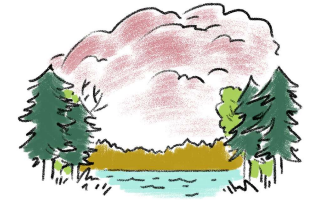
Option	Description	Recommended for detailed costing?
Phoslock or Eutrosorb G (Lanthanum)	Phosphorus binding products typically applied as a slurry from a boat	Yes, will consider targeted treatment to most impacted areas and full lake treatment.
Alum	Similar concept as lanthanum	Yes, will consider targeted treatment to most impacted areas and full lake treatment.

In-Lake Treatment Options, Reduction of Internal Loading



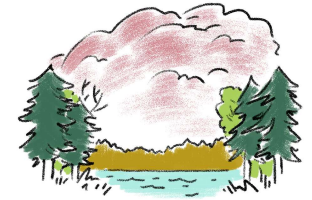
Option	Description	Recommended for detailed costing?
Hypolimnetic aeration or oxygenation	Increase Dissolved Oxygen at the bottom of the lakes, creating less favorable conditions for release of Phosphorus from the sediments	Not at this time. Sampling results indicate internal loading occurs is likely several times smaller than external loading. Maintain consideration for future phases.
Nanobubbler	Similar in concept to hypolimnetic aeration/oxygenation; more efficient oxygen transfer	Not at this time. Sampling results indicate internal loading is likely several times smaller than external loading. Maintain consideration for future phases.
Full water column mixing	Mix the full water column to increase Dissolved Oxygen and eliminate stagnant areas	Not recommended, would mix high TP concentrations at bottom with rest of water column

Additional In-Lake Treatment Options



Option	Description	Recommended for detailed costing?
Algaecide	Risk of toxicity to fish and vegetation; short term solution, requires monitoring	Not at this time; however, new products continue to be developed with lower potential for toxicity to fish and benthic organisms. Maintain for future consideration.
Carp removal	Carp are known to stir up Phosphorus in bottom sediments; reducing Carp population may reduce internal loading.	Consider communications encouraging carp fishing; maintain consideration of commercial removal of carp. <i>Consider holding "carp derbies"</i>
Limiting of motor use in shallow areas of lake	In some areas of Lacamas Lake, motors can stir up sediments from the bottom of the lake, potentially resulting in Phosphorus transfer to the water column.	There is not enough evidence to demonstrate that this would meaningfully reduce internal loading. Maintain for future consideration. <i>Policy decision</i>
Dredging	Remove Phosphorus-containing sediments from the bottom of the lakes.	Not at this time due to high costs and need to determine where dredged sediments would be placed.

Watershed Mitigation: Overview of Options



Option	Notes								
Stormwater program optimization	<p>Examples:</p> <table border="0"> <tr> <td>Upgrade bioretention facilities</td> <td>Upgrade media</td> </tr> <tr> <td>Optimize detention ponds</td> <td>Street Sweeping</td> </tr> <tr> <td>Cartridge unit replacement</td> <td></td> </tr> </table>	Upgrade bioretention facilities	Upgrade media	Optimize detention ponds	Street Sweeping	Cartridge unit replacement			
Upgrade bioretention facilities	Upgrade media								
Optimize detention ponds	Street Sweeping								
Cartridge unit replacement									
Agricultural BMPs	<p>Examples:</p> <table border="0"> <tr> <td>Conservation Buffers</td> <td>Reduced use of fertilizer or pesticides</td> </tr> <tr> <td>Streamside Management Areas</td> <td>Planting vegetation associated with reduced Phosphorus export</td> </tr> <tr> <td>Detention or Retention Basins</td> <td></td> </tr> <tr> <td>Media Filtration</td> <td></td> </tr> </table>	Conservation Buffers	Reduced use of fertilizer or pesticides	Streamside Management Areas	Planting vegetation associated with reduced Phosphorus export	Detention or Retention Basins		Media Filtration	
Conservation Buffers	Reduced use of fertilizer or pesticides								
Streamside Management Areas	Planting vegetation associated with reduced Phosphorus export								
Detention or Retention Basins									
Media Filtration									
Septic system management	Measures to increase compliance								
Stream restoration	A stream condition inventory could be conducted to identify erosional locations to identify high priority sites								
Constructed wetlands	Wetland treatment system could be located on public or private lands								
Public education	Support groups conducting work in the Watershed. Encourage less fertilizer use, cleanup after pets, agricultural BMPs, pen waste cleanup, etc.								



Parks & Recreation Commission

JUNE 29, 2023

PRESENTED BY:

TRANG K. LAM,
PARKS & REC. DIRECTOR

1

Chapter 12.32 Park Rules & Regulation

PROPOSED CHANGES:

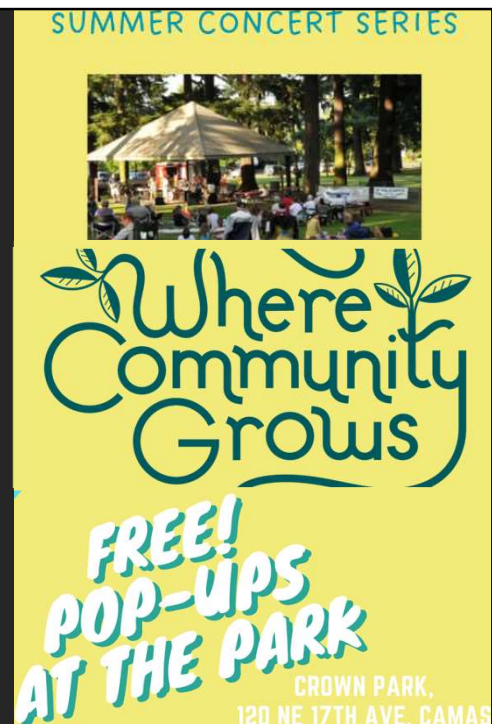
- 12.32.030 – added bullet C – to address unapproved landscaping in parks
 - *C. Place or cause to be placed any foreign materials such as earth, boulders, gravel, sand, wood or plant life into any park.*
- 12.32.105 – removed rule of no dogs in Crown Park to align with all other parks
- 12.32.145 – added bullet D – to address no use of drones
 - *D. Launching, landing, or operating an unmanned aircraft or drone from or on lands and waters within the boundaries of park property is prohibited except for use in cases of emergency law enforcement and fire response operations, or other operations designed to support responses to health and human safety emergencies such as search and rescue, health and environmental incidents; and*

2

July is Parks & Recreation Month

This year's NRPA theme —
"Where Community Grows" —
 celebrates the vital role park and recreation professionals play in bringing people together, providing essential services and fostering the growth of our communities.

<https://www.cityofcamas.us/parksrec/page/camas-recreation-programs>



3

Parks Update

- July 3 Council Meeting – Parks & Recreation Month Proclamation
- Parks & Open Space Management Plan – Request for Qualifications issued (<https://www.cityofcamas.us/rfps>)
- July 4th – Reminder, No fireworks on park property (CMC 12.32.020.D)

4



SAVE THE DATE
GRAND RE-OPENING

Riverside Bowl Skatepark

Established 2000

Renovated 2023

Thursday, July 27, 2023
4-7p.m.
2900 NE 3rd Ave, Camas, WA 98607




5

UPDATES



Public Works



Commissioners

6



7