City of Sammamish Pine Lake Creek Basin Plan

Pine Lake Creek Basin Plan In-Person Open House #2 Summary

April 22, 2024



Sammamish Pine Lake Creek Basin Plan Open House #2 Meeting Summary

INTRODUCTION

The City of Sammamish (City) is developing the Pine Lake Creek Basin Plan to address various environmental concerns within the Pine Lake Creek watershed, including flooding, erosion, water quality, and ecological health. Covering approximately 1,200 acres, this watershed is situated near the southern end of the Sammamish Plateau and encompasses significant environmental assets such as Pine Lake, Pine Lake and Kanim creeks, sphagnum bogs, and wetlands. Despite recent residential development,

substantial forested areas remain, particularly along Pine Lake Creek, which has historically supported kokanee salmon runs. The City emphasizes the incorporation of considerations for future development and climate resilience into the Basin Plan. A key aspect of the planning process involves active community engagement, wherein stakeholders participate in meaningful discussions to articulate their priorities, identify existing challenges, and propose viable solutions. This collaborative approach underscores the commitment to ensuring the enduring health and sustainability of the watershed.



The Sammamish Pine Lake Creek Basin Plan in-person open house was attended by over 35 community members.

PURPOSE

On March 28, 2024, the city held an in-person open house from 5:30 -7 p.m. in the Sammamish City Hall City Council Chambers. The primary objectives of the open house were to share and get community feedback on potential strategies and projects identified through the project and at the September 2023 open house.

NOTIFICATION

The project team used a variety of methods to promote the March 28 in-person Open House. These included:

- Sending a postcard to approximately 3,000 addresses within the project area
- Social media posts
- Posting event information on the City's website
- Sending emails to individuals on the project contact list

OPEN HOUSE OVERVIEW & FORMAT

Approximately 36 people attended the Open House. The event featured a welcoming booth and 15 display boards in the City Hall's council chambers. The display boards shared how the public process helps to shape the Sammamish Pine Lake Creek Basin plan; summarized the feedback and issues identified by the public to date; and summarized potential project and strategies for participants to provide input. Attendees were encouraged to ask questions and to express their opinions and suggestions by completing comment forms and using sticky notes, which are detailed in Appendix A of this summary.



Attendees participated in the open house through discussion with project staff, viewing project display boards, and providing written comments.

PARTICIPANT FEEDBACK

Attendees provided feedback in numerous ways, which included 8 comment forms and 30 sticky notes. Participants shared their thoughts and suggestions on, protection- and education-oriented strategies, stormwater, and creek improvement projects. Key themes and suggestions voiced by attendees are organized below:

Protection-Oriented Strategies:

 The city's management and use of Native Growth Protection Area
 Easements was questioned in the open house, suggested they could be used for beneficial actions like invasive species removal and tree pruning. A WHAT DO WE KNOW SO FAR?

WATERSHED ISSUES AND CHALLENEGES

STORMWATER MANAGEMENT

• Undersized ditches and loss of wetland storage leading to flooding and erosion

• Need ponds and infiltration facilities to reduce flooding

• Older development was not required to provide as much stormwater treatment

• Sediment and water quality

• Erosive flows

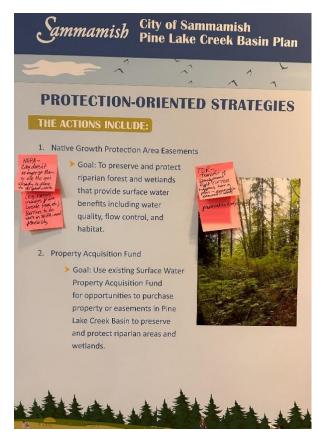
CLIMATE CHANGE

• Can expect more frequent and intense rain storms

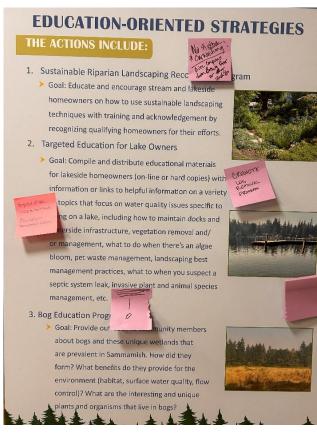
Attendees provided their thoughts and suggestions on the "what do we know so far" board.

- need for flexibility, which could be limited by NGPA requirements was emphasized.
- Attendees also proposed Transfer of Development Rights (TDR) as a solution, stressing the importance of establishing a plan for conservation elements and identifying preservation tools.

• Implement measures to protect the redwood trees situated between ELSP and Lake Sammamish.



Attendees posted their notes on the Protection-Oriented Strategies display board.



Attendees posted their notes on the Education-Oriented Strategies display board.

Education-Oriented Strategies:

- Recommend educating the public to refrain from washing their cars on their properties, citing concerns about chemicals flowing into Pine Lake. They also proposed distributing coupons for use at Brown Bear Car Wash as an alternative.
- Suggested implementing an educational campaign regarding a creosote log removal program.
- Raised the issue of managing creosote-treated bulkheads.
- Education to the public about the value and importance of sphagnum bogs. Participants suggested providing background information on the prevalence and significance of sphagnum bogs, emphasizing the rarity and need for protection.
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Potential Stormwater Projects:

- Ensure potential projects allow water from Pine Lake Creek to expand into the wetland area on the north side of SE 24th and west side of 212th, without channelizing the creek between projects 6 and 8.
- Address runoff from city property, which is contributing to soap pollution in the lake.
- Commendations to the street crew for their response on SE 19th in January.
- Support using existing detention areas at 11 and 15 to enhance performance under various conditions.
- Explore options and funding sources for removing invasive weeds along the waterline, particularly in the southwest corner of the lake. Note that while the King Conservation District has conducted invasive removal away from the lake, they do not handle shoreline removal.
- Investigate differences in water quality parameters, especially at the lake's eastern end, and consider implementing monitoring measures. Additionally, address phosphorus (P) accumulation in the lake's mucky shoreline.

Potential Pine Lake Creek Projects (Upper Basin):

• Support for restoring the stream at the vacant property located at Upper Pine Lake NE 24th and 212th, including re-channelizing the stream where necessary.

Other Ideas for Strategies and Actions:

Lake

- Call for Lake Invasive Weed Control:
 - Urgent need for control measures to manage invasive weeds in the lake.
 - Request for assistance in cleaning up pond weed; clarification needed on responsible parties and methods.
 - Support homeowners in removing pond weed; specific guidance and assistance required.
- Survey for Lake Management Organizations:
 - Propose surveying lake residents to establish lake management organizations focused on weed mitigation and water quality improvement.
- Removal of Plastic on Lake Bottom:
 - Require the removal of plastic/tarps laid by homeowners on the lake bottom to prevent environmental harm.
- Guidelines for Floating Devices:
 - Establish guidelines for floating docks and devices to prevent littering and pollution of the lake.
- Permission for Invasive Species Removal:

 Advocate for permission to remove invasive species, which are rapidly spreading in the south end of Pine Lake.

Shoreline

- Shoreline Invasive Plant Removal:
 - Homeowners should be permitted to remove shoreline invasive plants such as iris and lilies in the lake.
- Pine Brook Meadows HOA seeking sources of funding for the removal of invasive plants like yellow flag iris and blackberry bushes along the shoreline.
- Permit for Chemical Weed Control:
 - Seek assistance in obtaining permits for the use of chemicals in weed control efforts.
- Request to Limit Lawn Fertilization:
 - Encourage homeowners near lakes or creek basins to refrain from fertilizing their lawns to prevent nutrient runoff.



Attendees made additional suggestions for strategies and actions.

The following is a summary of the input collected from the comment forms completed at the open

house; the scanned comment forms are included in Appendix B.

Basin/Stream projects & strategies:

- Should tree cover changes in the basin be considered? There may be a need to review and adjust tree removal policies in affected areas.
- Request for code enforcement of grading violations in the buffer zone, particularly at SE 24th and 212th, where a long-standing violation persists along Pine Lake Creek.
- Educational initiatives for landowners could help enhance understanding and compliance with regulations.



Attendees listen to a brief presentation about the Pine Lake Creek Basin Plan.

• Attention given to Project #3 Area to ensure the preservation of the eagle's nest, which has been in existence for nearly 30 years. Displacement or disturbance of the nest should be avoided.

Lake projects & strategies:

- Concerns about maintenance of Pine Lake weir.
 Described as it often breaching in late spring,
 leading to excessive water release that results in insufficient water levels by late summer.
- Shoreline vegetation management: Homeowners on Pine Lake need clearer guidelines and allowances for removing invasive shoreline plants like iris, lily pads, and watercress. Additionally, addressing the issue of falling water levels on the west end of the lake is necessary.
- Pond weed proliferation: The problem of pond weed in Pine Lake has escalated noticeably over the past 5-6 years, especially area near QFC, causing congestion in the lake by summer. Concerns arise about its impact on the lake's health, prompting a call for action.
- Clarity on waterfront regulations: Lakefront property owners feel apprehensive about making any changes due to fear of unknowingly violating regulations. There's a plea for transparency, openness, and upfront communication in the education program regarding waterfront regulations.



A project team member points out the project area for an attendee at the Open House.

- **City responsibility for lake management:** Suggested that the City needs to take responsibility for maintaining Pine Lake's water quality and managing lake weeds, considering Pine Lake as a valuable citywide resource.
- Invasive species management: There's a suggestion that either the City or homeowners should be permitted to address the invasive species infestation. Over the past two decades, the south end of Pine Lake has been overtaken by invasive plants, leading to significantly reduced water levels by July/August.
- **Pine Lake Weir Repair**: An attendee provided a letter (dated 1984-85) regarding the history of the weir. The letter is included in Appendix C.

NEXT STEPS

The project team will use the feedback from this Open House to inform the Pine Lake Creek Basin plan. Please visit the City's website for updates and ways to stay involved: Pine Lake Creek Basin Plan | City of Sammamish.

City of Sammamish Pine Lake Creek Basin Plan WHAT DO WE KNOW SO FAR? WATERSHED ISSUES AND CHALLENEGES STORMWATER MANAGEMENT Undersized ditches and loss of wetland storage leading to flooding and erosion Need ponds and infiltration facilities to reduce flooding Older development was not required to provide as much stormwater treatment Sediment and water quality > Erosive flows Rockment Kell de CLIMATE CHANGE > Can expect more frequent and intense rain storms SE 24m St



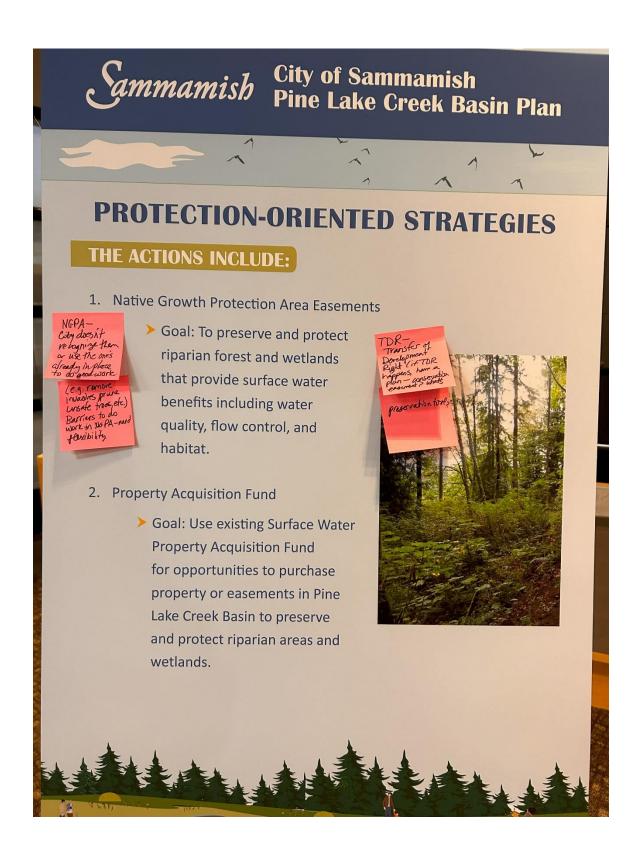


POTENTIAL PINE LAKE CREEK PROJECTS (UPPER BASIN)



PROJECT #	PRIMARY BENEFIT	SECONDARY BENEFIT	PROJECT DESCRIPTION
6	Water Quality	Habitat	Remove sediment at bridge abutments.
7	Flow	Water Quality	Retrofit detention pond to increase flow control and accommodate future growth.
8	Flow	Habitat	Improve drainage in vicinity of 212th Ave SE and SE 24th St intersection.
9	Flow	Habitat	Expand conveyance to reduce road overtopping along 212th Ave SE.

EDUCATION-ORIENTED STRATEGIES THE ACTIONS INCLUDE: 1. Sustainable Riparian Landscaping Reco gram Goal: Educate and encourage stream and lakeside homeowners on how to use sustainable landscaping techniques with training and acknowledgement by recognizing qualifying homeowners for their efforts. 2. Targeted Education for Lake Owners Goal: Compile and distribute educational materials (REGIOTE for lakeside homeowners (on-line or hard copies) with information or links to helpful information on a variety SEDEREN topics that focus on water quality issues specific to ng on a lake, including how to maintain docks and terside infrastructure, vegetation removal and/ or management, what to do when there's an algae bloom, pet waste management, landscaping best management practices, what to when you suspect a septic system leak, invasive plant and animal species management, etc. 3. Bog Education Progr Goal: Provide out munity members about bogs and these unique wetlands that are prevalent in Sammamish. How did they form? What benefits do they provide for the environment (habitat, surface water quality, flow control)? What are the interesting and unique plants and organisms that live in bogs?



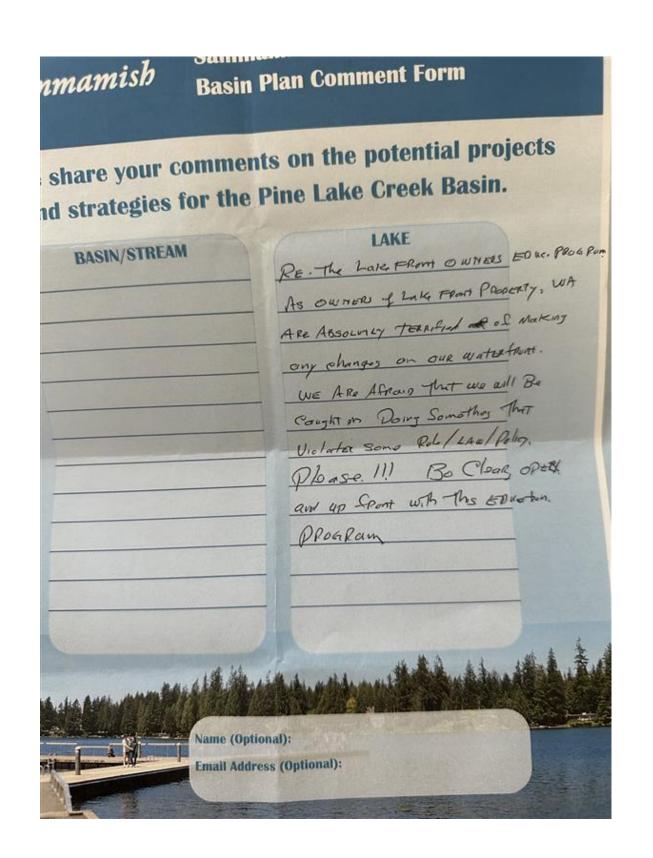
Appendix B: Notes from Comment Forms

Sammamish	Sammamish Pine Lake Creek Basin Plan Comment Form					
Please share your comments on the potential projects and strategies for the Pine Lake Creek Basin.						
BASIN/STREAM Do we need to to into consideration cover + loss in + BASIN BASIN read just these areal areal	LAKE					

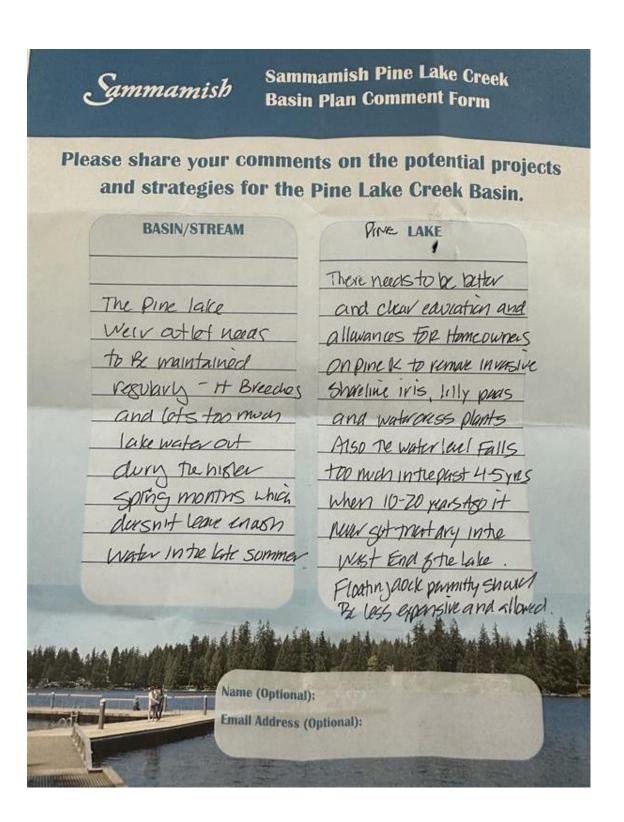
Sammamish	Sammamish Pine Lake Creek Basin Plan Comment Form
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Sammamish	Sammamish Pine Lake Creek Basin Plan Comment Form
and strategies	omments on the potential projects for the Pine Lake Creek Basin.
Please do not or drottub The nest. They he	displace
there for wear	arly 30

BASIN/STREAM	RE! Pive Lake
	pond weed gets worse every year. This was NOT an
	year. This was Not an
	Brue 5-6 years ago. Now
	the part of the lake near
	OFC is really longested with this weed by Summer.



Sammamish Pine Lake Creek Sammamish **Basin Plan Comment Form** Please share your comments on the potential projects and strategies for the Pine Lake Creek Basin. LAKE BASIN/STREAM Pine Lake Either the city should, on the homeowners should be allowed to remove the infestation of investie species 20 years ago the south end of Pine lake was clear with decent water plants have taken over and come Try / August, the labe is day at He forth end. consideration Name (Optional): Email Address (Optional):



Appendix C: Comment Letter from An Attendee

Pine Lake Weir Repair

Related by Roger Ek, Chemical Engineer

Date: 1984-85

Issue:

Pine Lake was experiencing a significant algae bloom brought on by very high phosphorus levels.

The Pine Lake homeowners' association engaged the UW and USGS to study the water quality issue. Roger said that homeowners kicked in \$10 each. These funds covered the cost of contacting homeowners, and the remainder was used for the new weir.

There was an issue with the existing lake weir not holding the lake at the correct level.

The UW/USGS study concluded that the phosphorus loading was coming from the "bog" at the south end of the lake. It sounds like the UW/USGS study occurred before the development of the QFC commercial center.

Proposed Solution:

The proposed solution by Sammamish Plateau Water and Sewer District was to divert the seasonal stream that enters the south end of the lake to the Pine Lake Creek that drains into Lake Sammamish.

The District installed a 4 foot diameter diversion pipe. The diversion pipe runs from the south end stream (Blue Berry farm) to the Pine Lake outfall near the weir. The diversion pipe didn't work. Roger told me that in order to get the stream diversion to work, the District lowered the lake level by 3 feet.

Roger and Harvey Miller (civil engineer) attempted to remedy the low lake level with sandbags but the District immediately removed the sandbags. Roger and Harvey met with Ron Little, the District Manager, to impress on him that lakefront owners were materially impacted. The shallow cove south of Pine Lake Park had become a mud flat. As a result of Roger and Harvey's meeting, the District backed off its attempt make the diversion work by keeping the lake level low.

Next Steps:

Roger and Harvey contacted WA Dept. of Ecology regarding a permit to install a new weir. DOE said that a permit would be \$30,000. Alternatively, if the weir work cost less than \$2,500, no permit would be required. Roger and Harvey added Bill Wright to their team. Using a scrap steel H-beam, Roger welded up a new weir structure. Construction also included 4x10 treated lumber and a removable piece at the top so the lake lever could be adjusted. Since they used salvaged materials and volunteer labor, there was little cost associated with the new weir.

Other:

For many, many years, Harvey Miller documented and managed the lake level by adjusting the weir.

In 1980 USGS installed a lake level gauge on the Pine Lake Park dock. The lake level was continually recorded by Harvey. The lake level records were vital for setting and managing the height of the weir. This work successfully mitigated pervious lake level issues.