

Squaxin Island Tribe –Shelton, WA
REQUEST FOR PROPOSALS FOR LAKE MANAGEMENT FEASIBILITY STUDY
Mason Lake and Lake Limerick in Mason County

Date of RFP Request February 18, 2026, Proposals are due no later than **March 18, 2026 by 4:00 PM Pacific Time**. To obtain further details, please contact: Erica Marbet, emarbet@squaxin.us, 360-432-3804

U.S. Mail or Email, or hand deliver proposals to:

Erica Marbet
200 SE Billy Frank Jr Way Shelton, WA 98584
360-432-3804 emarbet@squaxin.us

Section 1.0: Introduction

Squaxin Island Tribe Natural Resources is soliciting bids for a Lake Management Feasibility Study at Mason Lake and Lake Limerick, both of which are located in Mason County, WA.

The Squaxin Island Tribe is a culturally and economically strong community of self-governing, resilient people united by shared values and traditions. While the Tribe's ceded lands include the South Salish Sea and beyond, the reservation is located between Shelton and Olympia, WA and of course, on Squaxin Island. The Tribe's administrative campus and housing area are located off Old Olympic Highway at the Little Creek Casino exit east of Highway 101. Mason Lake and Lake Limerick are near Tribe's reservation and in the Tribe's Usual and Accustomed Area.

The Sherwood and Cranberry watersheds are important places for the Squaxin Island Tribe. These watersheds were historically occupied by the Squawksin (Case Inlet) and Sah-Heh-Wa-Mish (Oakland Bay) communities, two of the seven Native American communities comprising the Squaxin Island Tribe¹. While these communities were relocated to the Squaxin Island Reservation following the Treaty of Medicine Creek, some remained along Sherwood and Cranberry Creek, and many others would eventually return to their saltwater inlets. They continued to hunt, fish, and gather throughout the area as they always had.

Section 2.0: Background/Watershed Descriptions

The Squaxin Island Tribe has been continuously measuring streamflow at Sherwood Creek since 2006 and at Cranberry Creek since 2003. Sherwood Creek is downstream of Mason Lake, and Cranberry Creek is downstream of Lake Limerick (Figure 1). At both stream gages, the Tribe has registered dramatic changes in streamflow in response to small changes in lake level. We know that streamflow is significantly affected by the pattern of lake outflow as lake levels change. Our objective is to do a feasibility study for the management of lake levels in these two lakes.

Sherwood Creek and Cranberry Creek have unmet instream flows during low flow periods of the year that are critical for fisheries, and both of these streams are subject to closure (Figures 2 and 3)². Cranberry Creek was placed on Washington State's 303(d) list for temperature in 2004³. Lake Limerick is the primary driver of increased temperature in Cranberry Creek (Figure 4)⁴.

Mason Lake is a 966 acre lake upstream of Sherwood Creek (Figure 5). The outlet of the lake is a 20 ft gap that appears to have been modified by humans earlier in the 20th century (Figure 6). Now, the lake outlet is much loved by industrious beavers (Figure 7). Random humans occasionally pull their dams or add some debris in order to raise or lower the lake level. The beavers get busy again modifying and

building. In other words, the management of the lake outlet and the lake level is haphazard. The Tribe monitors streamflow in Sherwood Creek all the way down in Allyn, and we can see huge swings in flow when the lake outlet gets modified. This is especially notable when a human breaks a dam in late summer, and a big pulse of flow keeps the creek up 10 cfs for ten days (Figure 8). For this reason, we know that, by deliberately managing the lake outlet, we could ensure that flow remains at least 1.0 cfs higher during July, August, and September. We could also ensure that no humans or beavers unintentionally lower the level of Sherwood Creek, while still allowing beavers to be active around the lake outlet.

Lake Limerick is a 132 acre lake upstream of Cranberry Creek (Figure 9)- This lake is a manmade lake with a weir and fish ladder (Figure 10). When the Lake Limerick Homeowners Association (HOA) adds weir boards, the flow in Cranberry Creek decreases (Figure 11). When the Lake Limerick HOA removes weir boards, the flow in Cranberry Creek increases (Figure 11). The HOA is careful to minimize impacts on Cranberry Creek flow. The Tribe has similar questions about Lake Limerick as about Mason Lake: Is there a way to effectively store and release some flow in late summer? Our objective is to get as much as 0.14 cfs into Cranberry Creek during the dry season. Also, as we enter a period with wetter winters and drier summers, are the weir and fish ladder designed so that water will always flow over the fish ladder?

Section 3.0: Project Objectives/Scope of Work/Deliverables

Objectives

This feasibility study aims to improve streamflow in Sherwood Creek and Cranberry Creek in Mason County. The study will evaluate whether the lake outlets on Mason Lake (feeds into Sherwood Creek) and Lake Limerick (feeds into Cranberry Creek) can be reconfigured to manage lake levels that provide downstream benefits to improve streamflow and fish habitat during the dry season.

The Squaxin Island Tribe will provide:

Sanderson Field Precipitation record from 2007 to 2024.
Continuous streamflow and temperature records from 2007 to 2024.
Seepage run flow measurements from a few summers.
Continuous lake level and temperature measurements from 2015-2024.

Scope-of-Work: Separate costs need to be estimated for the Tasks and Sub Tasks as well as for all work items in this RFP. Estimated average unit rates on which costs are based should be included with the proposal. The work efforts for this project will fall into the following tasks:

Task 1.0: Quality Assurance Project Plan Development for Tasks 2 and 3

The following activities will be included in the QAPP:

- A. *Roughly* estimate water budget for contributing watershed (precipitation, evapotranspiration, lake evaporation, groundwater flow, groundwater pumping, and streamflow).
- B. Compare existing records of lake levels to existing records of streamflow.
- C. Collect additional lake level data if needed.
- D. Assess whether lake temperature is a primary driver of creek temperature.
- E. Professional survey of lake outlet for key elevational controls, etc., and impacts to human structures from rising and falling lake levels.
- F. Estimate lake complex and adjacent wetland storage and potential additional capacity.
- G. Field reconnaissance visits as part of other QAPP activities.

Deliverable: Quality Assurance Project Plan that includes uploading of collected data to Ecology's Environmental Information Management (EIM) database. Two rounds of edits based on Ecology's responses.

Task 2.0: Mason Lake Management Feasibility and Design (Identical to Lake Limerick Task 3)

- A. *Roughly* estimate the water budget for the contributing watershed by using existing data (precipitation, evapotranspiration, lake evaporation, groundwater flow, groundwater pumping, and streamflow) available from NOAA, USGS, and other sources.
- B. Determine how lake level changes drive changes in streamflow.
- C. Use existing lake and stream temperature data to ascertain whether releasing lake water could negatively impact downstream temperatures.
- D. Conduct site visits and document their observations in field notes.
- E. Conduct a professional survey of the lake outlet and determine the most vulnerable human structures (docks, boathouses, storage, septic systems) to rising and falling lake levels.
- F. Estimate lake complex and adjacent wetland storage and potential additional capacity.
- G. Develop 30 percent outlet flow control design modifications along with cost estimates for construction and long-term maintenance.
- H. Make a short presentation at two public meetings.

Deliverables:

- 1. Technical Memo-Watershed Analysis. Includes A, B, and C.
- 2. Technical Memo- Lake Inundation Analysis- Includes results of Tasks D, E, and F.
- 3. Technical Memo-Lake Outlet Configuration with 30% designs and construction and maintenance cost estimates (Task G).
- 4. Two short PowerPoint presentations, one each for two public meetings.

Task 3.0: Lake Limerick Feasibility and Design (Identical to Mason Lake Task 2)

- A. Estimate the water budget for the contributing watershed by using existing data (precipitation, evapotranspiration, groundwater flow, groundwater pumping, and streamflow) available from NOAA, USGS, and other sources.
- B. Determine how lake level changes drive changes in streamflow.
- C. Use existing lake and stream temperature data to ascertain whether releasing lake water could negatively impact downstream temperatures.
- D. Conduct site visits and document their observations in field notes.
- E. Conduct a professional survey of the lake outlet and determine the most vulnerable human structures (docks, boathouses, storage, septic systems) to rising and falling lake levels.
- F. Estimate lake complex and adjacent wetland storage and potential additional capacity.
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Section 4.0: Indian Preference.

Indian preference may be used in the purchase of goods or services. Indian preference is preferential treatment in securing goods and services from Alaska Natives and Indians, or Indian owned businesses, as provided in Public Law 93-638, Section 7(b) Indian Self Determination and Education Assistance Act, January 1975.

Unless federal law or the source of funds requires a different consideration, an enrolled member of the Squaxin Island Tribe or business majority owned by an enrolled member of the Squaxin Island Tribe shall be considered first among all Preference Applicants.

- In circumstances where cost is the determining factor in decision making, Indian Preference will apply to bids that are within ten percent (10%) of the lowest bid submitted by a qualified bidder not claiming Indian Preference, provided that the successful Indian applicant agrees to perform the work at the cost of the lowest bid submitted by a qualified bidder not claiming Indian Preference.

- In circumstances where issues in addition to cost form a part of the decision making, for example design, experience, and/or timeliness, Indian Preference will be considered in the cost element only. In such circumstances, the bid documents will identify the relevant elements and the scoring methodology to be used. The Tribe shall offer a contract to a qualified Indian applicant provided the qualified Indian applicant agrees to perform the work at the cost of the lowest bid submitted by a qualified bidder not claiming Indian preference; provided further that, the qualified Indian applicant scores equal to or higher than all other applicants for all non-cost elements.

- Indian Preference will apply to subcontracts where the subcontract is equal to or greater than ten percent (10%) of the total contract or Five Thousand Dollars (\$5,000), whichever is less. In such cases, when a subcontract or supplier bid offered by an Indian bidder is within ten percent (10%) of the low bid, and meets all other bid requirements, the Contractor shall select the Indian bidder, provided that the Indian bidder agrees to perform the work at the cost of the lowest bid of a qualified bidder not claiming Indian Preference.

Section 5.0: Qualifications

- (a) Include descriptions of roles for key personnel/subcontractors expected to work on this project, their work experience and certifications.
- (b) Provide recent examples water resource management projects completed by your firm.
- (c) Give examples of working with tribal, federal, state and local regulatory agencies.

Section 6.0: Claims History and Professional Integrity

- (a) Provide an accurate summary of any claims initiated against your firm in the past five (5) years and any currently pending claims.
- (b) Provide a certified statement that the firm is not debarred, suspended or otherwise prohibited from professional practice by any federal or state agency.
- (c) The proposing entity must supply a statement that they and their firm presently has no interest and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of the services contemplated by the agreement with the Squaxin Island Tribe, No person having such interest shall be employed by or associated with consultant during the term of this agreement.

Section 7.0: Submittal Procedures

The proposal should include anticipated schedule and time/material cost estimates for the activities listed above. Time should be allowed in the schedule for the Tribe to review and revise draft deliverables and for preparation of final documents. Unit rates on which costs are based should be included with the proposal and a timeline.

Proposals are due no later than March 18, 2026 at 4:00 pm Pacific Standard Time to the

contact listed at the beginning of this RFP and below. Submit 1) an electronic copy, or 2) two hard copies by mail, or 3) hand deliver two hard copies.

Section 8.0: Selection Process

An Evaluation Committee comprised of Squaxin Natural Resources staff will review each proposal. The Squaxin Island Tribe reserves the right to ask questions of clarification of any or all firms as part of its evaluation. Criteria for rating firms will include the following:

- 15%** The firm's reputation for personal and professional integrity and competence; ability to work with other entities and persons;
- 25%** Professional and educational experience of key personnel to be assigned to the project and the firm's experience;
- 25%** Ability of the firm to provide required services and to perform the required work within the project period;
- 25%** Costs associated with the scope of work. (Final costs will be negotiated with the selected firm upon submittal of a detailed work plan);
- 10%** Any consideration that would be in the best interest of the Squaxin Island Tribe.

This RFP does not commit the Squaxin Island Tribe to award a contract nor pay any cost incurred in the preparation of the proposals. The Squaxin Island Tribe also reserves the right to reject any and all proposals because of non-conformance and to waive any irregularities and informalities and to re-advertise when it is in the best interest of the Tribe.

Section 9.0: Notice of Award

After the Evaluation Committee has reviewed and scored the submitted proposals, an announcement shall be issued to all parties that submitted proposals. The estimated date of selecting a contractor/consultant is April 15, 2026.

Questions or to schedule a site visit please contact: *Erica Marbet, Water Resources Biologist, 360-432-3804, emarbet@squaxin.us and M-F 7:30-4:00.*

CITATIONS

1. Squaxin people- <https://squaxinland.org/government/who-we-are/>
2. Instream flow rule for Sherwood and Cranberry Creeks WAC 173-514.
<https://apps.leg.wa.gov/wac/default.aspx?cite=173-514>
3. Listing ID: 23752, Washington State Water Quality Assessment, 303(d)/305(b) List
<https://apps.ecology.wa.gov/approvedwqa/approvedpages/viewapprovedlisting.aspx?ListingId=23752>
4. Cranberry, Johns, and Mill Creeks Temperature Characterization Study
WA State Dept. of Ecology June 2018 Publication No. 18-10-022
<https://apps.ecology.wa.gov/publications/documents/1810022.pdf>

FIGURES

**Mason and Limerick Lake Management for Streamflow Benefit Feasibility Study
Squaxin Island Tribe
February 18, 2026**

Figure 1. Vicinity Map2

Figure 2. Sherwood Creek flow relative to the WAC 173-514-030 instream flow rule based on the Squaxin Island Tribe’s long-term monitoring.3

Figure 3. Cranberry Creek flow relative to the WAC 173-514-030 instream flow rule based on the Squaxin Island Tribe’s long-term monitoring.4

Figure 4. Pg. 19 of Cranberry, Johns, and Mill Creeks Temperature Characterization Study., Ecology, June 2018, Publication No. 18-10-022.5

Figure 5. Mason Lake and Sherwood Creek.6

Figure 6. Outlet of Mason Lake is a narrow gap that appears to have been made slightly more narrow by humans during past logging in the 20th century. The outlet is currently 20 ft wide.7

Figure 7. Outlet of Mason Lake a) with beaver dam, b) without beaver dam. Yellow arrows indicate old control structures from earlier in the 20th century.8

Figure 8. Example relationship of creek flow (blue) to lake level (orange). When a beaver dam is removed from the outlet of Mason Lake, the lake level drops 0.3 ft over about 10 days. This causes a significant increase in streamflow at the Tribe's Sherwood Creek gaging station. The flow essentially triples from just under 10 cfs to about 30 cfs, and the flow remains elevated for about 10 days.9

Figure 9. Lake Limerick and Cranberry Creek..... 10

Figure 10. The weir and fish ladder at Lake Limerick as viewed from a) upstream and b) downstream. 11

Figure 11. Streamflow in Cranberry Creek at Highway 3 near Oakland Bay in April 2021. Each drop in flow results from installation of a weir board at Lake Limerick. Regular diurnal fluctuations result from evaporation and transpiration in the watershed. Some rainfall occurred in the vicinity of April 24, 2021, and so that may have caused the Lake Limerick Homeowners Association to adjust the weir boards..... 12

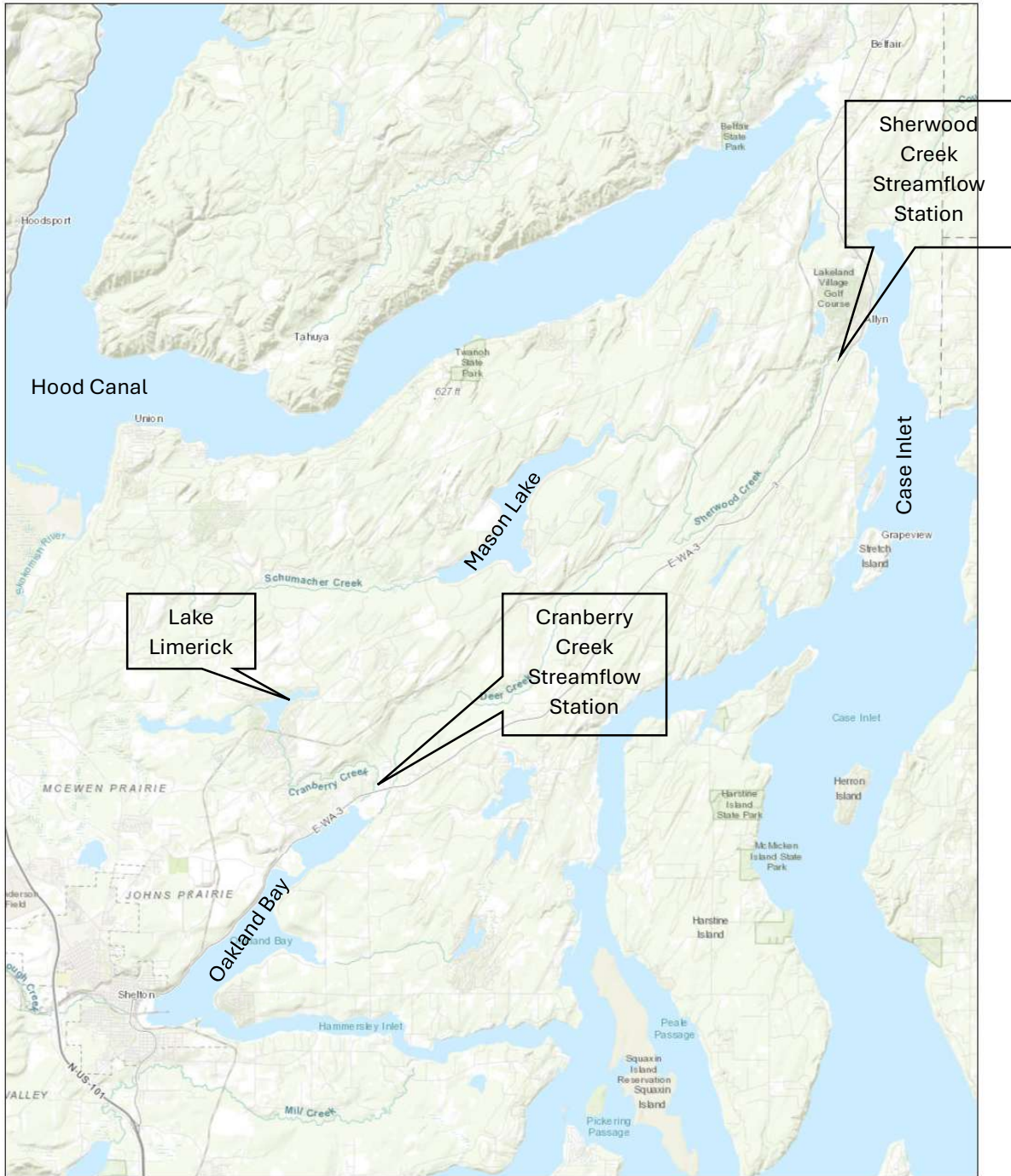


Figure 1. Vicinity Map

Lat 47.371609
Long -122.843795

SHERWOOD CREEK at SHERWOOD CR RD

Flow exceedance Probability Hydrograph

RM 0.3; Period of Record: 2008 - 2021

- 10% exceedance
- 50% exceedance
- 90% exceedance
- Instream Flow RM 0.14

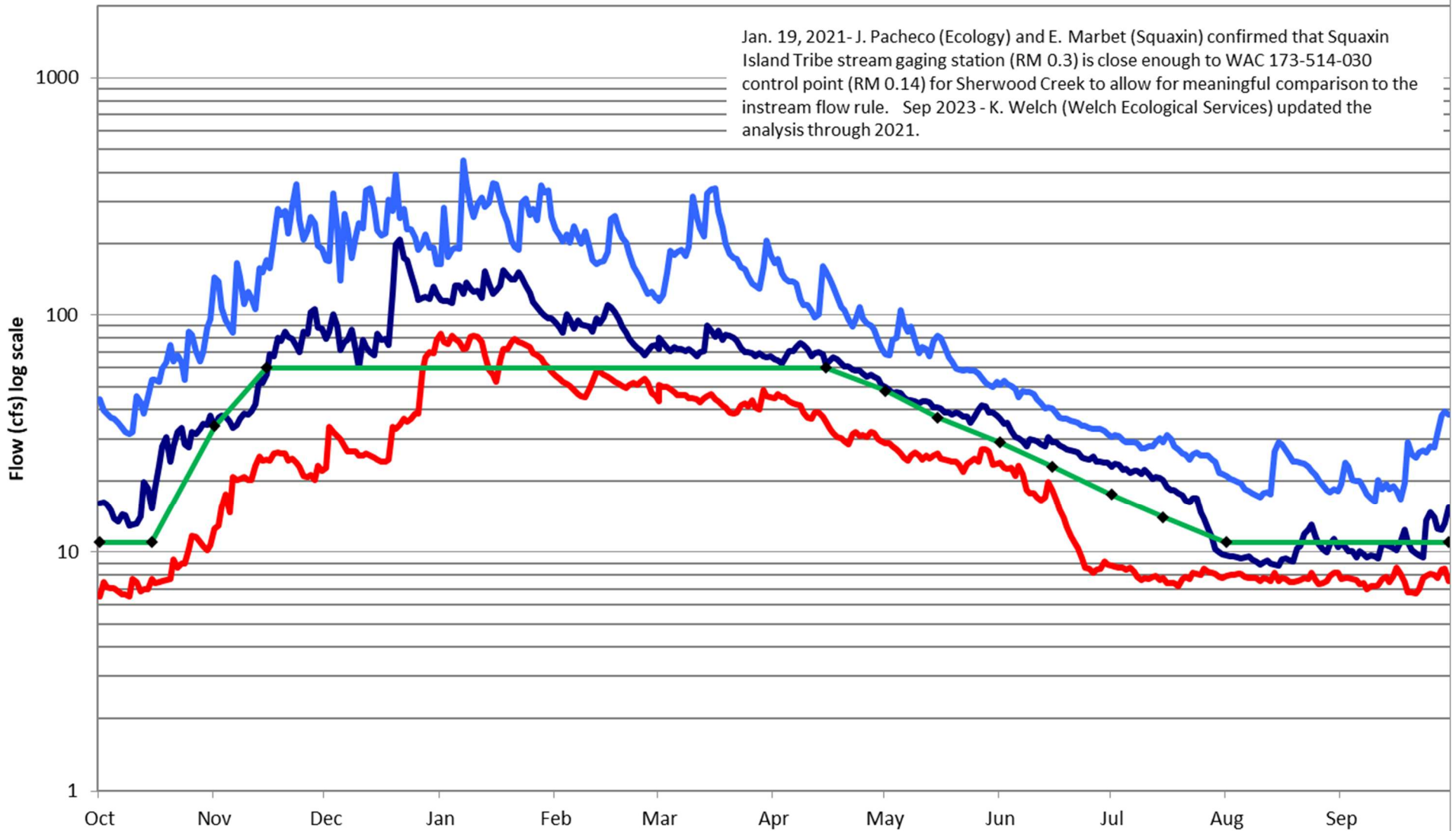


Figure 2. Sherwood Creek flow relative to the WAC 173-514-030 instream flow rule based on the Squaxin Island Tribe's long-term monitoring.

Lat 47.264634
Long -123.011652

CRANBERRY CREEK AT HWY 3 Flow exceedance Probability Hydrograph RM 0.5; Period of Record: 2006 - 2021

- 10% exceedance
- 50% exceedance
- 90% exceedance
- Instream Flow RM 0.5

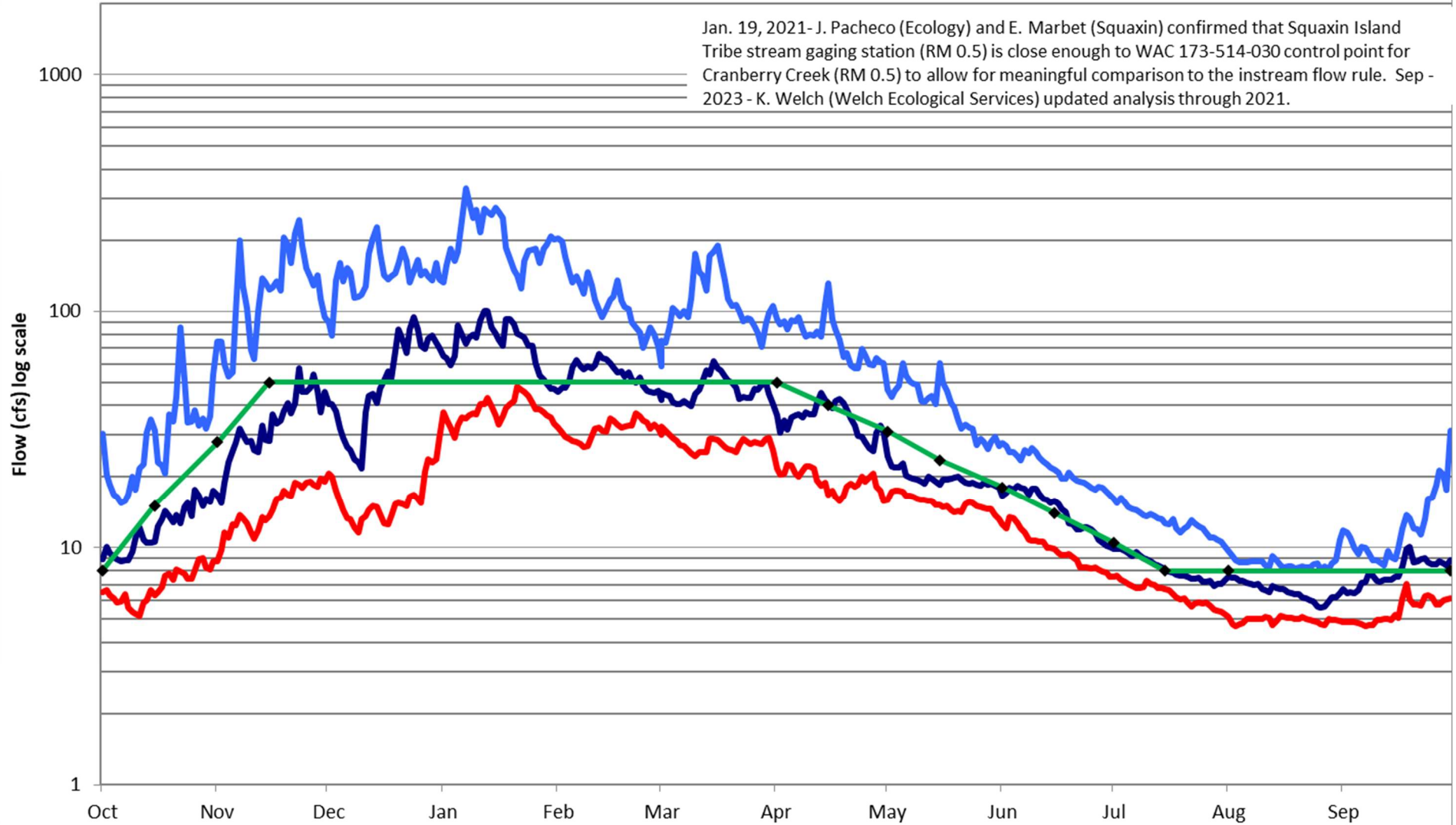


Figure 3. Cranberry Creek flow relative to the WAC 173-514-030 instream flow rule based on the Squaxin Island Tribe's long-term monitoring.

Figure 6 shows a longitudinal temperature profile for Cranberry Creek from the thermal infrared (TIR) survey. There was almost an 8°C drop in water temperature from the outlet at Lake Limerick to the mouth of Cranberry Creek at Oakland Bay. The cooling may be due to riparian shade and/or cooler groundwater inflow. Cooling also takes place in the 2100 feet of the stream stretch between Cranberry and Limerick Lakes. Figure 7 shows a plan view of the TIR survey with cooling temperatures towards the mouth of the creek. The flow at station CRA1, at the mouth of the creek, on the day of the TIR survey was 4.7 cfs.

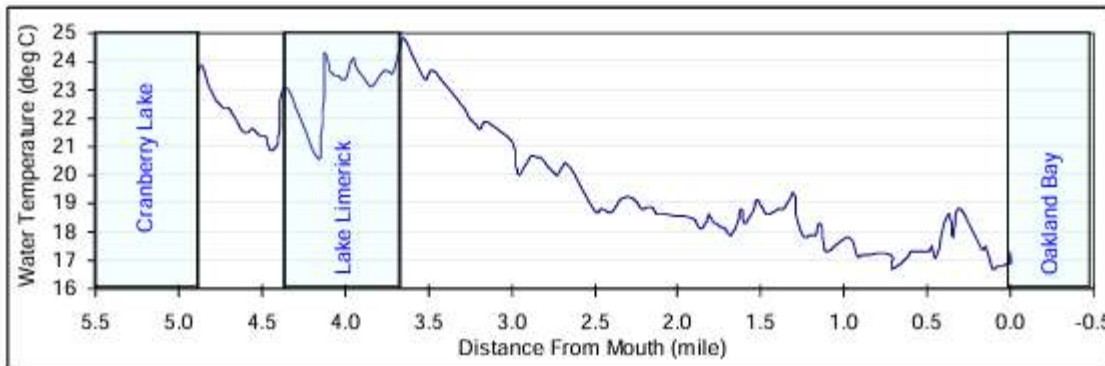


Figure 6. Longitudinal temperature profile in Cranberry Creek, August 2003.



Figure 7. TIR survey of Cranberry Creek showing decreasing temperatures towards the mouth of the creek.

Figure 4. Pg. 19 of Cranberry, Johns, and Mill Creeks Temperature Characterization Study., Ecology, June 2018, Publication No. 18-10-022.

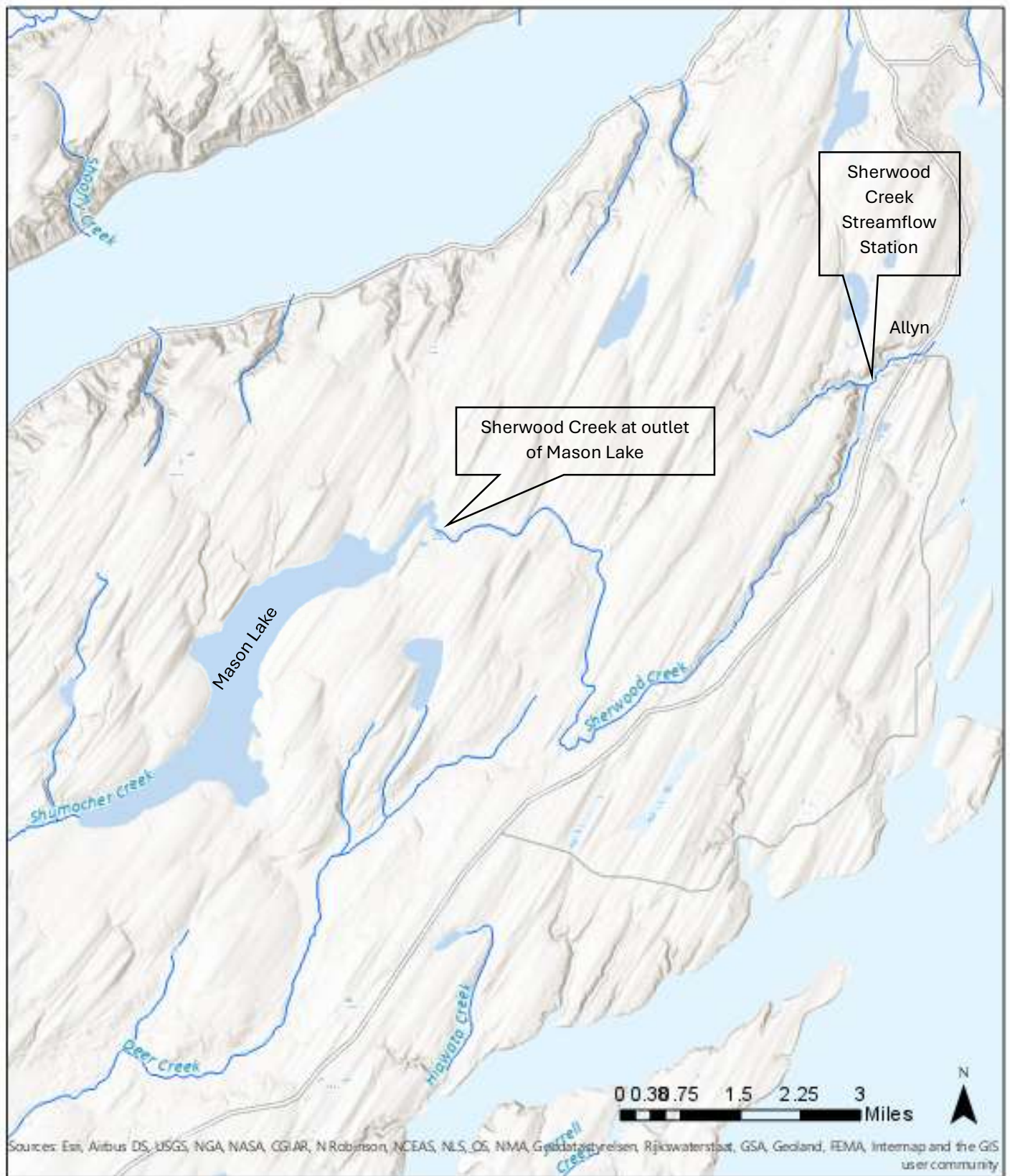


Figure 5. Mason Lake and Sherwood Creek.

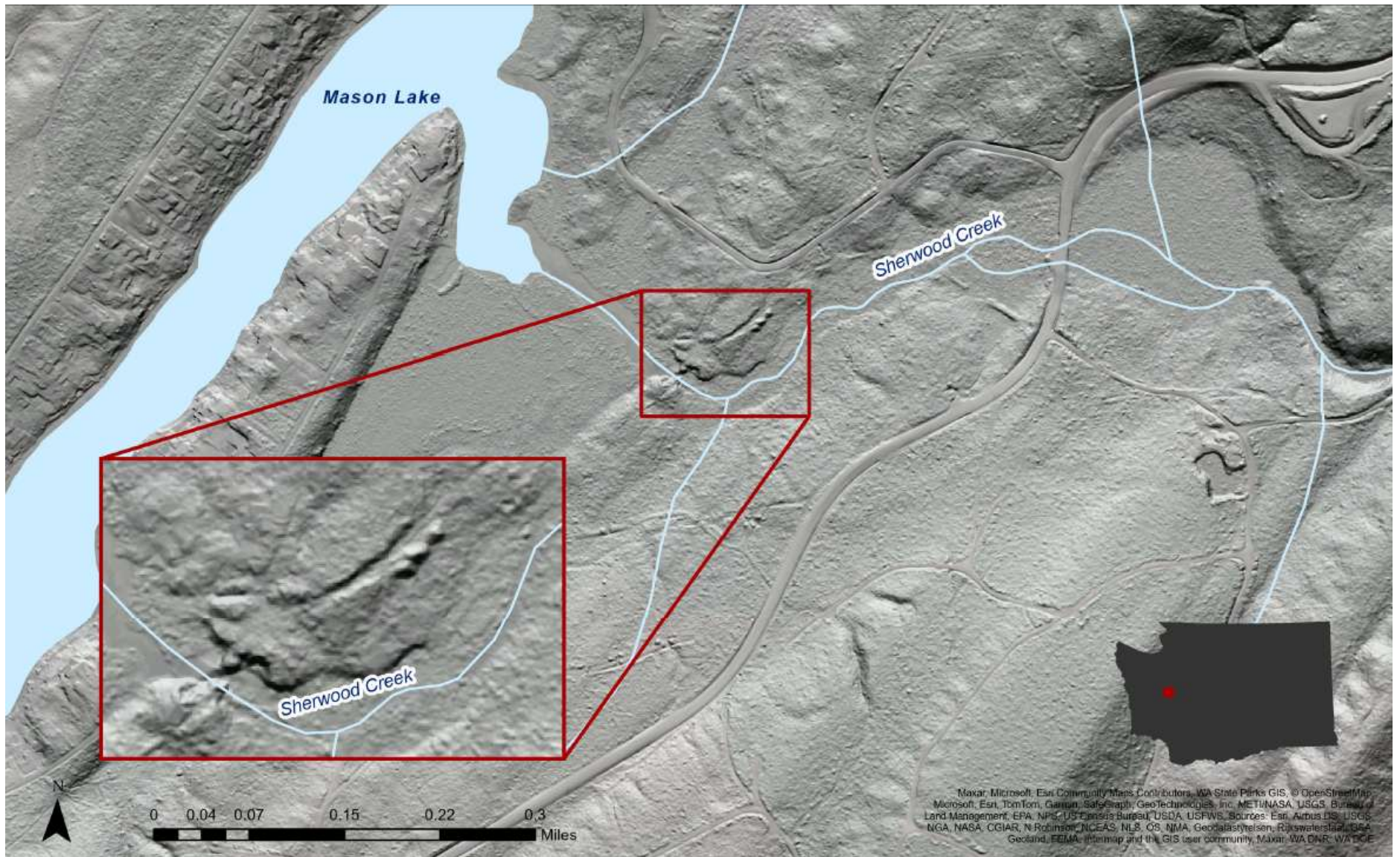


Figure 6. Outlet of Mason Lake is a narrow gap that appears to have been made slightly more narrow by humans during past logging in the 20th century. The outlet is currently 20 ft wide.



a



b

Figure 7. Outlet of Mason Lake a) with beaver dam, b) without beaver dam. Yellow arrows indicate old control structures from earlier in the 20th century.

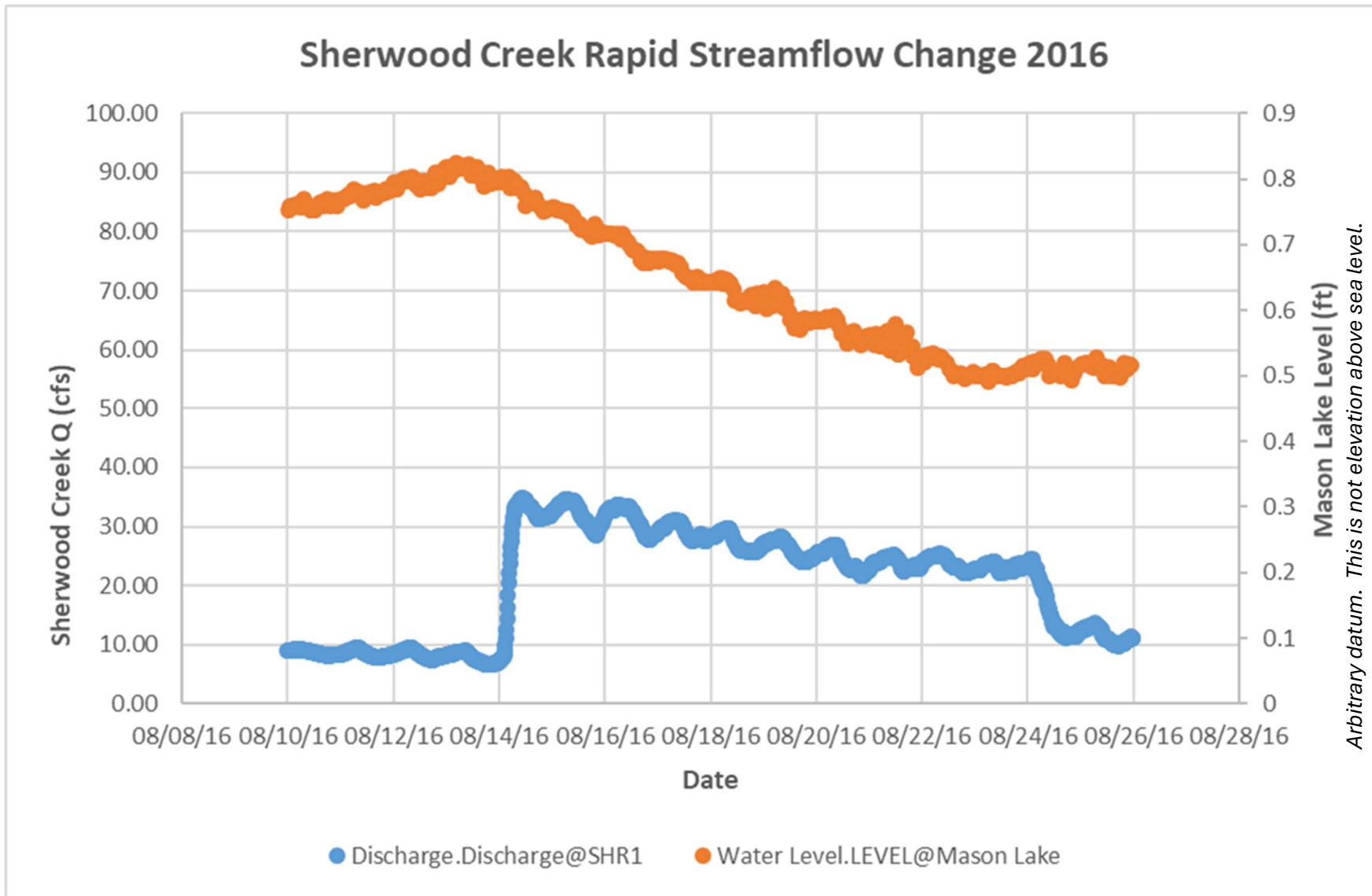


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Figure 9. Lake Limerick and Cranberry Creek.



a



b

Figure 10. The weir and fish ladder at Lake Limerick as viewed from a) upstream and b) downstream.

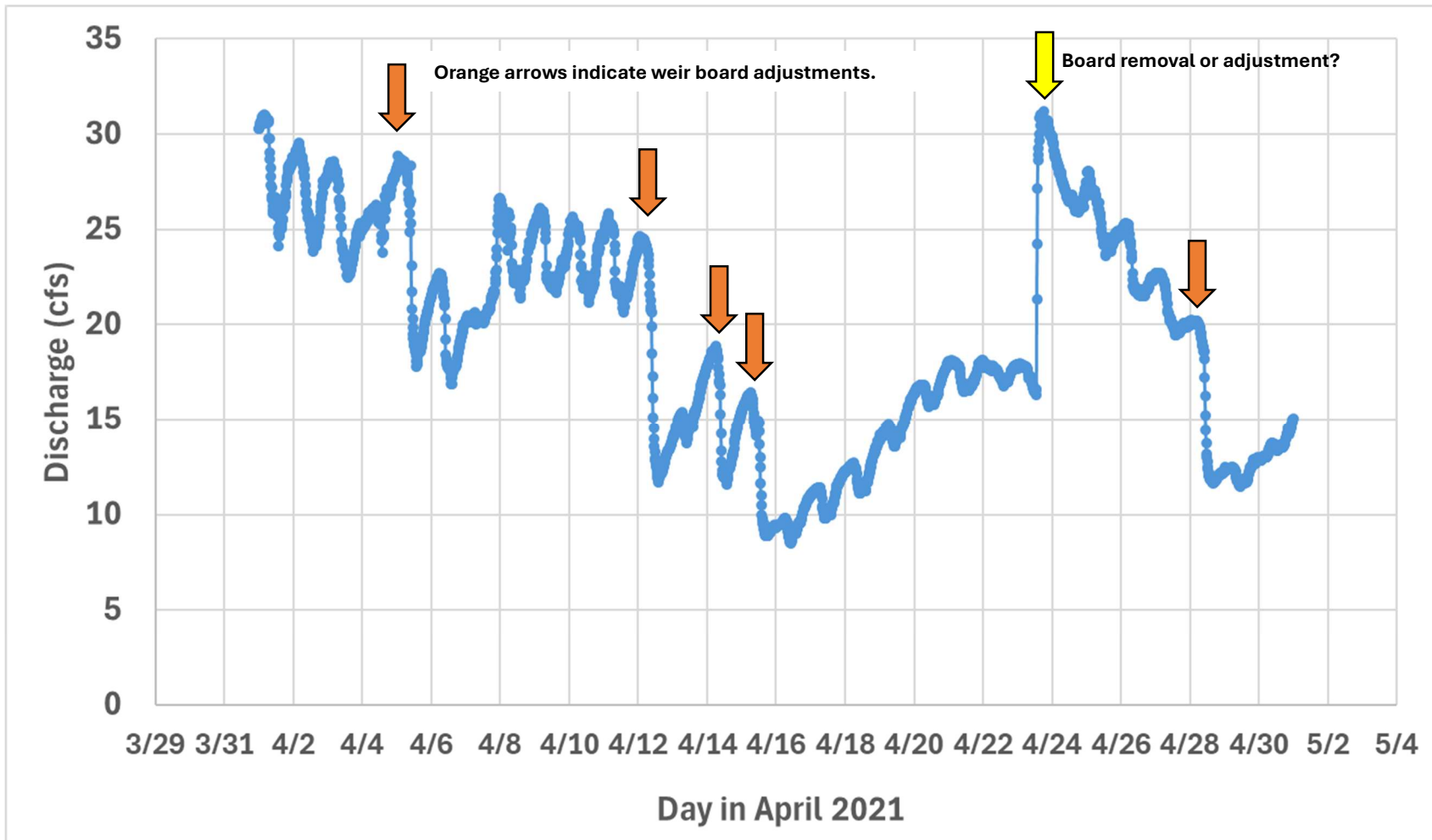


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