

March 9, 2023



WSSA seeks a commitment (to identify solutions to known problems and a corresponding action plan) from King County to eliminate damaging high-water levels and persistent flood events on Lake Sammamish:

1. Problem: Bear Creek Water Dam

The Sammamish River Flood Control Project (FCP) *directly* receives Bear Creek outflows into the FCP channel downstream of the transition zone. During peak water events, flows of more than three times the FCP's design for this creek are recorded. The result, as recognized by King County, is that a water dam forms, severely restricting the designed outflow from Lake Sammamish.

What We Are Asking:

King County (in partnership with the City of Redmond) needs to assess the sources of this problem, such as reduced detention capacity within the Bear Creek Basin, and propose solutions. To encourage this to happen, WSSA would ask you to do one or more of the following:

- A. Arrange a meeting with officials of those two jurisdictions and yourself, and WSSA if appropriate, to seek a near-term plan of action.
- B. Send a letter to appropriate officials of those two jurisdictions, signed by you but drafted by WSSA if you wish, appealing for a near-term plan of action.
- C. Make a case to your fellow council members for an initiative in this regard undertaken by the County Council.

2. Problem: Sammamish River Flood Control Project Capacity and Function

The Sammamish River is the sole outflow for Lake Sammamish, and the lake is a "receiving body" for the Lake Sammamish Watershed's stormwater. Lake Sammamish shoreline residents have repeatedly sustained property and shoreline damage during high water events when the FCP failed to drain adequately in response to the inflows. Lake Sammamish shoreline residents also report loss of property function and greater restrictions due to a raised ordinary high-water mark (OHM.)

What We Are Asking:

- A. Determine if an assessment is underway by any entity. Is this part of the CIS?
Will this assessment include measurements of the FCP flow capacity, and consider future performance with the current degradation of the project and potential additional degradation of not addressing the siltation, noxious weed overgrowth, LWD (Large Woody Debris) and any other regular maintenance?
- B. Determine if the assessment is intended to lead to an action plan to deliver adequate FCP capacity.
- C. If no assessment is underway, can you take steps to authorize one?

3. Problem: Incomplete Analysis of a Dynamic Weir

Given the backwatering effect of Bear Creek, the only feasible near-term solution to preventing damaging peak lake level events appears to be to reduce lake level in advance of forecast events so that the lake can buffer more water without going as high. WSSA has had ongoing conversations with the King County Flood Control District concerning flooding around Lake Sammamish and has requested a more thorough evaluation of a flood control concept to accomplish this called a Dynamic Weir. (As an example, see the attached draft RFP)

What We Are Asking:

- A. Can you help to make a thorough study happen?
- B. How can WSSA input aid in this process?
- C. Why has WSSA received silence on this issue?

4. Problem: Inadequate Monitoring Equipment

We find inconsistent and incomplete data from current gauges surrounding and within the Transition Zone, along the length of the Flood Control Project and along key inflows (natural and manmade) recording flow rates, water temperature, stage etc.

What We Are Asking:

Unspent grant money or other funding source to be used to update and add gauges and accomplish:

- A. Key gauges should: record a consistent set of data, be calibrated, report data in real time.
- B. There should be several gauges over the course of the Flood Control Project. Presently there is only one additional downstream gauge at 116th.
- C. Data from these gauges should support modeling of FCP performance and should be available online to the Public.

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