

## Category 4 Streams

Other small streams that have little to no recent spawner information and that likely have some limited potential for kokanee spawning.

The streams addressed in this section are generally smaller than those addressed in the prior sections. There is no recent anecdotal or formal record of kokanee use of these streams for spawning and they are not currently a focus of directed spawner monitoring. These streams are included in this Blueprint to recognize their potential, with some level of improvement in habitat conditions, to provide opportunities for periodic spawning use by relatively small numbers of kokanee and other salmonids.

### Other East Shore Tributaries

At this time, there is no suggested restoration project for kokanee in any of these creeks. An assessment of habitat conditions in these tributaries is needed before any proposal is added to the list of kokanee restoration projects. The shoreline area near most streams along the east shore is highly developed and it may be quite difficult to make any significant improvements.

### Southeast Tributaries

Within one mile northeast of the mouth of Laughing Jacobs Creek there are two small tributaries that could have some potential for kokanee spawning (Figure 26). These tributaries appear to have reasonable sized watersheds that may warrant further investigation into their spawning potential. Close to Laughing Jacobs Creek is Many Springs Creek (WRIA 08.0164); however, little information is available for this stream. The other tributary is stream 0163 (WRIA 08.0163), which is known to be a fish-bearing stream (Buitrago et al. 2008). Current use of this stream by kokanee is unknown. Culverts and weirs near the mouth of the creek and under the East Lake Sammamish Trail appear to be fish barriers. Replacement of the culvert under the East Lake Sammamish Trail to meet WDFW fish passage standards is considered feasible (Buitrago et al. 2008). The name of Stream 0163 is likely Alexander's Creek, which was listed as a historical kokanee spawning stream by Berge and Higgins (2003), although it appears to be mislabeled in that report.

Another possible stream in the southeast area is an unnamed tributary near SE 26th Street that was identified as a fish-rearing stream by Buitrago et al. (2008). The culvert under the East Lake Sammamish Trail is a fish barrier and replacement to meet WDFW fish passage standards is not considered feasible.



### Northeast Tributaries

North of George Davis Creek there are also a few small tributaries within relatively small watersheds (Figure 26). These streams appear to have mostly a steep gradient but there may be some lower gradient areas near the mouth that could support kokanee spawning. Their potential for kokanee spawning is unknown but is likely very limited. Four streams (WRIA 08.0143F, H, M and an unnamed tributary) are known to be fish-bearing streams (Buitrago et al. 2008); however, their potential for kokanee spawning is not known. For all four streams, a culvert under the East Lake Sammamish Trail is a fish barrier. Only the culvert on stream 0143H is considered feasible for replacement to meet WDFW fish passage standards.

Category One Streams

Category Two Streams

Category Three Streams

Category Four Streams

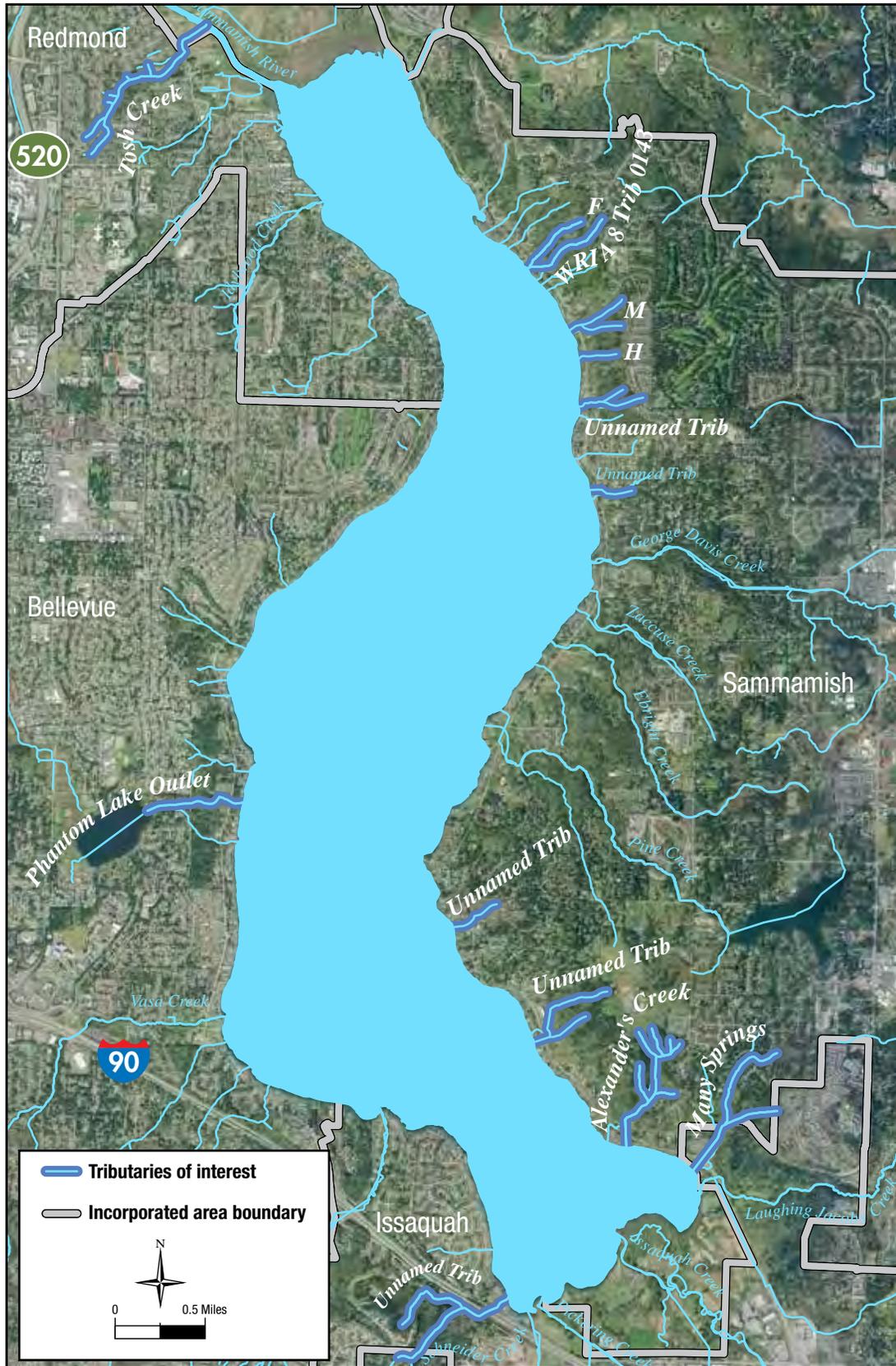


Figure 26. Map of the Lake Sammamish basin displaying other potential kokanee tributaries.

## Other West Shore Tributaries

Most other streams along the west shoreline of Lake Sammamish are generally small and have steep gradients and likely have limited habitat for kokanee spawning. At this time, there is no suggested restoration project for kokanee in any of these creeks.

*A few streams that need further investigation include:*

- **Phantom Lake outlet (WRIA 08.0154)**

The mouth of this small stream is 1.2 miles north of the mouth of Vasa Creek. This stream has a steep gradient but may be able to support a few kokanee spawners near the stream mouth.

- **Unnamed Tributaries in Southwest Shoreline of Lake Sammamish**

There are two small unnamed tributaries within the City of Issaquah in the southwest shoreline that need further investigation. Both tributaries drain off of Cougar Mountain. The first tributary enters Lake Sammamish about 0.2 miles west of the mouth of Schneider Creek. This stream has a steep gradient but may be able to support a few kokanee spawners near the stream mouth. The mouth of the second tributary is located about 0.3 miles northwest from the first tributary. The second tributary only has about 260 feet of open stream channel at its mouth. This stream

section has a low gradient and may be able to support a few kokanee spawners.

- **Tosh Creek (WRIA 08.0141)**

The outlet of Tosh Creek is in the Sammamish River slough above the weir (0.6 miles from the lake; Figure 26). Tosh Creek is located in the City of Redmond. The stream has a gradual gradient and is in relatively good condition. Fish passage at the West Lake Sammamish Parkway culvert was improved in 2013. Whether Lake Sammamish kokanee would use this stream is uncertain. Because water velocities are generally low in the slough, fish can easily move between the stream outlet and the lake. However, adult kokanee would have to migrate downstream through the slough to reach this stream and then fry would have to migrate upstream to reach the lake. Given its downstream location, it seems unlikely that this stream would be used by kokanee from Lake Sammamish; however, it would be prudent to conduct spawner surveys in Tosh Creek when kokanee are abundant in other streams. For example, if several kokanee have been observed in nearby Idylwood Creek, then Tosh Creek should be surveyed within the next few days.



## References

- Berge, H. B., and K. Higgins. 2003. The current status of kokanee in the greater Lake Washington Watershed. King County Department of Natural Resources and Parks, Water and Land Resources Division. Seattle, Washington.
- Buitrago, C., J. Friebel, and P. Lawson. 2008. East Lake Sammamish Master Plan Trail. Project Number 554-1521-075. Technical Memorandum of Parametrix to King County, Seattle, Washington.



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**Blueprint for the Restoration and Enhancement of Lake Sammamish Kokanee Tributaries**