

# Eyes on the Lake Survey Report:

Upper Truckee River, Highway 50 to Elks Club Road, Aug. 21, 2018

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## Project Design

On August 21, 2018, the League to Save Lake Tahoe coordinated an Eyes on the Lake volunteer survey of the Upper Truckee River from the Highway 50 overpass to the crossing near Elks Club Road, in South Lake Tahoe, CA. The League conducted the survey in collaboration with the California Tahoe Conservancy, which has an interest in locating all infestations of aquatic invasive plants in the Upper Truckee River in advance of a large restoration project for the Upper Truckee Marsh, scheduled to break ground in 2019.



The August 21 survey was the second of several Eyes on the Lake surveys to be conducted on the Upper Truckee River; the first being a survey in 2016 from the mouth of the Upper Truckee River to the Highway 50 overpass. Later surveys during the summers of 2019 and possibly 2020 will include additional stretches of the river upstream of Elks Club Road.

The 2016 survey provided the location of aquatic invasive plants above and below a proposed diversion of the river, where heavy equipment will be filling the existing channel and could risk transporting aquatic invasive plants. The river will be redirected from this point into the Upper Truckee Marsh and allowed to develop new channels naturally. The 2018 survey determined that there are no additional infestations of aquatic invasive plants between Highway 50 and Elks Club Road. This was important to determine, as any infestations upstream could potentially transport fragments downstream to the restoration site.



**Figure 1.** Team surveying Zone 5 on the Upper Truckee River.  
*Photo by League staff.*

For the 2018 survey, teams of two (one zone, Zone 5, had a team of three), made up of Eyes on the Lake volunteers and League staff, conducted the surveys at five separate zones along this stretch of river. (See attached map – Figure 3 – showing the five zones of the survey.) Teams started at designated access points and utilized social trails along the river to return to their starting point after completing the survey of their designated zone. In one exception, Zone 1, the team surveyed the main channel of the river upstream, and then surveyed a branching channel known locally as “the gully” downstream, back to their starting point. After completing their surveys, teams met up for lunch and to exchange data at Ernie’s Coffee Shop.

League staff instructed teams to survey their assigned zone from either the stream bank (one team member on each bank) or in the channel, depending on access, obstructions and water depth. Staff also instructed teams to collect plants in hand for verification. If any aquatic invasive plants were verified, teams were to record the plant name and a GPS point, as identified using a smartphone with a GPS application. Each team was provided with a clipboard, survey data sheet, map of their zone, Eyes on the Lake ID guide and pen. Team members provided their own smart phones with GPS apps. Teams were instructed not to record data for native plants as these are known to occur in this stretch of river.

At the meeting location (Ernie's), League staff collected all clipboards with completed data forms with plant locations and GPS points and checked in with all volunteers to ensure there were no problems in surveying. As was expected or at least hoped for, teams located **no** aquatic invasive plants in this stretch of river. Following the surveys, since no aquatic invasive plants were found, League staff entered two absence data points for each zone; one at the start or access point for the survey and a second at the center of the zone. For Zone 5, staff also entered one final absence data point for the end of the zone.

### Survey Results

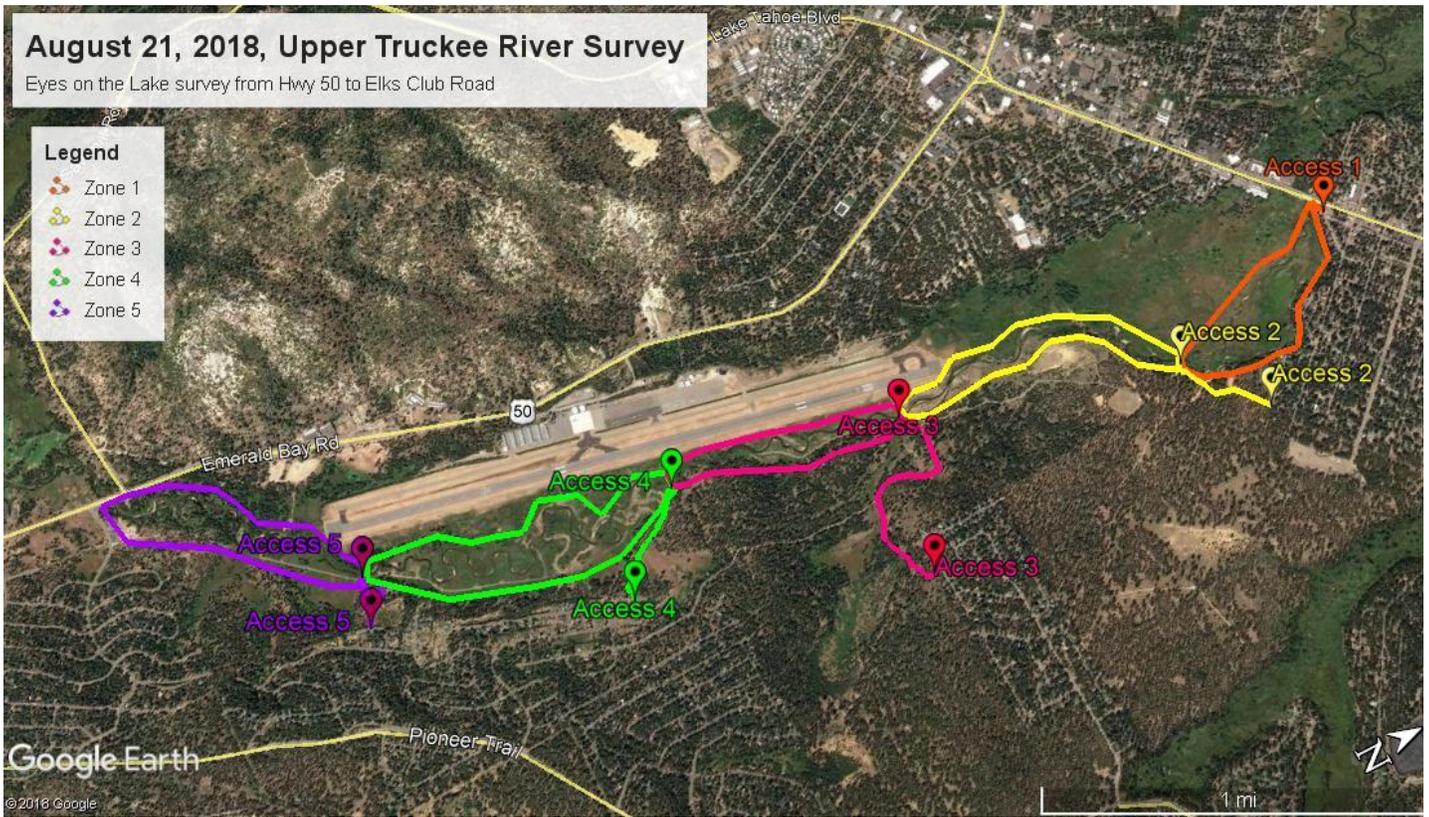
The five survey teams each successfully completed a survey of their assigned zone. No team located any aquatic invasive plants in their zone. The only aquatic plants identified were the native plants common waterweed, leafy pondweed and white-water buttercup. Distribution wise, teams found primarily waterweed in Zones 1 and 2; a mix of waterweed and white-water buttercup in Zone 3; and primarily white-water buttercup in Zones 4 and 5. The team in Zone 2 found a single leafy pondweed plant. The substrate in this stretch of the Upper Truckee River varied from clay, to granite, to sand and mud.



**Figure 2.** Zone 5 on UTR survey from Hwy 50 to Elks Club Road. *Photo by League staff.*

### Next Steps

League staff are confident that teams conducted a thorough survey of this stretch of the Upper Truckee River from Hwy 50 to Elks Club Road, and that this section of river is “weed-free”. Even so, continued monitoring of the Upper Truckee River, including the reach from the river mouth to Hwy 50, is warranted to ensure new infestations of aquatic invasive plants don’t pop up in the future. Most immediately, League staff will encourage Eyes on the Lake volunteers to return to both stretches of the Upper Truckee River on their own to monitor for aquatic invasive plants. In the long-term, League staff will continue to work with the California Tahoe Conservancy to determine appropriate times and intervals to repeat surveys of these stretches of river. Additionally, there remains one last stretch of river upstream, through Washoe Meadows State Park, which may warrant a comprehensive survey. The League will work with CTC to plan a future survey in this stretch of the river, possibly in 2019 or 2020.



**Figure 3.** Map of survey zones for Eyes on the Lake survey of the Upper Truckee River from Hwy 50 to Elks Club Road. August 21, 2018.