Henry's Fork Watershed Council Annual Tour

August 14, 2019 | Big Springs Water Trail Float

Brandon Hoffner, Henry's Fork Foundation welcomes the ~35 participants to the Henry's Fork Watershed Council Annual Tour. Brandon shares the agenda for the day, explaining the nature of the USFS Big Springs Water Trail float – generally slow and easy – while preparing participants for safety and potential wildlife viewing.

Kamberlee Allison, HFF described an ongoing recreational use capacity survey conducted in partnership with the US Forest Service to get a better sense of river use, and user experience on the Big Springs Water Trail. This is accompanied by an angler attitudes survey to capture angler perceptions/experience on the trail separately from other floaters. HFF interns and staff have conducted the surveys at randomly selected times and a camera captures visitor use numbers. Survey results will be shared with the USFS to inform future management.

At the first stop, Matthew Ward, The Nature Conservancy (TNC) shared information about a wetland enhancement project designed to benefit swans in the Flat Ranch. Surface water rights were included with the purchase of the Flat Ranch, which includes four miles of river bank along Henry's Lake Outlet. The Ranch also has storage water rights. Rocky Mountain Environmental has helped TNC with water rights applications and gaining a better understanding of the rights and water rights process. Matthew hopes to start construction ton the swan pond this fall. The pond will be four feet deep and located on the SE side of the ranch. TNC has also worked with Idaho Dept. of Fish and Game (IDFG) and the US Forest Service (USFS) installing head gates on ditches.

Jenn Vincent, Idaho Department of Fish and Game (IDFG) discussed projects ongoing at Henry's Lake. IDFG has increased stocking of the lake since 2015, but trout populations were still decreasing. There was very limited water quality data available for Henry's Lake, so IDFG launched a project last August, in partnership with the Henry's Fork Foundation (HFF) and Henry's Lake Foundation (HLF) looking at what could be impacting trout populations. A sonde, underwater water quality monitoring instrument, was deployed and water samples taken on a consistent basis. Five sites were selected across the lake to study and a preliminary report is complete. In terms of nutrients, the lake is phosphorus limited throughout the year. There was excellent oxygen this summer, and levels were not too bad this winter. Water temperatures did not exceed 20 degrees C this year, whereas last year experienced multiple days over 25 degrees C. The project is still ongoing and IDFG is looking into ways to keep it going longer term. This year and last year were quite unique in terms of temperatures and water quantity so they would like to see what water quality in the lake looks like in a "normal" year.

At the lunch stop, Christina Morrisett, HFF conducted a demonstration of an Acoustic Doppler Current Profiler (ADCP). The unit was connected to a raft by a stretch of rope

and is rowed across the river from one bank to the other at a constant rate of speed, while maintaining a straight line across. Four passes across the river (two in each direction) are required to get accurate measurements. The unit measured streamflow at the lunch spot as ~330 cfs. The ADCP unit was purchased by Fremont-Madison Irrigation District (FMID) and is operated by HFF staff and graduate student researchers. HFF will measure streamflow in canals and sections of river as needed by FMID, and in return, FMID allows HFF to use the unit for a PhD research project studying streamflow and groundwater influence on habitat in the lower Henry's Fork.

Jack McLaren, HFF also described his PhD work on the upper river (between Island Park Reservoir and Big Springs). Jack is studying factors that may be limiting fisheries production in this reach. This includes assessing macrophyte (aquatic plant) cover, conducting nutrient analysis, and assessing impacts of potential change, including increased development in the area. Jack noted that local residents described a decrease in productivity after the septic system was replaced by sewer. Jack is interested not only in understanding nutrients' potential role in growing big fish, but in improving the fishery overall.

Aaron Dalling, FMID described an application submitted to USBR's WaterSMART grant program for a project that would increase effectiveness of irrigation infrastructure and technology. FMID hopes to increase the use of technology to automate or make remote changes to irrigation infrastructure, thereby increasing the efficiency and effectiveness of water management in the Henry's Fork Watershed. This could save water in Island Park Reservoir, benefitting both irrigators and fisheries. One of these technological improvements would be installed on Henry's Lake Outlet.

At the final stop on the tour, Liz Davy, USFS explained the history of the Big Springs Water Trail and opportunities for changes in management. The water trail is just that, a trail. It was the first water trail designated in the United States and is managed as a trail. The Forest Service would like to know how people feel about their experience on the water trail to see what they might be able to do in their management to improve that experience. The USFS is partnering with the Henry's Fork Foundation on a recreational use survey to try to capture that feedback from as many river users as possible. Liz is also looking to other rivers as examples. The USFS will also improve the legal boat take out.

Robin and Devin Beard, Ensign Hospitality shared information on the new Marriott project and the Mack's Inn river shuttle service. Mack's Inn has added a reservation system and spaced rentals out by extending rental length to four hours. The USFS permit is for 6,000 people per year (that includes all ages, not just adults). July is by far the busiest month. A good deal of engineering and money went into ensuring the river isn't harmed by the new development. For example, storm water is captured and filtered before returning to the system. Also, the river side of the property will always have a stretch open to the public, including a few parking spaces. The river is one of the key reasons people come here, so it's in their best interest to protect it.