Meeting Minutes
March 11, 2025

Hosted in-person at the Fremont County Annex Building in St. Anthony, ID and hybrid via Zoom

Attendance

- **25** in-person
- **30** via Zoom

Introductions and Community Building

Aaron Dalling, co-facilitator from Fremont-Madison Irrigation District, welcomed everyone to the hybrid meeting. The group went around with introductions and then called for a moment of silence before opening for announcements and community building.

Announcements

Aaron Dalling announced that Christina Morrisett was serving as the new co-facilitator of the meeting on behalf of the Henry's Fork Foundation and asked Christina to introduce herself. Christina is a scientist with the Henry's Fork Foundation. Jamie Powell thanked Christina for stepping into the role. The position was previously held by Jamie Powell starting in Fall 2015.

Groundwater Recharge and Habitat Restoration Project in Teton Valley
Katie Salsbury, Intermountain Aquatics

The Foster Slough 1,000+ acre wetland complex is located in the upper Teton Basin across from the Teton Valley Lodge. The original lodge guides and guests have fond memories of running laps down the Teton River and up the slough fishing for large, healthy native cutthroat trout, but over time, the mouth of the slough filled in with sediment and flows decreased, making the old famous lodge boat laps impassable. In 2022, Intermountain Aquatics was invited to design and permit a large-scale habitat restoration project in the Foster Slough complex. Working with the Teton Regional Land Trust, Idaho Fish & Game and Friends of the Teton River we developed a plan to benefit fish and wildlife. In 2024, we completed the restoration of 0.5 miles of Elliot Creek, 1.75 miles of slough and 33 acres of hemi-marsh. The project components provide valuable winter fish habitat and cover, seasonally inundated marshes and slough channels, complex habitat for long-billed curlews, sandhill cranes and other water birds, and recharge approximately 50 acres of flood irrigation water rights to the aquifer.

Q&A: Groundwater Recharge and Habitat Restoration Project in Teton Valley

- Jan Brown asked if hemi-marshes can be used in other downstream regions for recharge. Katie Salsbury affirmed there is potential, particularly around Chester.
- The presentation noted that the project did seek to change the water rights for the property and received a protest from Fremont-Madison Irrigation District. Christina Morrisett asked about the process of receiving and resolving a water rights protest. Katie Salsbury noted that they approached the protest with open discussion and felt comfortable doing so thanks to the Henry's Fork Watershed Council creating bridges between organizations. Overall, the protest and resolution experience as a good example of how protests can be to everyone's benefit. Aaron Dalling noted that the Teton River is a tricky watershed because it always run dry, so anything that can be done to hold water in the system for later use is of benefit to Fremont-Madison Irrigation District.

Island Park Reservoir Bathymetric Map
Jack McLaren, Henry's Fork Foundation

Jack spoke about the Henry's Fork Foundation's (HFF) bathymetric survey and the products, tools, and statistical results that came from it. First, he outlined the survey process: using an affordable, commercially-available sonar-GPS chartplotter along with accessible tools (a small boat, SD cards) and open-source datasets (OpenStreetMap roads, USDA NAIP imagery, and USGS 10m DEM) to compile a complete bathymetric dataset. This dataset was processed using proprietary algorithms in free and open-source GIS software (R, QGIS). The final product is a raster digital elevation model (DEM) that shows the bottom elevation of Island Park Reservoir at full pool.

The DEM can be used with open-source GIS tools to produce valuable products. HFF found that Island Park Reservoir's volume is not significantly different from the nominal full pool of 135,205 acre-feet. The reservoir's shoreline length is 109 miles, its shoreline complexity index is 8.87 (bias-corrected to 6.17), its average depth is 16.5 feet, and its surface area is 7,830 acres. These statistical measures and the DEM are useful for determining fish habitat, assessing reservoir trophic state (including algal bloom risk), and estimating water residence time. Beyond its scientific applications, the bathymetric map is also available to the public as a fishing and recreational aid through the Avenza mobile app and on the HFF website blog.

Looking ahead, the Island Park Reservoir water quality data web tool aims to feature a real-time, dynamic bathymetry layer that reflects current water surface elevation as the reservoir's volume fluctuates throughout the year. HFF is currently testing the website internally and plans to roll out new products related to Island Park Reservoir soon.

Q&A: Island Park Reservoir Bathymetry Map

- Christina Morrisett asked if there have been safety issues on Island Park Reservoir. Jack McLaren affirmed that people have damaged their boats/motors/engines in shallow areas and even had engines catch fire due to sand/sediment getting into the engine.
- Katie Salsbury asked about the longevity (shelf-life) of the map given sediment deposition. Jack McLaren noted that there is not much if any evidence of deposition accumulation happening in

Island Park Reservoir. The biggest threat is going to come from reservoir drawdowns, so the map should be useful for a long time.

- Dick Spackman noted that the 1992 sediment event in Harriman State Park was always thought to be from releases from Island Park Reservoir, which have been accumulating for decades. Jack McLaren noted that although it is fair to say that some sediment has accumulated, it has not done so in the amounts anglers perceive. This lack of accumulation was evident during the 2023 spring freshset that showed crystal-clear water within minutes of release through the dam gates.
- Brian Stevens asked how much sediment came out of the reservoir during the 1992 event. Rob Van Kirk answered with 50–100,000 tons.
- Keith Esplin asked how deep the west end of Island Park Reservoir is and about the west end's importance to fish. Jack McLaren answered with 10–15 ft at full-pool and that the west end is particularly important for non-game species, namely Utah Chub, but also many groundwater springs flow into the reservoir on the west end so it can provide cold-water inputs during the summer months.
- Brett High asked about plans to add temperature profiles to the map. Jack McLaren noted that the Henry's Fork Foundation will soon launch a data website sharing a variety of water quality parameters like dissolved oxygen, temperature, and turbidity.

The Clean Kilgore Coalition and Protecting Idaho's Water Resources
Tom Hallberg, Greater Yellowstone Coalition

Canadian-owned Excellon Resources owns 789 mining claims on U.S. Forest Service land in the Centennial Mountains west of Kilgore, Idaho. It is permitted for a gold exploration project there through November 2026. This program is an effort to establish a valid mineral right on the claims, which is the basis for approval of mining under the General Mining Law of 1872. If Excellon is successful, it would be able to pursue a gold mine.

Company documents say it plans an open-pit, heap-leach mine. Though specific details will not be available until Excellon submits a mine plan, it would likely use a diluted cyanide solution as a processing agent, as cyanide is the only economically viable leachate for low-grade ore. Similar mines, such as Zortman-Landusky in Montana, have led to cyanide spills and acid mine drainage, the formation of sulphuric acid and release of heavy metals created by exposing sulfide-bearing rocks to rain or groundwater. These types of pollution have impacted water resources across the West, leaving rural communities to pay millions of dollars for cleanup and treatment. Associated pollution from this type of mine in the Camas Creek watershed and the headwaters of the Eastern Snake Plain Aquifer could degrade water used for agriculture, wildlife, aquifer recharge, and human consumption.

Q&A: Clean Kilgore Coalition and Protecting Idaho's Water Resources

- Jan Brown asked if it would be an open-pit mine. Tom Hallberg affirmed that it would be an open-pit heap leach mine, which will use cyanide to extract gold from the heap piles.

- Keith Esplin asked if any of the land in the project area is private and how deep they intend on digging. Tom Hallberg noted that the project is entirely on U.S. Forest Service land and the company plans indicate a 2,000 depth.
- Rob asked where the mine will get its water from and if they need a water right for it. Tom Hallberg affirmed that they would need a water right to mine, but not for exploratory drilling. James Cefalo affirmed that they would need a water right, but that no industrial water rights are currently permutable given the moratorium.

Groundwater-Surface Water Administration in Henry's Fork Basin
James Cefalo, Idaho Department of Water Resources

In the coming years, the Idaho Department of Water Resources will create water districts to administer ground water rights in basins tributary to the Eastern Snake Plain Aquifer. This includes the Teton Basin and the Henrys Fork Basin. As part of that process, the Department will review the current administration of surface water rights in those basins and may propose water district modifications to ensure surface water rights are properly administered. This presentation provides an overview of the steps the Department follows to create or modify water districts. It also summarizes the existing administration of water rights in the Henrys Fork and Teton Basins and highlights some of the administration challenges unique to those basins.

Q&A: Groundwater-Surface Water Administration in Henry's Fork Basin

- Keith Esplin asked if the Drummond-Ashton-St. Anthony triangle (which is not currently administered by Water District 1) will be part of the Teton or Island Park district. James Cefalo noted that public meetings and initial information gathering will help inform that decision.
- Jan Brown asked if the DCMI (domestic commercial municipal industrial) approach will change and if larger subdivisions will be exempt. James Cefalo said that the DCMI approach would not change and that subdivisions with more than 10–15 homes will be subject to metering and curtailment.
- Jack McLaren asked how interstate streams like the Teton River get handled. James Cefalo said that whereas Idaho has a water rights moratorium, Wyoming is open to new applications. So IDWR will have to navigate applications where water originates in other states on a case-by-case basis. Craig Chandler added that interstate agreements will play a part.
- Sarah Lien asked how surface water delivery will be impacted once a groundwater district is created in the Teton basin. James Cefalo noted that because the upper Teton is already in WD01, no change in surface rights is anticipated. Sarah Lien followed up asking if the basin's current reliance on the futile call doctrine is expected to change. James Cefalo said no, but that those who rely on those calls may need to participate in mitigations plans and planning.
- Katie Salsbury asked what that mitigation would look like. James Cefalo noted that it could be reductions in pumping and/or participating in recharge efforts.

Community Building and Wrap Up

- Keith Esplin shared that the state legislature is currently considering legislation to dedicate $30M/year to recharge and infrastructure on an annual basis or as a one-time payout. If anyone has contact with the House of Representatives, he encourages folks reach out and express the need for funding in the Eastern Snake Plain Aquifer and beyond. If these bills do pass, he thinks that a future Watershed Council meeting could touch on those funding opportunities/sources.
- James Cefalo asked Jack McLaren if the bathymetric map project was at all tied to efforts to expand Island Park Reservoir. Jack McLaren said no. James Cefalo asked Jack McLaren how well his results line up with existing water rights. Aaron Dalling said that there was initially some concern from Fremont-Madison Irrigation District, but after some additional data was used Jack's estimation better matched the water rights.
- Jan Brown shared that Harriman State Park is assessing their trail system, including river bank trails. Friends of Harriman State Park are leading fundraising efforts. There is also an online survey currently available asking for user input. In-person surveys will be conducted this summer with the help of interns. The trails condition report will be out on November 1st and a presentation could be given to the HFWC in November/December.
- Aaron Dalling gave kudos to Idaho Dept. of Water Resources, noting that people who aren't regulated do not want to be regulated, and so IDWR takes a lot of heat but continues their important work.
- Christina Morrisett thanked everyone who participated, helped set up, and took notes. She shared a big thanks to Jamie Powell for her time and efforts co-facilitating these last 9 years, even when in a different country running the meeting at 1am!