



Board of Commissioners Meeting

McKenzie Valley Customers | April 19, 2022

Welcome McKenzie Valley Customers

Meeting Agenda:

1. Welcome and Meeting Overview (5 mins)

John Brown, Board President and Frank Lawson, General Manager

2. Utility Overview - McKenzie Valley Topics (25 mins)

- Watershed Recovery Status & Investments

Karl Morgenstern, Watershed Restoration Program Manager

- EWEB & Pure Water Partners Programs for McKenzie Valley Customers

Nancy Toth, Environmental Specialist

- Wildfire Mitigation

Tyler Nice, Electric Operations Manager

Jeannine Parisi, Strategic Program Manager

- Leaburg Canal Updates

Lisa Krentz, Generation Manager

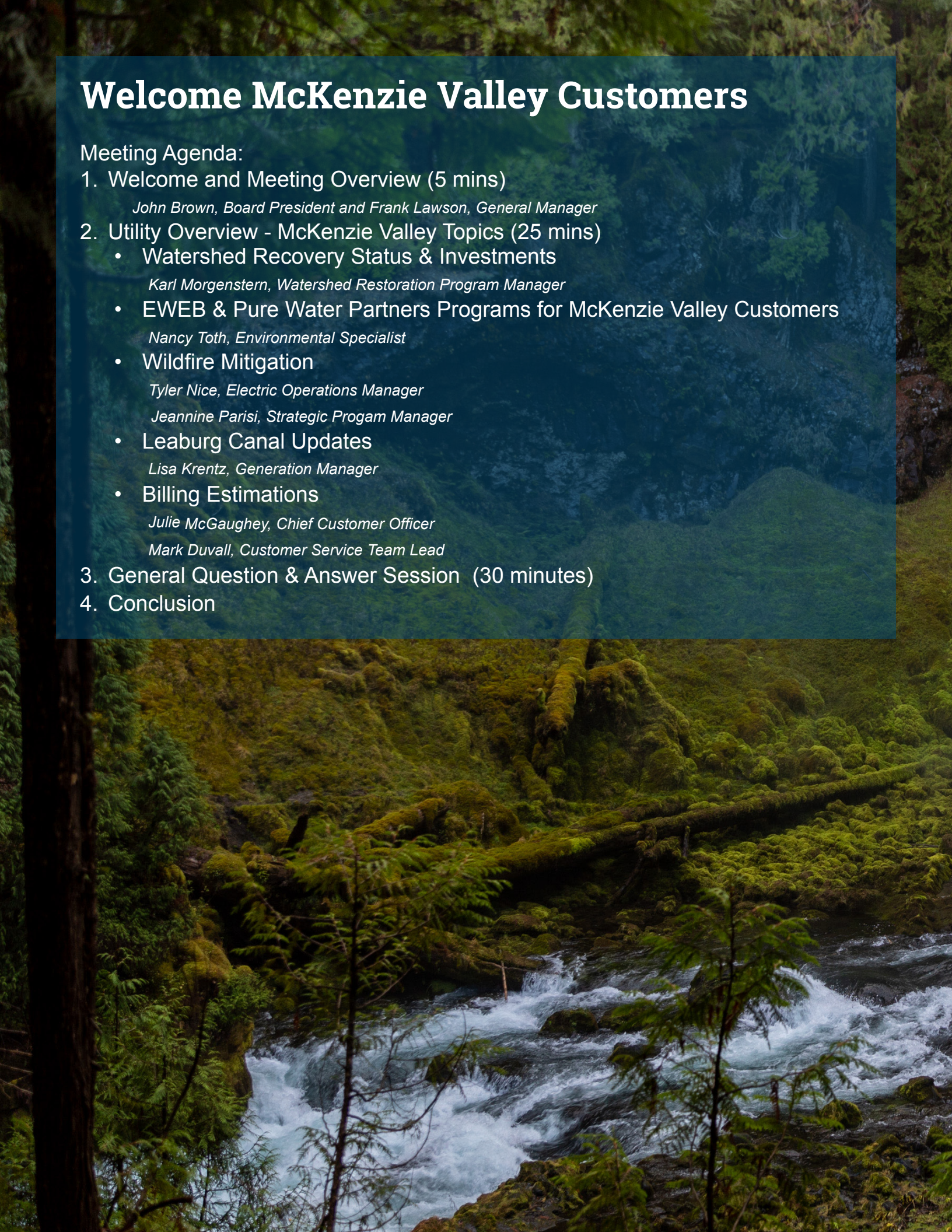
- Billing Estimations

Julie McGaughey, Chief Customer Officer

Mark Duvall, Customer Service Team Lead

3. General Question & Answer Session (30 minutes)

4. Conclusion



Watershed Recovery Status & Investments

On March 2, 2021, the Board authorized \$4.275 million for budget year 2022 to continue the watershed recovery and restoration work. This work is funded through a “watershed recovery surcharge” collected on EWEB customers monthly water bills starting in July 2021 and sunsetting after 60 months. The Watershed Recovery Fee provides stable, reliable funds to continue time-sensitive restoration work while staff seek numerous avenues for outside funding and resources to complement EWEB customer investments. The following is a summary of that work and what is planned for the near future.

Pure Water Partners

The Pure Water Partners (PWP) program is an initiative designed to reward McKenzie landowners who protect high-quality land along the river, assisting EWEB in protecting water quality. The PWP, led by the Upper Willamette Soil & Water Conservation District and McKenzie Watershed Council (MWC), have been instrumental in conducting property assessments and getting restoration work done on high priority fire-impacted properties, which includes forest fuels reduction, invasive vegetation removal, erosion issues, and revegetation in riparian and floodplain areas using native species. To date the PWP has completed 252 property assessments out of 259 landowner requests.

Highlights of work completed this winter includes:

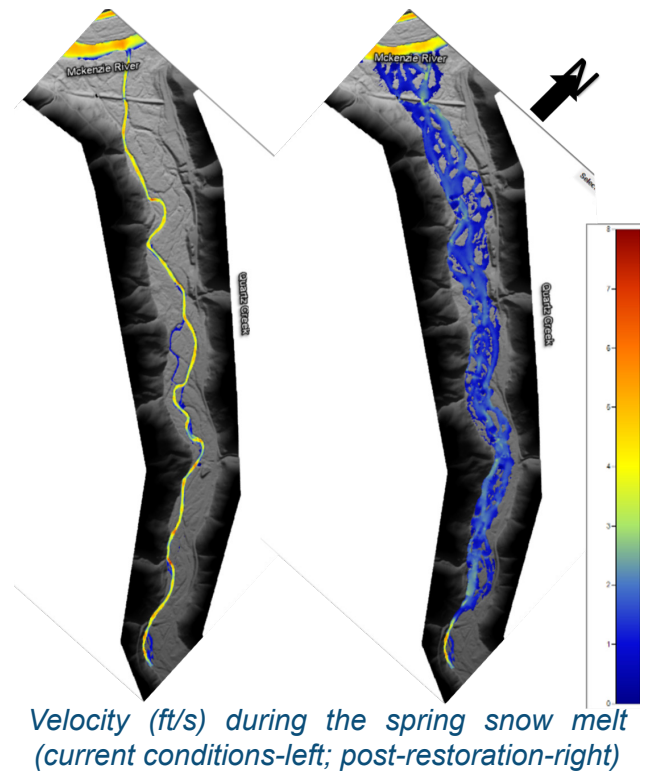
- Fire fuels treatments on 34 properties and invasive vegetation control on 49 properties ahead of revegetation efforts
- Planting over 450,000 native tree and shrubs using 52 different varieties to maximize biodiversity in fire impacted riparian and floodplain areas across 110 properties
- Installing various erosion control measures including hydroseeding using native grasses on over 30 properties.

With recent completion of the large revegetation effort and wrapping up winter erosion control work, the PWP is shifting to implementing larger scale fire fuels treatments using Oregon Department of Forestry (ODF) grant funds (\$300,000) and conducting spring invasive weed control. As a result of the McKenzie Valley Long Term Recovery Group needs assessment, the PWP will start engaging the over 100 new landowners requesting PWP property assessments.



Long-Term Watershed Resiliency Work

The primary purpose of resiliency actions is to support and create long-term functional and healthy floodplain ecosystems below burned landscapes that decrease flow velocity and encourage the development of side channels and other complex habitat. These actions create a depositional environment where sediment drops out, nutrients and metals are attenuated, and water is stored on the landscape, reducing downstream flood impacts, all of which benefit water quality and reduce impacts on downstream drinking water treatment processes. Well-saturated floodplains have proven effective as firebreaks, reducing the severity of wildfire damage, as well as providing exceptional habitat for salmon and other species (see example of hydraulic modeling of the Quartz Creek floodplain restoration design). EWEB continues to work closely with the USFS, MWC, McKenzie River Trust (MRT), and Bureau of Land Management to get three large-scale floodplain restoration projects and 3-4 tributary large wood enhancement projects designed and permitted for implementation in 2022 and 2023.

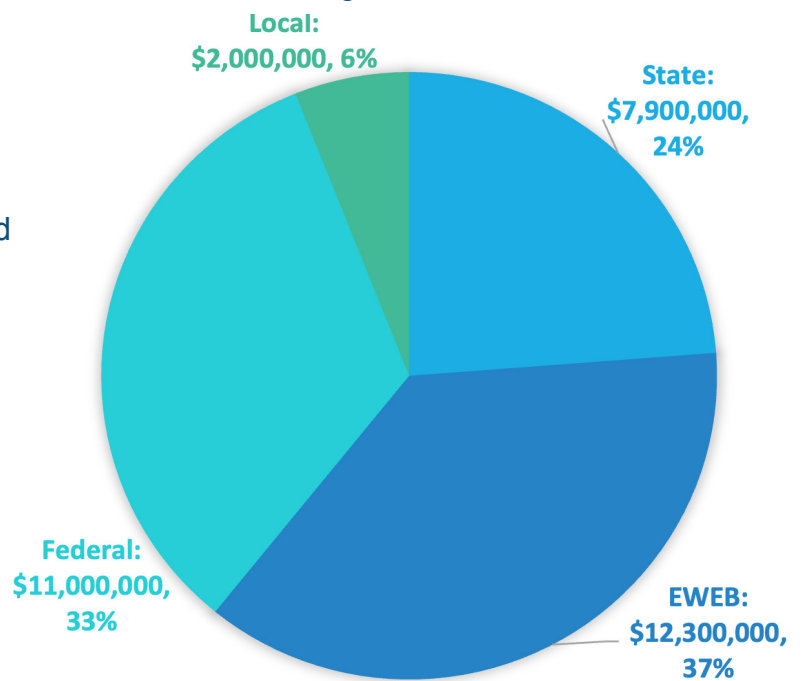


Funding

EWEB and the PWP team continues to pursue and obtain outside funding to leverage the \$12.3 million investment EWEB is making in watershed restoration. The following graph summarizes the levels and sources of funding that have been secured or are pending from EWEB, federal, state, and local sources.

These funds are used for a wide variety of restoration activities including:

- PWP operations and restoration work
- Floodplain restoration
- Tributary large wood enhancements
- Water quality monitoring and early warning network
- LiDAR and debris flow/landslide analysis and modeling
- Land acquisitions and conservation easements
- Landowner incentive programs
- Sourcing native plant materials
- Septic system repair, replacement, and upgrades



2021-2024 Watershed Restoration Budget (\$33.2 million)

Landowner Incentive Programs

Home Site Relocation

EWEB will provide up to \$7,000 in grant funding for eligible landowners in the Holiday Farm Fire perimeter who move their building footprints farther away from the river, helping to rebuild smarter and better protect water quality. To date four homeowners have taken advantage of this program and moved their homes outside of the riparian setback area.

Septic System Assistance

Seventeen homeowners affected by the Holiday Farm Fire have applied for EWEB's septic system assistance zero-interest loans (six are funded and 11 are in process). The maximum loan amount is \$20,000 and homeowners affected by the fire have an eight-year repayment term.

EWEB is currently working with Lane County to distribute approximately \$1.5 million from the state wildfire recovery funds that is allocated for repairs and replacements of damaged septic systems post-fire, specifically targeted toward lower-income homeowners. These funds would flow through EWEB's septic system assistance program and be administered in the form of grant funds to homeowners. Homeowners who qualify and currently have or obtain a zero-interest loan could have their loans paid off via these grant funds. We are hoping to roll this program out in April 2022.

Property Assessments and Restoration Support

PWP is currently working with nearly 300 landowners affected by the Holiday Farm Fire (HFF) to assist with restoring burned areas and planting in riparian areas. Regardless of whether a landowner has been impacted by the HFF, the PWP can help by starting with a property assessment that identifies high conservation values on the property, as well as mapping areas that may have erosion issues, fire fuels and invasive weed problems, and/or revegetation needs. Following the property assessment, landowners can get assistance addressing some or all the recommendations by signing a 7-year Watershed Stewardship Agreement with EWEB. Landowners can sign-up for a free property assessment by visiting: www.purewaterpartners.org.

Wildfire Mitigation Plan

The safety of our community is our first organizational core value and fundamentally drives how we deliver essential utility services to the public we serve. EWEB's strategic plan prioritizes community resiliency and emergency preparedness, which includes wildfire risk reduction activities. EWEB's first Wildfire Mitigation Plan (WMP) will be adopted this summer, consistent with upcoming regulatory requirements. This action-oriented plan consolidates numerous existing and several new grid reliability efforts that aid in wildfire mitigation (and winter storm response).

A key facet of the WMP is to identify areas with high wildfire potential to focus risk reduction actions for greatest impact. EWEB's upriver service territory, as well as a small area in Eugene's southeast hills, were identified as our higher risk areas.

Some core components of the WMP related to our high-risk areas are:

Annual Inspections and Maintenance:

EWEB is now conducting visual patrols of this part of the electric system and nearby vegetation prior to April 1 of each calendar year. This enhanced inspection process prompted the accelerated replacement of around 100 cross-arms in the upriver service territory that showed signs of degradation. We expect fewer repairs will be needed following the 2022 inspections due to last year's findings. Vegetation management crews will also visit this area annually to maintain line clearance.



Crew member replacing cross-arm in 2021.



Aerial trimming of 12.5 miles along the Carmen-Smith transmission line.

System Hardening:

As part of the rebuild effort, which included 173 new poles and 62 new transformers, EWEB re-configured North Gate Creek Road to single phase to reduce the chances of vegetation contacting electric equipment. The utility is also offering financial assistance to customers rebuilding their homes with undergrounding their electric service. By reimbursing eligible expenses, EWEB is partnering with homeowners to improve the design of our upriver distribution system for enhanced reliability and wildfire resilience.

Wildfire Season Preparedness:

In response to the growing wildfire threat, the utility has developed procedures to make the electric system more sensitive to faults during times of high wildfire potential. This tactic results in lines being shut off more quickly if an issue, like a branch touching a wire, is sensed. This extra level of protection currently applies to EWEB-operated facilities in the McKenzie Valley and is triggered by Red Flag Warnings. Once protective settings are in place, if the line trips-off, EWEB will patrol the area to ensure it is safe to re-energize the line. EWEB alerts customers when the system has been placed in this mode through various communications channels as it may increase the frequency and duration of power outages when used.

Remote Sensing Tools:

EWEB is partnering with the University of Oregon to install an ALERTWildfire camera at the Smith Ridge telecommunications site. This would be the first wildfire camera with public viewing access in the McKenzie Valley. Recent statewide funding for wildfire cameras may enable additional cameras and/or weather monitoring stations in the vicinity.

The EWEB Board has committed \$1M for 2022 wildfire mitigation projects and plans to review the draft WMP, including planned investments, in June.



Carmen-Smith Update

Refurbishment of the Carmen Power Plant continues in 2022 with completion of the first generating unit overall expected near the end of the year. Unit disassembly work began late last summer and reassembly is well underway with generator rewind work expected to finish in April. Installation of the new turbine will come next, followed by re-installation of the refurbished generator rotor in the fall. Following successful commissioning, EWEB will operate the equipment for a couple of months to confirm reliability prior to starting disassembly of the second unit. There is also additional work starting at the Trail Bridge Power Plant in July, upgrading the electrical and control systems so that the facility is ready for construction of fish passage improvements as soon as they receive FERC approval to proceed.



Construction of new salmon spawning channel exit.

In May 2021, EWEB discovered sinkholes on the bottom of Trail Bridge Reservoir and quickly initiated a variety of investigations to determine the public safety risk of those sinkholes. Results obtained to date indicate that these sinkholes are slowly-progressing features which are unlikely to present an urgent dam safety problem. EWEB initiated cautious monitoring of the sinkholes immediately after discovery and implemented several risk reduction measures. These precautions and associated monitoring will



remain in place while we continue investigations with geotechnical drilling planned for the coming months. In addition to identifying an appropriate sinkhole remediation strategy, the 2022 investigations are expected to allow EWEB to complete the now delayed fish passage design and construction and inform changes that might be necessary to mitigate risks associated with the sinkholes.

EWEB installed 140 glow-in-the-dark reflective diverters over eight water crossings to make transmission lines more visible to migrating birds.

While finalizing upstream and downstream fish passage designs at Trail Bridge awaits completion of ongoing dam safety evaluations, progress on a number of other license-required improvements includes completion of the following:

- Relocation of the Deer Creek transmission line to the hillside above the creek. This project was performed in parallel to a stream habitat restoration project in Deer Creek by the McKenzie Watershed Council.
- Reconstruction of the Salmon Spawning Channel below Trail Bridge Dam.
- Installation of bird flight diverters on the transmission lines above the McKenzie River, Trail Bridge Reservoir, and Deer Creek.
- Reconstruction of Trail Bridge Campground (80% complete).
- Revised and updated EWEB's Geographic Information System for all current resource and infrastructure associated with project and provided training to staff on the use of that system.
- Conducted historic, cultural and resource surveys at a variety of locations in order to document and protect sensitive areas and species.



Improvements were made to the entrance of the salmon spawning channel below Trail Bridge Dam.



Construction of new boat ramp at Trail Bridge Campground was completed in December 2021 amidst snow flurries.

Due to the dam safety related delays to fish passage construction, full functionality of those systems is currently not anticipated until 2028. In the meantime, EWEB has been working with our regulatory partners to develop a mitigation agreement that will include additional aquatic environmental work as appropriate to offset impacts associated with the delayed completion schedule. Mitigation activities are planned for 2022 and include habitat restoration projects and potentially moving fish manually prior to completion of the trap and haul system. This mitigation agreement is expected to be finalized later this year.

Leaburg Canal Update

The Leaburg Hydroelectric Project has been a feature of the McKenzie Valley for over 90 years, providing the local community with clean power, recreational opportunities, and an irrigation source for many neighbors. Due to structural issues complicated by the canal's age and original building materials, EWEB closed the Leaburg Canal's intake in October of 2018, after observing internal erosion of the canal embankment. Since closing the canal intake at Leaburg Dam and dewatering the canal, the only water that flows through the canal comes from creeks that flow into the canal from the north side of the valley. The canal carries those tributaries back to the McKenzie River – a function the canal provides called “stormwater conveyance.”

With the canal dewatered, EWEB initiated a comprehensive risk assessment of the entire canal to better understand the level of investment that would be required to ensure long-term safe and reliable operation. This assessment determined that the Net Present Value (NPV - the current value of all future cash flows generated by a project, including the initial capital investment) for the Leaburg Project would be substantially negative for the rest of its current Federal Energy Regulatory Commission (FERC) operating license, which expires in 2040.

As a result, EWEB's Board of Commissioners directed staff to pursue near-term risk reduction measures for safe stormwater conveyance while, in parallel, performing a Triple Bottom Line (TBL) analysis of long-term options. The TBL will evaluate the financial, social, and environmental impacts of several alternatives so the Board may select a path forward for the future of the project. Fundamentally, the decision is between returning to service for power generation (return-to-service/ relicense) or moving toward permanent decommissioning.

EWEB staff continues to work with the risk assessment team, led by Cornforth Consultants, to implement near-term risk reduction measures. These measures will include changes to the canal's configuration, such as isolating portions of the canal from high flow creeks. These near-term risk reduction measures can be reversed if EWEB Commissioners decide to pursue a return-to-service scenario but, in the meantime, will ensure safe operation until a long-term plan is implemented.

EWEB retained a consulting team, led by GEI Consultants, to assist with developing detailed analyses of the TBL considerations for various scenarios to provide the Board with information needed to make an informed decision on the long-term use of the canal. Four alternatives were selected for further in-depth analysis following a thorough evaluation by a team of over two dozen engineers, geologists, environmental professionals, compliance specialists, dam safety experts, and EWEB staff. Of the four alternatives, two are on opposite ends of the “stormwater conveyance” vs. “return-to-service” spectrum. Alternative 1 represents the full removal of all facilities to pre-project conditions – as if the Leaburg Project were never built. Alternative 2 would entail a full return-to-service, with renovation of all facilities back to peak performance configuration. These bookended scenarios would be the most expensive due to the extensive construction and repairs required throughout the entire project and facilities. Alternatives 3 and 4 each represent a “middle ground” return-to-service or decommissioning scenario.

- Alternative 1: Decommission the entire Leaburg Project by returning the site to pre-construction conditions.
- Alternative 2: Full return-to-service, restoring the facility to its pre-existing power generation configuration.
- Alternative 3: Building a new hydro powerhouse near the Luffman Spillway (about a mile from the dam) and converting the rest of the canal downstream to a stormwater conveyance canal.
- Alternative 4: Decommissioning the Project with a combination of stormwater conveyance and return to pre-project conditions, including a new spillway at Johnson Creek and modification to the Luffman spillway. This alternative converts short-term risk reduction measures into a long-term solution.

EWEB understands that many McKenzie Valley community members have interest in understanding the impacts of the current and future status of the canal, as well as the near-term and long-term strategies currently under evaluation. We invite feedback from the community on the information provided to date, and any information that will be provided in upcoming reports or meetings. EWEB staff will continue to communicate the latest information and status updates on our investigation and the Board's decision throughout the remainder of 2022. Additionally, as part of our decision-making process, we will continue to listen to the community to understand how the Board's direction will impact you and your neighbors.

If you are interested in following along, please visit our website: eweb.org/leaburgcanal. There, you can also sign up for a newsletter about the progress of the investigation.

Tabletop Presentations (available pre and post-meeting)

Carmen-Smith Project

Customer Service & Solutions

- Programs & Service Offerings
- Holiday Farm Fire Resources & Programs for McKenzie Valley Customers
- Customer Service

Dam Safety

Leaburg Canal

Tree Trimming

Watershed Protection and Restoration

Wildfire Mitigation and Fuels Management Initiatives

