Crooked River Watershed Council

2022 ANNUAL REPORT

Fish Passage Project site on Lower Ochoco Creek (pre-project)

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This report summarizes activities, project accomplishments, and outreach conducted during the calendar year 2022. The year was largely one of a return to normality following the covid pandemic. Overall, 2022 was a year of some staff transition and new project development. It included carry over projects and partnership work from 2021, as occurs in most years.

When 2022 started, the council was fully back to normal office hours. Board meetings were changed to offer a remote attendance option. This feature is a practice carried over from the covid era and the council has benefitted by making it easier and more efficient for board members located outside Prineville to actively participate.

Board of Director monthly meetings remained challenging in 2022. Early in the year, lingering covid status uncertainty and new technical conveniences led to many meetings continuing to being offered remotely throughout the year. Ancillary to these changes in meeting dynamics it continued to be challenging maintaining full board membership interest and engagement.

Report Overview
As in past years, the report elements include a featured project, a short description of accomplishments, a summary of financial status & projection for the next period, and a summary of expected future projects, topics to address, or geographic focus areas that will be developed.

The OWEB FIP partnership program capacity grant to the council expired in 2022, so the Deschutes Partners applied for a second capacity grant supporting coordination within the group as they explore future options for the partnership.

For the area described as the lower Crooked River, the primary focus continues to be on habitat improvements in support of steelhead and salmon reintroduction by applying priorities listed in state and federal recovery and conservation plans. These plans guide and prescribe actions that can address limiting habitat factors. This effort by the council was started in earnest in the mid-2000s with several fish passage projects initiated in McKay Creek and the Crooked River. Currently, the council and NRCS are implementing a USDA-NRCS Regional Cooperative Partnership Program (RCPP) grant for the lower Crooked River to address the suite of habitat restoration goals expressed in the plans.

In the larger geography identified as the upper Crooked River, or 'upper country', the council's actions focus on broad watershed health and function issues to recreate conditions supporting natural capture, storage, and safe release of water. A primary and common factor particularly impacting the upper watershed across many acres in the upper country is juniper encroachment. As sites become dominated by juniper, the natural capacity of the watershed to capture, store, and safely release water is compromised. In late 2022, staff began designing a general plan for supporting beaver reintroduction focused on the upper country. Beavers are well-known natural water engineers whose activities address our driving principle of retaining water in the watershed as long as possible. Beaver dam analogs (BDAs) are becoming a widely used tool to mimic beaver impacts to small- and medium-sized creeks to achieve similar landscape outcomes and encourage site conditions that support beaver use in the future.

Featured Project –

Lower Ochoco Creek Fish Passage

Existing diversion structure with flashboard configuration for managing pond water levels (pre-project)

The photo above shows the existing, pre-project structure that blocked fish migration to habitat upstream. The primary characteristic that blocked fish movement was the jump height typically during irrigation season when dam height was raised with flashboards. This entire structure (above) was removed and replaced by a roughened riffle (long gentle slope) and an open channel. A roughened riffle design mimics a natural feature found in rivers and creeks basically bringing the streambed below the diversion point up in elevation over a slightly increasing grade. This new channel supports fish migration upstream by removing the barrier by creating a direct path over the dam through a low point. The same amount of water can be held in the irrigation pond (seen through the vent in the photo above) and the height is now controlled by a hardened rock outlet point located at the top end of the new roughened riffle.

Existing, pre-project diversion on Lower Ochoco Creek viewed from the irrigation pond side of the structure

This project is identified as a habitat limiting factor for Middle Columbia steelhead in state and federal conservation and recovery plan for this ESA-listed fish species (Threatened) historically present in large numbers in the Crooked River watershed. The council has been implementing these plans pertaining to the lower Cooked River since 2002 when the salmon and steelhead reintroduction plan began at the Pelton-Round Butte dam complex. This particular fish passage barrier is one of the last in the lower Crooked River because most all others have been addressed with one passage solution or another.

A new roughened riffle channel design being implemented at Prineville Country Club in October 2022

A roughened riffle passage design is widely preferred for sites where it can be accommodated because it functions and appears much like a natural channel. In locations where esthetics of a passage project are important such as in highly public areas, or setting that contain a more natural ambiance, this method of providing fish passage around a diversion structure is one of the best fits. This project was developed in close coordination with the landowner to ensure appearance, low-level long term maintenance needs, low cost of operation, and other considerations were included in the project design stage.

Key instream structures being placed and buried (anchored) in Ochoco Creek - October 2022

Habitat features were added to the new channel form to increase habitat value and fish use. Whole juniper logs (boll and root wads) were partially buried with parts of the log exposed. These buried logs provide both structural integrity of the channel bottom (surface roughness and stability against downcutting) and in channel physical structure which can provide critical cover for younger age classes of fish. Cover provides relief from predation, high temperature, and high flow velocity.

Grading river rock materials for the final channel elevation; October 2022

Final channel configuration, bed materials, and juniper log structures for the new roughened riffle fish passage project on Ochoco Creek.

Final slope grades and channel alignment on Ochoco Creek

New foot and cart access bridge over Ochoco Creek as part of the wider roughened riffle project completed in the fall of 2022

Summary

The Lower Ochoco Creek Fish Passage project was completed on schedule in late 2022. It was one of the last primary fish barriers left in the lower Crooked River and is now a fully passable site for all fish species. The project was a success as measured on several fronts – the landowner is completed satisfied and has ahigh level of appreciation for the overall project outcome, fish can volitionally pass the site in both upstream and downstream directions, the project was completed with the budget available, and no significant hurdles or problems emerged during the project implementation phase. It should be noted that going into the implementation phase, an existing budget shortfall was effectively addressed with a community grant from Meta (Facebook). This grant was highly beneficial to the project and closed an important gap in funding attributed to inflation.

Other Major Projects & Activities

The council continued to engage and support a locally led partnership focused on water quality. Monthly water samples were collected at 10 sites in the lower Crooked River throughout 2022 and sent to the U.S. Bureau of Reclamation laboratory in Boise, Idaho, for analyses. These activities are supported by an OWEB monitoring grant that will expire in 2024. The data collected will be used by the partnership to develop remedial actions to address water quality improvement needs and establish baseline information that can act as a reference point used to compare future restoration work impacts to current conditions.

For upland work, the council applied for two projects in 2022 (OWEB grant program for Region 4). One was approved for funding with a project start date in March 2023, and the other was recommended for, but did not receive funding. The council will reapply for this project in the spring 2023 grant cycle. Other upland work is represented by a floodplain restoration grant awarded by OWEB in October 2022. This technical assistance grant project will collect a vast array of information associated with floodplain areas bordering the Crooked River above Prineville Reservoir. It will involve the collection and use of LiDAR (Light Detection and Ranging) data to map elevations along a 20-mile reach of the river encompassing over 750 acres of adjacent floodplain. The primary project goal is to determine if and how much natural river flow volume could be spread onto and temporarily retained by floodplains. Water available during high flow periods, typically the annual spring runoff period, could be spread out across these floodplains, soaked into the ground, 'stored' during the early summer, and then naturally released during the early fall. The benefits would be for extended higher flows in the Crooked during the lowest flow periods and cooler temperature of return flow water. This dual benefit would better support native fish and other aquatic species.

Summary of Major Activities & Accomplishments in 2022

1) Maintained council capacity by securing a service contract with Mark Peterson for specific assigned tasks, mostly associated with managing the USDA-NRCS Regional Conservation Partnership Program (RCPP) grant.
2) Field-tested two fish screens on the King Ranch located in the lower Prineville valley. Both screens were retained by the landowner under the cost-share Fin Safe project. They worked well under our river conditions and actually reduced the electricity used by the two irrigation pumps when compared to the previous screens. The Fin Safe project has three years left to implement and 2023 will focus on increased landowner outreach, engagement, and possibly additional field tests of different screen designs.
3) Staff applied for implementation funds for two large landowner projects in the lower Prineville valley as part of the NRCS-RCPP project. Funding to implement several more landowner projects will be pursued in 2023.
4) Fulfilled obligations under the new Tri-County CREP contract for Crook County which started in January 1. By the end of the calendar year, ten landowners were engaged and three CREP contracts were in development.
5) Staff completed a full year of baseline monitoring in the lower Crooked River. This project focuses on water quality at 10 sites and will conclude in 2024.

6) Council staff implemented all contract work with the Deschutes River Conservancy (DRC) providing field data to support the McKay Creek Water Switch project.
7) Completed and submitted four post-implementation status reports for past projects supported by OWEB grant funds.
8) Applied for three OWEB grants in the fall of 2022.

Consistent with previous years, the 2022 Council Board included wide representation from local landowners, federal land management agencies, research, state resource agencies, private sector utility, local government and the Confederated Tribes of Warm Springs. This diverse group of interests reflects the organizations charter. The council employed three full time employees throughout most of 2022, with the exception of a two-month period from October to December following the resignation of one of two project managers.

Landowner & Community Outreach

The council continued to implement an OWEB landowner engagement grant providing support for pre-project activities, typically conceptual and low detail design input, that lead to landowner projects in the future. This work is directed to the lower Crooked River geography to support conservation goals and objectives for the watershed. These activities are conducted in coordination with the Crook County Soil & Water Conservation District and the DRC, with each of the other partners focusing on different locations, project types, and landowners. The program grant expires at the end of 2023.

The council partnered with Think Wild and BeaverWorks to host a series of public information events focused on the watershed at large but presenting information on one focused topic at each event. The series is supported by a grant from Facebook. Three quarterly events were held in 2022, starting in May. The first watershed topic was Water. With extreme drought conditions for the entire watershed, the partners on this program selected this topic to go first. It was followed by Fire and Recreation. Each event featured a panel of presenters on the topic, a questions and discussion period and then an open house format that included invited and associated organizations tailored for the topic presented that evening. For the large part, the series was a success, especially the format and content, but low community turn-out dampened the partners desire to continue the series. While the events were publicized, it could be that some form of covid pandemic 'hangover' suppressed participation.

In 2023, staff anticipate focusing on outreach activities supporting water quality and beaver re-introduction topics.

Summary of Finances & Future Projection

The council continues to rely on grant funds, particularly from OWEB, and infrequent consulting services to support project implementation activities including contracted services, project management & monitoring, and grant administration. As such, the council is persistent in its efforts to develop the next set of projects and activities that will sustain the organization and provide support for watershed restoration activities within the service area over a durable timeframe. The council secured a new contracted project associated with delivering CREP program support for Crook County. The OWEB grant funding these activities expires in mid-year 2024. Staff plan to apply for a separate grant from OWEB in 2023 that would begin in mid-2024. It would be specific to Crook County with the council as the grantee.

The NRCS-RCPP project was extended by a full year in late 2022. The new grant expiration date is September 30, 2024. This project has provided funding stability to the council by increasing staff capacity and overall indirect funding levels. Although it took some time to get the grant activities in place and working efficiently, over the entirety of 2022, this project progressed well and is on a path to successful completion and outcomes.

Year End Financial Information Summary

The total income processed by CRWC in 2022 is $757,529, from all sources. Expenses for 2022 total $908,848, meaning the council ran a deficit for the year of $152,526. This is not unusual and can be attributed primarily to cash flow schedules and timing of funds availability as most all grants administered by the council are on a reimbursement basis.

Year-over-year comparisons for income are presented Table A, below. These figures reveal that the council's total income increased in 2022 by 289%, when compared to total 2021 income. The year-over-year increase is attributed to the NRCS-RCPP project which increased federal funding source levels well above normal, and several private sector additions that are not typical in most years. These changes from year to year are not uncommon as the organization's work varies by year and thus income and expenses can also vary widely.

INCOME

Total income for 2022 was $757,529. Income derives from several key sources, primarily grant income from the Oregon Watershed Enhancement Board (OWEB) and in 2022, the federal government via the NRCS-RCPP grant. Not included in the table below is the annual contribution from Crook County of approximately $27,000 to support the benefits package for the coordinator position.

Table A. Year-over-Year Income Comparison

Income Source	Amount 2022 ($)	Amount 2021 ($)	Change $ (+/-)
Contracted Services	35,892	19,973	+ 15,919
Donations	10,000	10,176	- 176
Private income	54,954	0	+ 54,954
Federal grants	425,448	18,362	+ 407,086
Local Government	3,297	0	+ 3,297
State grants	198,249	183,085	+ 15,164
Other	29,689	30,070	- 381
TOTAL	**$757,529**	**$261,666**	**+ 495,863**

EXPENSES

Total expenses for 2022 were $908,848. Expenses presented in the next two tables, B & C, are for all major expenditures for the year. The bulk of this amount is attributed to contracted services and payroll, at $690,821, and $178,609, respectively. These two figures best convey the proportionality of these two key expenses year after year in a consistent manner. As compared to 2021 totals for these two expense categories, contracted service expenses increased significantly while total payroll decreased slightly due

to an open project manager position for two months near the end of the year. Total payroll (all inclusive) was approximately one quarter of the total contracted expense for 2022. These two major expense categories account for 95.6% of the total for 2022.

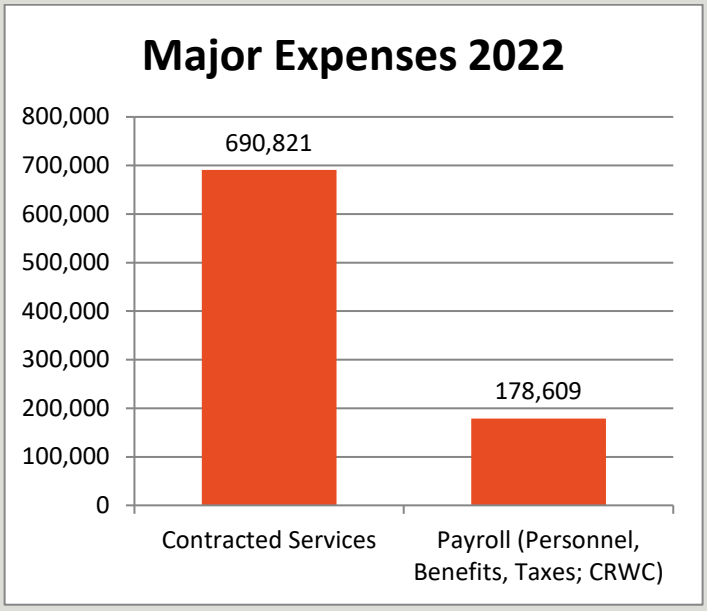

Table B. Major Expenses ($) - 2022

Contracted Services	$690,821
Payroll (Personnel, Benefits, Taxes, SAIF)	$178,609

Narrowing the focus to internal or operational expenses for the council, the 2022 internal expenses are graphed and displayed on the next page (Table C). Table C is organized in descending order starting with the highest costs. Clearly, total contracted services make up the bulk of expenses similar to most years. This pattern is typical, although the actual amounts can fluctuate from year to year, based on project type, scope, scale, staffing levels, and cost increases.

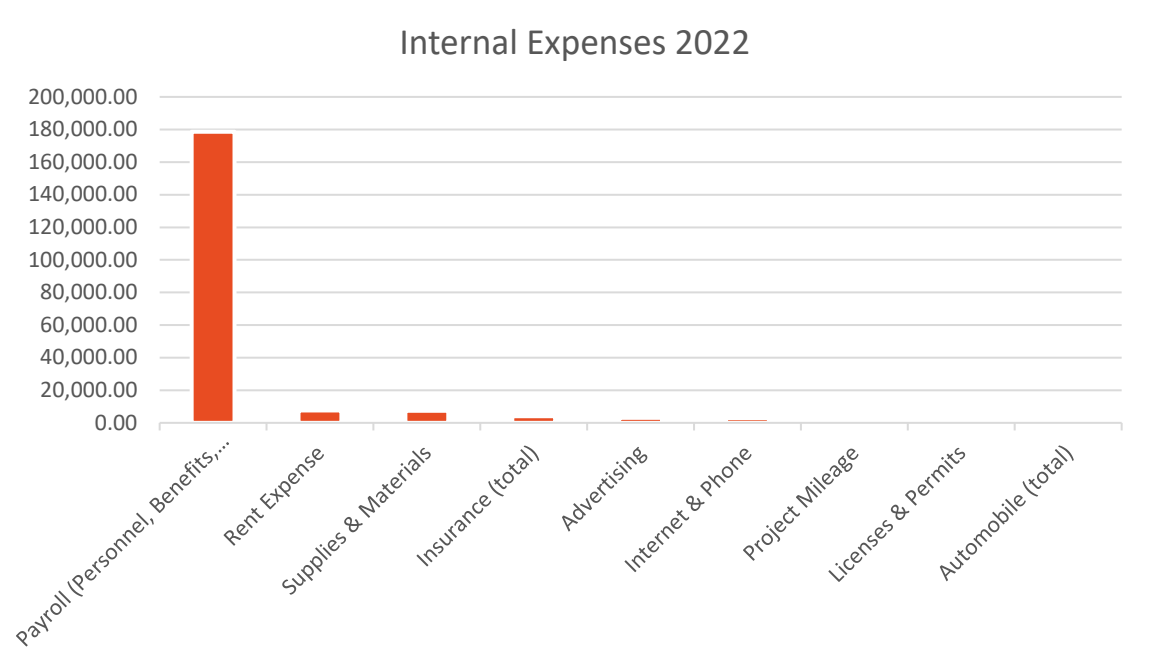

Table C. Internal Expenses by Category ($) - 2022

Payroll (Personnel, Benefits, Taxes; CRWC)	178,609
Rent Expense	7,500
Supplies & Materials	7,367
Insurance (total)	4,090
Advertising	3,130
Internet & phone	2,901
Project mileage (total)	2,095
Licenses & permits	1,161
Total automobile	437
Other (minor - total)	10,737
TOTAL Internal Expenses 2022	**218,027**

Outreach Projects

The Council typically implements several annual, recurring educational events with partners and primary educators in our service area. Since 2020, when the covid pandemic forced many operational changes for the council and its participating outreach partners, these activities have largely been curtailed or deferred indefinitely. In past years council personnel worked with US Forest Service personnel and other volunteers to host the annual *Fin, Fire, Feathers* (FFF) event that centers on first through third grade levels in Crook County. This annual event was cancelled in 2021. In 2022, two outreach events were completed. In 2023 and beyond, the council anticipates expanding out outreach and community engagement activities to pick up and add more information and support of beaver reintroduction goals.

OWEB Focused Investment Partnership (FIP)

In 2022, the council continued to utilize OWEB Focused Investment Partnership (FIP) program funds for regional coordination with partners, implementation and oversight of ongoing projects, reporting, and planning for next steps. This funding is in place for a two-year period and may lead the partnership re-applying for an implementing FIP grant which directly supports conservation project development and implementation exactly like the previous FIP grant.

Next Year & Beyond

The council will continue advancing work developed and secured by grants or other funding support delivered in 2022. This includes landowner outreach in support of future habitat restoration projects in the lower Crooked River valley below Prineville, implementing the Fin Safe fish screening project, the next phases and activities supporting our water quality program, further development of beaver reintroduction plans and projects, and providing community-oriented services through outreach and education. In 2023, the staff will continue a process to develop five-year workplans, long range plans for council sustainability, and more specific financial reporting and budget tools.

The council will continue working in coordination with partners to develop watershed restoration projects in the Upper Crooked River watershed. Our primary partner for work in this part of the watershed, the Crook County-SWCD, leads efforts focused on sage grouse habitat and upland issues such as juniper encroachment, while the CRWC focuses on in-stream improvement and habitat projects. In several cases, subcontracting is used to formalize these working partnerships and assign specific work to each of the participants. Other key partners in this area for 2022 and beyond include the US Forest Service, The Nature Conservancy, and the Bureau of Land Management.

The Council Coordinator will continue to seek new and creative opportunities to enhance long term stability and sustainability of the organization. The development of ecosystem service relationships with corporate, municipal, or other similar partners may be a key activity and may hold the most potential. External private sector funders, such as foundations and corporate sector investors, are expected to play a larger role in underwriting restoration projects developed by the council and collaborating partners.

The Council Board meets monthly in Prineville on the second Thursday. These meetings are open to the public. Please direct any questions, comments, or other input to this Annual Report to Council staff at 541.447.8567, by email to chris@crwc.info , or via the Council's new website at:

http://www.crwc.info

The Mission Statement of the Crooked River Watershed Council (revised 2020):

To promote stewardship of the Crooked River watershed and its resources from ridge top to river bottom, to capture, store, and safely release water to ensure sustainable watershed health, functions, and uses for optimal conservation and economic benefits