RUSSIAN RIVER BASIN

BUILDING FORMAL COLLABORATIVES TO LEVERAGE FEDERAL FUNDING

Watershed Context

The Russian River watershed, on the California coast just north of San Francisco, is home to 360,000 people and a diverse and productive agricultural economy known primarily for grape and wine production. It historically supported abundant populations of steelhead, Coho, and Chinook salmon. Today, these species are listed as endangered or threatened at the federal and state levels. This is due to habitat degradation and insufficient streamflow as a result of alterations and diversions of surface flows in the watershed, as well as prolonged periods of severe drought. The Russian River Coho Water Resources Partnership – a coalition comprised of Sonoma Resource Conservation District, Gold Ridge Conservation District, Trout Unlimited, Sonoma Water, NFWF, California Sea Grant, and the Occidental Arts & Ecology Center's WATER Institute – was formed to develop a strategy for addressing the most significant ecological threats to watershed health. These efforts, which are primarily focused in the middle and lower sections of the watershed, are driven in large part by the objective of protecting and restoring instream flows to enhance conditions for its endangered salmonid species.

Characterization of the Watershed

The Russian River flows south from its headwaters near Redwood and Potter valleys and discharges into the Pacific Ocean near the town of Jenner. The watershed drains an area of about 1,500 square miles, covering most of Sonoma County and part of southern Mendocino County.

Santa Rosa, with a population of 178,127, is the largest city in the watershed. Sonoma Water provides naturally filtered Russian River water to more than 600,000 residents in portions of Sonoma County and adjacent Marin County. The watershed is also home to dozens of Native American Tribes, who have lived alongside its river systems and managed their lands for millennia (Mendocino County Resource Conservation District 2012).

Roughly 90% of the land in the watershed is privately-owned. Of the public lands, about 5.5% is federal, 2.5% is state, and 2% is owned by local communities. Despite the number of distinct Native American communities, tribal lands make up only 0.08% of the watershed area (Mendocino County Resource Conservation District 2012). Wine grape cultivation is the most significant land use in the middle portion of the watershed. The lower reaches are predominantly mixed agriculture, rural residential, and recreational tourism (Mendocino County Resource Conservation District 2012). Agriculture is the most significant sector of the Russian River watershed economy, with the wine industry making up 40% of the county's gross domestic product.

The watershed has a Mediterranean climate characterized by mild, wet winters and dry summers. These conditions necessitate active irrigation for crop production during the growing season that substantially

impacts what is naturally the low-flow part of the annual hydrograph. It also creates ripe wildfire conditions, particularly during the end of the dry season or during periods of extended winter drought.

Russian River hydrology is best characterized as seasonally "flashy". During the winter wet season, the river experiences rapid, short-term high flow periods in response to extreme rainfall events (increasingly from atmospheric rivers). Flows during the summer and fall dry season are generally lower and are supported on the mainstem primarily by reservoir releases (Center for Western Weather and Water Extremes n.d.). These releases include water diverted into the Russian River from an adjacent watershed. Reservoir operations result in mainstem flows that are higher than natural during the summer months and lower than natural during the winter months, outside of major storm events (Mendocino County Resource Conservation District 2012).

The Russian River partnership is primarily focused on restoration of flow and habitat conditions on five tributary watersheds to the mainstem Russian that have been identified as flow impaired and critical for coho recovery. These are Mark West Creek, Mill Creek, Grape Creek, Green Valley Creek, and Dutch Bill Creek. The upper portion of Mark West watershed has relatively intact habitat of high biological value for coho salmon recovery, but the lower watershed is highly urbanized. Most of the upper watershed was impacted by a wildfire in 2017 and subsequently in 2020. Mill Creek watershed contains some of the best summer rearing habitat in the Russian River watershed, but its hydrology has been heavily impacted by unsustainable historic logging practices, and much of the watershed was also impacted by wildfire in 2020. Flow in Grape Creek has been altered by diversions for wine cultivation and barriers to fish passage. In recent years, Green Valley Creek has experienced extremely low flows during the summer and fall dry season that have caused some critical reaches to be disconnected or go completely dry for weeks at a time. Withdrawals of water for irrigation in Dutch Bill watershed have caused similar problems with pool disconnection and streambed drying.

Agencies / Entities Interviewed

AMP interviewed representatives from Sonoma Resource Conservation District (RCD), Gold Ridge RCD, and Trout Unlimited (TU) to gather information on their collaboration, conservation priorities, projects, and utilization of federal and other funding sources.

Resource Conservation Districts (RCDs) are established under California state law to conserve soil and water, control runoff, prevent and control soil erosion, manage watersheds, protect water quality, and develop water storage and distribution. They are locally governed agencies with independent boards of directors that are accountable to their communities. Unlike municipalities, RCDs have nominal tax base, and thus must rely on grant money for programs and operations. RCDs serve as a vital link between federal, state, and local conservation programs.

Sonoma RCD was established in 1946 and has a mission of bridging the needs of the community and natural resources by empowering people through reliable expertise and action to strengthen the resilience of Sonoma County. They strive to employ "voluntary, cooperative, and scientifically sound methods to ensure that the natural resources of the watersheds within the District are sustained, conserved, restored, and protected within a landscape of productive agriculture, growing cities, and wild lands" (Sonoma Resource Conservation District n.d.). Sonoma RCD covers most of Sonoma County.

Gold Ridge RCD was the first RCD established in Sonoma County, in 1941. It covers 134,000 acres of western Sonoma County and contains parts of the lower Russian River watershed. Their mission is to provide "technical assistance, access to funding, education, community facilitation, natural resources planning, voluntary natural resources monitoring, and efficient and impactful use of public funding cooperation with others, in partnership with landowners, land managers, and all other members of our community" (Gold Ridge Resource Conservation District n.d.).

Trout Unlimited - California (TU) has been involved in the Russian River watershed as a founding member of the Russian River Coho Water Resources Partnership. TU is a national organization that works collaboratively to protect, reconnect, and restore coldwater fisheries. TU's California Program works in areas of the state with viable coldwater fisheries habitat.

Geographies of Focus The Partnership has focused its work to date in select subwatersheds of the Russian River determined to be flow impaired and critical to coho recovery. These have included Mark West Creek, Mill Creek, Grape Creek, Green Valley Creek, and Dutch Bill Creek. Over time, Porter Creek has been added as a subwatershed of focus due to increasing flow restoration work (Figure 1). In Mark West, Mill, and Grape Creek subwatersheds, recent conservation efforts have been in response to wildfire. Fires have caused significant changes in land ownership and a migration out of the watershed, particularly for owners that keep their properties as a second home. A core community has remained, however, and is the focus of current post-fire restoration efforts. These include erosion control, forest management work, and rainwater capture projects.

Work in the other subwatersheds can most generally be categorized as flow enhancement through water release, conservation, and off-channel storage and forbearance projects. Storage and forbearance projects are intended to divert water from winter flows and store it off-channel for use during the dry season to offset summer and fall water diversions. Flow release projects involve releasing water directly into creeks from either agricultural ponds or other storage facilities. Grape Creek has utilized water storage and water conservation projects designed to reduce or eliminate water use for frost protection and irrigation. Mill Creek has primarily had water storage projects, with one flow release and one conservation project mixed in. Mark West Creek has had water storage projects, and projects designed to slow runoff and sink water into the ground to support base flows. Both Green Valley and Dutch Bill subwatersheds have employed a mix of all three project types (Gold Ridge Resource Conservation District et al. 2022a). More recently, the focus of conservation in these geographies has shifted towards broader solutions for repairing the modified hydrologic function at the subwatershed scale.

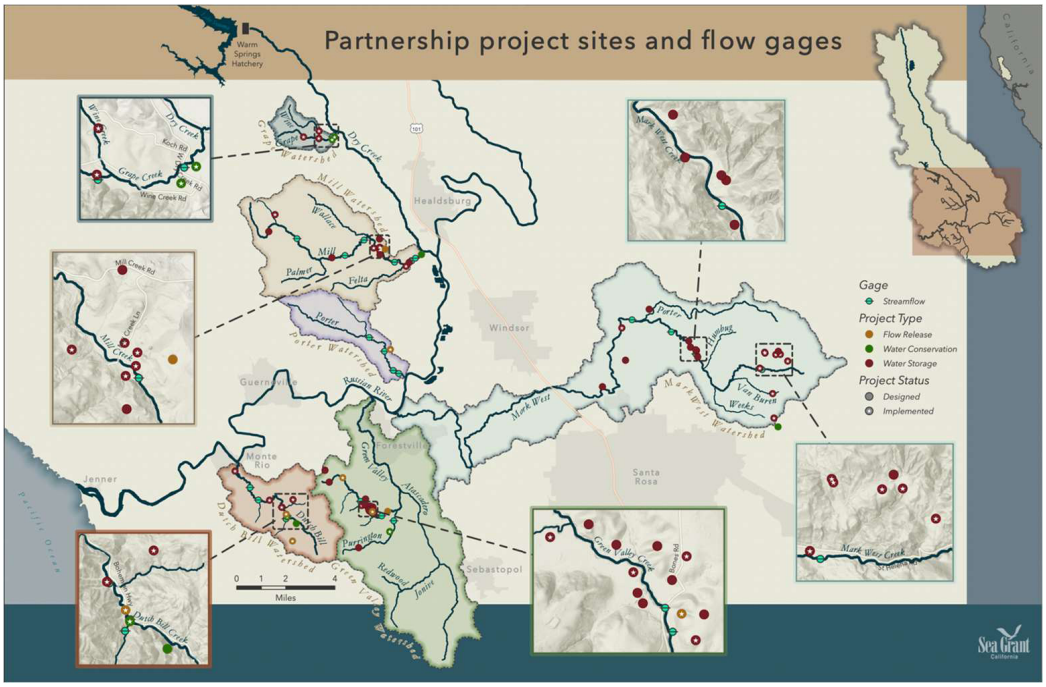

Figure 1. Focal subwatersheds. Source: Coho Partnership Glossary Final Report.

Coalition of Partners

The core partners of the Russian River Coho Water Resources Partnership are Gold Ridge RCD, Sonoma RCD, Trout Unlimited, Sonoma Water, NFWF, California Sea Grant, and Occidental Arts & Ecology Center's WATER Institute. These groups are water resource practitioners and scientists who are motivated to protect salmonid species and improve water security for their local communities in the Russian River watershed. The Partnership has worked with a variety of other local, state, and federal entities and stakeholders as part of their Technical Advisory Committee (TAC) (Figure 2).

- **California Department of Conservation**
- **California Department of Fish and Wildlife**
- **California Department of Water Resources**
- **California Environmental Water Network**
- **California State Coastal Conservancy**
- **California Water Boards**
- **California Wildlife Conservation Board**
- **CalTrout**
- **Coast Range Watershed Institute**
- **ESRI**
- **Friends of the Mark West Watershed**
- **Jackson Family Wines**
- **NOAA Fisheries**
- **Natural Resource Conservation Service**
- **O'Connor Environmental, Inc**
- **Salmonid Restoration Federation**
- **The Nature Conservancy**
- **University of California, Berkeley**
- **US Army Corps of Engineers**
- **US Fish and Wildlife Service**

Figure 2. List of entities that have worked with the partnership. Source: Coho Partnership Glossary Final Report.

Partnership Dynamic Each of the core partners brings their own expertise to the Partnership. The RCDs are an indispensable local part of the partnership with a national conservation organization like TU. They provide connections to landowners and stakeholders on the ground that are essential for identifying and developing projects. There is often a mistrust of larger, national entities among local landowners in the watershed. The local relationships that are established through the RCDs are essential for achieving the Partnership's goals. TU brings its capacity and in-house hydrology and water right expertise to the Partnership and provides broader access to state and federal agencies than RCDs may have on their own.

In the first few years of the Partnership, it was critical to focus efforts on establishing and developing cohesiveness between the core partners. It took a few years to build relationships and develop a programmatic structure among partners who had never worked collaboratively together on this scale. Tension existed early among these groups who had previously been in competition with each other on grant proposals or other project funding opportunities. For this reason, a lot of the focus of the Partnership's early work was to coalesce around how best to collaborate to achieve their shared goals. These discussions resulted in signed documents outlining the ways in which the core partners would collaborate on projects as part of the Partnership. Through this collaboration, the Partnership has been more effective at securing funds and more efficient at utilizing the time and capacities of each core partner. For example, the California Wildlife Conservation Board has a certain grant proposal model that requires implementation and monitoring to be included in each project. The Partnership can bring together partners with expertise in each of these elements to secure funding for a well-rounded collaborative project.

Initial relationship-building and development of an agreed-upon programmatic framework is an essential preliminary stage for establishing an effective coalition of partners. However, it can be challenging to take these critical steps without the support of an initial source of core funding. The challenge is that these entities usually rely on funding that is primarily for the design and implementation of specific projects rather than for activities such as partnership building. The Russian River Coho Water Resources Partnership had a major advantage in this regard due to having secured long-term funding from the National Fish and Wildlife Foundation (NFWF) in 2009 to both launch and sustain the collaboration for over a decade. NFWF made the long-term funding commitment through

its now defunct keystone initiatives, which were developed and nurtured by four NFWF scientific experts. This funding was indispensable for providing the opportunity and will to continue having the conversations needed for the Partnership to work and succeed together. NFWF funding concluded in 2020, but the relationships and structure that were established during the initial stages of the Partnership remain.

Partnerships with Private Landowners Given that about 90% of the watershed is privately-owned, it is critical to have landowner participation to be able to identify and implement conservation projects. Relationships with landowners have been developed largely by the RCDs and TU, but the Partnership has continued to maintain and foster new relationships through public outreach and education efforts. By the start of 2022, the Partnership had communicated with 10,000 community members either through direct outreach or public meetings (Gold Ridge Resource Conservation District et al. 2022a). Through public outreach and education, they have been able to identify specific landowners to collaborate with on certain projects that benefit both the landowner and the river. Collaborations are typically with agricultural and rural residential landowners and tend to be smaller in scale. For example, the Partnership worked with a vineyard in the Grape Creek subwatershed to replace irrigation-based vineyard frost protection systems with a fan system. The Partnership has also collaborated on projects with other types of private landowners in the watershed. In the Dutch Bill Creek subwatershed, they worked on a water storage and conservation project with the Westminster Woods Camp and Conference Center, a year-round camp, outdoor school, and retreat center. The project involved irrigation efficiency improvements and turf replacement, installation of storage tanks, and permanent removal of the camp's existing diversion pump from the Dutch Bill Creek (Russian River Coho Water Resources Partnership, n.d.). Projects like these meet the landowner's irrigation needs while leaving more water available for instream flow.

Priority Conservation Issues and Efforts

Conservation Issues The Russian River watershed is home to 3 listed species of salmon that have experienced a significant decline in abundance due primarily to insufficient water quantity. As such, the most important conservation issue in the watershed is the restoration and protection of instream flows. Sufficient streamflow is required for multiple parts of the salmonid life cycle, including spawning during the winter months, rearing in pools during summer dry season, and migrating to the ocean in the spring as smolts (Gold Ridge Resource Conservation District et al. 2022b). In particular, juvenile salmonid stranding during the dry summer months is a major limiting factor for overall population viability.

Hydrologic restoration for flow enhancement is the overarching focus of many smaller, more specific conservation issues in the watershed. These primarily include sediment reduction, forest management, and wildfire resilience and prevention. Sediment is a major issue in most of the Russian River's subwatersheds, as a result of past land use and wildfires. There are multiple subwatersheds that experience problems with stream channel incision in their headwaters transporting sediment downstream and contributing to sedimentation and flooding issues. This ties into the watershed's ability to produce flow, as streams tend to dry up faster with degraded and disconnected alluvial aquifers. Issues with forest management also tie into overall watershed health and hydrology. Forests are currently overstocked with trees in the same age range, leading to greater water consumption than in the past. Overstocked forests lead to increased fire hazard as well and creating conservation issues resulting from wildfire. In addition, wildfires pose a serious risk to communities, infrastructure, habitat, and watershed health.

Strategic Approach Each conservation issue in the watershed has multiple resource connections that relate to overall watershed health and hydrologic function and thus restoration requires an integrated approach. The approach taken to addressing instream flow and other related conservation issues in the Russian River watershed is to harness collective expertise and action through partnerships and coalition-

building. In 2009, the RCDs, TU, and other groups formed the Russian River Coho Water Resources Partnership with the goal of improving instream flow for coho salmon while addressing water supply reliability for water users (Gold Ridge Resource Conservation District et al. 2022b). They focused specifically on the 5 subwatersheds listed previously – Mark West, Mill, Grape, Green Valley, and Dutch Bill.

Project Types and Scale The Partnership focused first on improving streamflow through water storage, water conservation, and flow release projects in the subwatersheds of focus. Some examples of these project types include nonirrigated frost protection, custom-designed rainwater tanks to increase catchment capacity, irrigation efficiency improvements, installation of off-stream storage tanks to shift timing of diversions from summer to winter, and more (Gold Ridge Resource Conservation District et al. 2022a). These projects were implemented at many locations within each subwatershed (see Figure 1). However, the groups recognized that even if all human water demands were addressed, in some years it would still not generate enough flow to achieve ecological goals for salmonids. Watershed impairment would also need to be addressed to achieve the greatest potential from each subwatershed. It has generally been more difficult for the Partnership to find funding for watershed health than for direct flow restoration, as there is no simple metric to evaluate effectiveness of investment dollars, and fisheries funders increasingly prioritize projects with direct and immediate results. However, in recent years, the Partnership has been increasingly approaching watershed health from the angle of fire resilience while concurrently achieving hydrologic restoration. Through the lens of fire, the RCDs have been able to access state funding available for wildfire resilience and utilize it to start addressing issues related to sediment and forest management. For example, TU has worked with the RCDs on addressing flow and water diversion in the context of community fire preparedness while also having conversations about storage tanks that are good for both wildfire and fish (MaryAnn King, personal communication).

The RCDs in the Russian have recognized in recent years that funding for fire resilience will represent an increasing share of the overall funding available for future work in the watershed. Mark West, Mill, and Grape Creek subwatersheds have each been significantly impacted by catastrophic wildfires in the past 5 years. Post-fire recovery and fire resilience projects in these subwatershed can also be used to address the issues of forest management and sedimentation that impact streamflow. RCDs have started to look toward federal and state funding opportunities for fire resilience projects as a way to also address watershed health at the subwatershed scale. For example, FEMA's Building Resilient Infrastructure and Communities (BRIC) program has been utilized by Sonoma County to perform forest health and natural infrastructure projects to reduce wildfire risk for three small communities in the watershed.

Projects related to sediment reduction, wildfire resilience, and forest management have typically been implemented at the subwatershed-scale in Mark West, Mill, Grape, Green Valley, and Dutch Bill subwatersheds. The idea is to restore and protect watershed condition at the subwatershed-scale such that each system can contribute as much flow as possible, particularly during the low-flow dry season, in hopes of achieving ecological goals for salmonid species. In watersheds that haven't experienced large fires, like Green Valley and Dutch Bill, the goal is to implement large-scale fire resilience and forest management projects so that catastrophic wildfires like those that have happened in other areas of the watershed can be avoided.

Funding

Funding for projects in the Russian River have been secured from a variety of federal, state, local, and private sources. The sources used to fund different project types are summarized in Table 1.

Category	Project Types	Funding Sources & Opportunities
Coalition Building	Coalition Building	NFWF Keystone
Flow Restoration and Protection	Water Storage	NFWF Keystone + grantee match, FRGP, WCB
	Water Conservation	NFWF Keystone + grantee match, FRGP, WCB
	Flow Release	NFWF Keystone + grantee match, FRGP, WCB
Soil Reduction	Road Remediation	FRGP
	Bank Stabilization	FRGP
Wildfires	Wildfire Prevention and Resilience	FEMA BRIC, USFS Wildfire Crisis Strategy
Salmon Recovery	Salmon Recovery	NOAA
Coastal Resilience	Coastal Resiliance and Infrastructure	Federal Infrastructure Bill (through NOAA)

Table 1. Summary of project types and funding sources in Russian River Watershed.

Initial and Core Partnership Funding The Russian River Coho Water Resources Partnership received its initial keystone investment from NFWF in 2009. NFWF used US Fish and Wildlife Service money as a base for the annual grant, with periodic additions from private donors. It initially provided about $800,000 per year to the Partnership, but the amount eventually fell to $600,000 per year and finally to $400,000 per year by the end of the funding window. It was expected to last 12 years but ended up concluding in 2020 after 11 years. In total, more than $6 million was invested into the Russian River Coho program, with an additional $10.6 million leveraged in grantee match (National Fish and Wildlife Foundation n.d.). Significant funding support was also provided by Sonoma Water.

In the first few years, the NFWF funding was used primarily for relationship-building, programmatic design of the Partnership, outreach and project development, and setting up the Partnership fisheries and streamflow monitoring. This was a critical first step for the Partnership, especially in the first 6 months. It was important for relationship-building among the core partners, but also for outreach to foster connections with landowners and stakeholders in the watershed. Outreach was noted as being the most difficult part of the program to find funding for, but NFWF and other related funding matches helped fill that gap. Comprehensive watershed planning was also funded by NFWF. This was helpful in the early phases for establishing a scientific basis for conservation efforts in the watershed. Having a scientific basis early on has helped the Partnership strengthen their proposals when they reached the project implementation phase of their collaboration. Since the conclusion of the NFWF annual funding, the Partnership has been continued to maintain its cohesiveness and has focused on securing funding from various sources on a project-specific, piecemeal basis.

Federal Funding Sources The Partnership has received various sources of federal funding (either through state agencies or directly) for projects on the ground. A major source of their federal funding is through the Fisheries Restoration Grant Program (FRGP). This is a state program with the California Department of Fish and Wildlife (CDFW) that channels federal (primarily from the Pacific Coastal Salmon Recovery Fund (PCSRF) administered by NOAA-Fisheries) and other funding sources towards the recovery and conservation of salmon and steelhead populations in coastal California watersheds. The Partnership was able to match FRGP funding with NFWF funding to implement conservation projects in the watershed. In addition to the flow enhancement project types described above (Section 2.4.3), FRGP funding has been used in the past for road remediation work to reduce sediment loads in streams and implement numerous instream habitat enhancement projects. CDFW has moved away from erosion prevention work over the past 10 years and the Partnership has mostly moved away from seeking FRGP funding. Gold Ridge RCD still applies for and received FRGP funds on a somewhat regular basis, although there have been grant cycles in recent years where they have not applied for it.

The Partnership has also directly utilized NOAA money for salmon recovery through their Habitat Blueprint program. This was focused primarily on improving streamflow in Grape Creek and Dutch Bill Creek (Alliance Redwoods project) for the conservation of salmon species. Since then, Sonoma RCD has

attempted to apply directly to NOAA for certain grant programs but without much success. Sonoma RCD has received the bulk of their federal funding from the Environmental Protection Agency through the California State Water Resources Control Board under the Clean Water Act. Sonoma RCD has also received Bureau of Reclamation WaterSMART grants for projects in other adjacent watersheds, but not for work in the Russian River watershed. Certain WaterSMART programs were not an important source of funding for entities in the Partnership because they focus on planning and strategy development, and the Partnership already had NFWF funding for that purpose. It was noted that the NFWF funding was easier and more effective for this purpose than seeking WaterSMART would have been. In the future, the Partnership could seek project implementation funding through other WaterSMART programs such as the new Environmental Water Resources Projects program.

Natural Resources Conservation Service (NRCS) funding has been secured in bits and pieces for conservation work in Sonoma County through a partner's Regional Conservation Partnership Program (RCPP) award. In 2020, Sonoma County Agricultural Preservation and Open Space District and partners received $3.5 million for an RCPP Alternative Funding Arrangement (AFA) project. The project, called "Innovative Conservation: Vital Streams and Forests", is a multi-objective project focused the development of innovative riparian corridor conservation easements and source water protection forestland easements (NRCS California n.d.). RCPP funding has been used in the county for conservation planning and has been noted to be flexible enough to be utilized by both RCDs for forest management, carbon sequestration and erosion prevention planning. However, the RCD has noted that, in their experience, RCPP processes have become more difficult to navigate, with intricate requirements that are difficult to match up with programmatic needs.

In addition, Sonoma County has received federal funding for fire risk reduction from the first round of FEMA's Building Resilient Infrastructure and Communities (BRIC) grant program. The BRIC program has allocated $1 billion to "support states, local communities, tribes, and territories as they undertake mitigation projects, reducing the risks they face from disasters and natural hazards" (FEMA n.d.). Sonoma County received $37 million from the program for wildfire prevention. The BRIC grant requires a 25% match from its recipients, to which Sonoma has committed $13 million it had set aside from Pacific Gas & Electric (PG&E) legal settlements. The BRIC program emphasizes wildfire prevention through a human objective of protecting communities and infrastructure but has been utilized by Sonoma for broader-scale forest management that also has benefits for overall watershed health.

State Funding Sources The bulk of the Partnership's funding for work on the ground is through a combination of state funding sources (and FRGP). This comes from Proposition 1 and California Wildlife Conservation Board (WCB) grant programs. Proposition 1 is an assembly bill in the state of California that provides large amounts of money ($7.545 billion) for a variety of water projects including watershed protection and restoration. This funding provided $200 million to WCB for flow enhancement projects. WCB also provides opportunities for additional restoration grant funding that the Partnership has utilized in the Russian River watershed. In addition, Gold Ridge RCD also utilized North Coast Integrated Regional Water Planning funds for project implementation. These funds were from Prop. 84 and were administered by the CA Department of Water Resources.

Private Funding Sources Private contributions to the Russian River Coho Water Resources Partnership were leveraged as matches to the keystone NFWF funding. Over 11 years of NFWF funding, a total of $10.6 million was leveraged in grantee match. However, it was not discussed in detail how much of that was sourced from private donors. Interviewees did not describe which types of private donors were contributing funds or how they were utilized in the watershed.

Future Funding Sources With the conclusion of the NFWF keystone funding, the core partners of the Russian River Coho Water Resources Partnership have shifted their efforts towards project-specific funding for conservation projects in the watershed while maintaining core support for staff capacity. Sonoma and Gold Ridge RCDs plan to take slightly different approaches to securing future funding. Gold

Ridge is considering moving back towards FRGP, as the program has been moving in a new direction in Sonoma County. The 2021 FRGP project announcement re-emphasized the use of bank stabilization and road decommissioning as strategies for restoring salmonid habitat in coastal watersheds (California Dept. of Fish & Wildlife 2021). They will also be looking towards funding from the federal infrastructure bill administered through NOAA for coastal resilience.

Both RCDs acknowledged the transition to FEMA funding for fire prevention as an avenue for securing funding for watershed health. However, both noted that the FEMA grant process is difficult to work with due to long delays to get the grant in place and a sizable 25% match requirement. They recognized that it is a tough task for smaller RCDs like theirs to be able to find a match of that size. Sonoma RCD will attempt to partner with the California Association of Resource Conservation Districts in an effort to work with FEMA. The Association has more experience with acquiring large federal grants funding that Sonoma does not have on its own. Application for FEMA grants requires a partnership with at least one larger partner that is capable of shouldering a grant of that size. In general, the RCDs have noted that there is a considerable lack of capacity for smaller entities to be able to keep up with the amount of money available. Finally, the U.S. Forest Service's recently launched 10-year Wildfire Crisis Strategy will expand federal funding for fire prevention and remediation beyond just the agency's lands. Under this new initiative, the Forest Service intends to work with partners to treat up to an additional 30 million acres of other Federal, State, Tribal, and private lands.

Challenges, Opportunities, and Lessons Learned

In the Russian River, the key challenges to collective conservation efforts are associated with program and project development and the process for seeking project funding, particularly through the state FRGP. Very few of the existing funding sources allow the award of unrestricted funds, or even moderately restricted funds, which are critical for developing conservation programs and individual projects. Activities such as outreach, development and maintenance of landowner relationships, project site evaluation and initial project planning are critical precursors to getting work done on the ground, but it is nearly impossible to secure funds explicitly intended for these activities. The programmatic nature of the NFWF funding was critical in this respect – the Partnership was able to use it to get this preliminary work done, then go to other sources to fund design and implementation. One interviewee stated that the biggest impediment to getting collective work done was the idea that the grant application process needs to be competitive. This is likely the cause for the initial tension when the core partners got together to form the Russian River Coho Water Resources Partnership. It took years of conversations to build trust and form a coalition that was capable of working collaboratively on conservation issues in the watershed. In addition, a competitive grant process requires a large expenditure of resources, time, and money – the cost of which is taken on by the applicant. As mentioned before, RCDs have limited to no tax base or other unrestricted funds, so they must figure out a way to pay for the writing of a grant proposal and for administering grants that do not always cover the full costs of a project. That can require another partner with more resources to invest in the grant application work that comes before the actual project work can be funded, and/or to act as lead administering the grant once funded. Relationships between the entity applying for the grant and the funding agency can be difficult to manage in this situation. Funding agencies have their own priorities as well that may not perfectly align with local needs on the ground. This poses a difficult situation for RCDs to receive funding for their conservation projects.

The upside of these challenges is that there are considerable amounts of resources available for this type of work. The opportunity exists to improve and streamline grant application processes and grant program terms such that local entities like RCDs can afford to secure that funding. To do that, one interviewee recommends that early-stage grants not come with large match requirements, and the process should be streamlined so as not to require 10 grants just to get one project done. However, given that this is often the case for smaller entities, the opportunity exists for them to have larger

comprehensive conversations on what it actually takes to complete a project and how to get there with multiple funding partners.

A key takeaway from the Russian River case is that fostering collaborations within the watershed and with larger entities can help to secure large-scale federal funding sources that are available for conservation work. Collaborative effort allows the collective expertise of the partners to be utilized most effectively to bring in funding and design and implement projects. Each individual entity brings its own connections and expertise that contribute to the greater success of the partnership as a whole. As seen in the Russian River Coho Water Resources Partnership, the RCDs contribute the essential relationships with local landowners needed for project design and implementation and TU contributes their capacity and expertise in hydrology and water right permitting and policy. with state and federal programs to bring in funding. All members of the Partnership contribute to grant writing, with the RCDs leading the charge on securing implementation funding. One key aspect of this, however, is that flexible funding is essential for the success of a collaborative effort. Money secured by TU must be able to be utilized on the ground by the RCDs or other partners.

With the collaborative approach, the challenge remains on how to fund the conversations and relationship-building required to foster these collaborations in the first place. The Russian River Coho Water Resources Partnership had a major advantage in this regard due to the NFWF funding that they received. Other entities do not have this luxury but can look to the example set by the Partnership. While NFWF's keystone initiative is now defunct, other funders may be cultivated to provide the type of support provided to the Russian River Partnership.

It is also beneficial for local entities like an RCD to secure federal funding that is disbursed through local and state programs. Both Sonoma and Gold Ridge RCDs have often done this through FRGP, the State Water Board, and Sonoma County. Participation in the larger, statewide associations, like the California Association of RCDs can further improve the ability to secure federal funding, whether directly or through a local or state agency. Finally, as mentioned above, the partnership with a national organization like TU can provide additional capacity and a broader perspective on how to fund conservation strategies.

References

MaryAnn King, Trout Unlimited. Personal communication, March 28, 2022.

Valerie Minton, Sonoma Resource Conservation District. Personal communication, March 28, 2022.

John Green, Gold Ridge Resource Conservation District. Personal communication, March 28, 2022.

California Dept. of Fish & Wildlife. 2021. "Mitigated Negative Declaration for FRGP, Steelhead and Forest Land Restoration Projects." 2021. *https://wildlife.ca.gov/Grants/FRGP/MND*.

California Forward. 2019. "Toward Russian River Sustainability." Prepared for Russian River Watershed Interests and California Department of Water Resources.

Center for Western Weather and Water Extremes. n.d. "Russian River Watershed Characteristics." Accessed April 7, 2022. *https://cw3e.ucsd.edu/firo-watershed-characteristics-and-challenges/*.

FEMA. n.d. "Building Resilient Infrastructure and Communities." Accessed April 14, 2022. *https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities*.

Gold Ridge Resource Conservation District. n.d. "Mission." Accessed April 8, 2022. *http://www.goldridgercd.org/htm/mission.htm*.

Gold Ridge Resource Conservation District, SeaGrant California, Trout Unlimited, Occidental Arts & Ecology Center, and Sonoma Resource Conservation District. 2022a. “The Russian River Coho Water Resources Partnership - Dedicated to Improving Water Reliability for Fish and People.”

———. 2022b. “The Russian River Coho Water Resources Partnership - Lessons Learned for Streamflow Enhancement in California.” Russian River Coho Water Resources Partnership.

National Fish and Wildlife Foundation. n.d. “Russian River Coho.” NFWF. Accessed April 11, 2022. *https://www.nfwf.org/programs/russian-river-coho*.

NRCS California. n.d. “NRCS Invests $3.5 Million in Innovative, Partner-Driven Conservation Project in California.” Accessed April 14, 2022. *https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/newsroom/releases/?cid=NRCSEPRD1656215*.

Russian River Coho Water Resources Partnership. n.d. “Dutch Bill Creek Water Conservation & Storage Project Westminster Woods.”

Sonoma Resource Conservation District. n.d. “About Us.” Accessed April 8, 2022. *https://sonomarcd.org/about/*.

Technical Memorandum prepared for River Network by AMP Insights, June 3, 2022.

AMP Insights

river NETWORK
connecting people · saving rivers