Technical Proposal for
Illinois Valley Irrigation Efficiency and Flow Restoration Project

By Illinois Valley Soil & Water Conservation District and Trout Unlimited

For WaterSMART Cooperative Watershed Management Program Phase I for Fiscal Year 2023 & 2024 Funding Opportunity No. R23AS00362

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September 3, 2024

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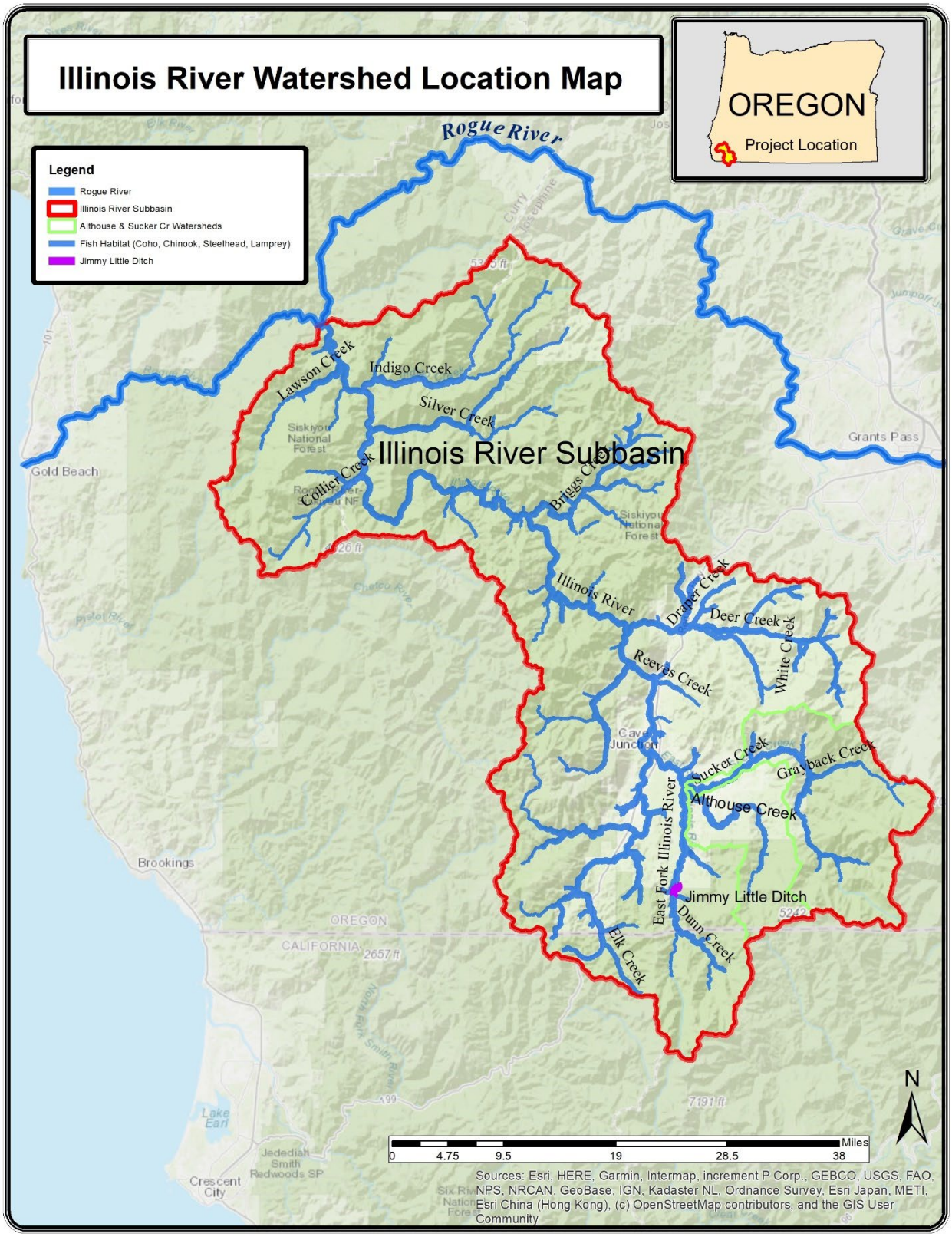
A Executive Summary

The Illinois Valley Soil & Water Conservation District (IVSWCD) in collaboration with Trout Unlimited (TU), have formed the Illinois Valley Irrigation Modernization Partnership (IVIMP) and are seeking funding for Watershed Management Project Design. This partnership will work to conserve water, improve streamflows, and provide water security to local irrigators. The Illinois River Subbasin is located in southern Oregon near Cave Junction. This project is part of a focused initiative to increase irrigation efficiency and restore river flows in a high priority area as designated by State agencies. The Illinois River Subbasin was identified as having a high ecological need and high opportunity for flow restoration by multiple planning activities including by ODFW and OWRD. The Illinois River and its tributaries experience de-watering due to water withdrawals for irrigation, resulting in reduced habitat quality and quantity for ESA-listed Southern Oregon/Northern California Coast (SONCC) coho salmon, chinook salmon, summer and winter steelhead trout, Pacific Lamprey, and other aquatic species. Improved instream flows are among the high-priority recovery actions listed in NOAA's SONCC Coho Recovery Plan (2014). There is a high level of interest in irrigation modernization and water security in this rural region as irrigators adapt to recurring droughts and changes in water management. TU and IVSWCD have developed a strong partnership and track record with local partners and agencies to support water conservation measures and restore streamflow. This partnership seeks funding to develop designs in order to support this program and put projects with local landowners on the ground. This proposal would provide funding over 3 years for the design of 1- 3 irrigation modernization projects on private land and outreach to local irrigators and ditch operators about the benefits of irrigation modernization and water conservation practices beginning in March 2025.

B Project Location

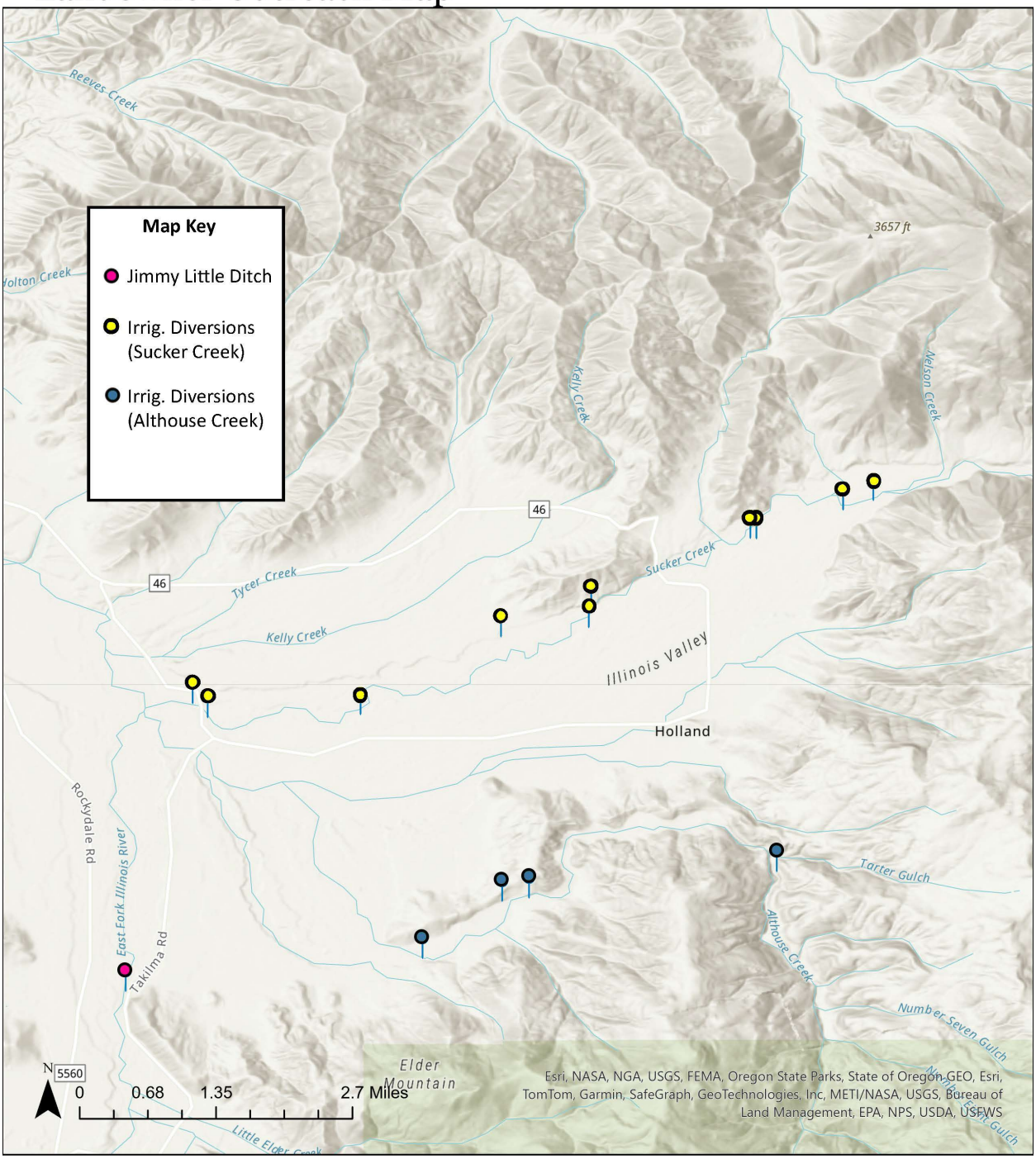
The Illinois Valley Irrigation Modernization Partnership (IVIMP) is focused on projects in the Illinois River Subbasin (Map 1; HUC 17100311). This project is in Josephine County, Oregon within approximately 10 miles of Cave Junction. Outreach will be completed for irrigators in the Illinois Valley. This includes the entire subbasin (HUC 8). Irrigation systems in Althouse and Sucker Creeks will be prioritized due to the high need in these areas for flow restoration and the high potential for irrigation efficiency work (Map 2). Following outreach to key water rights holders, designs will be completed for 1-3 irrigation efficiency projects. The first design project location will be the Jimmy Little Ditch Irrigation Efficiency Project. The Jimmy Little Ditch is in Takilma, Oregon on the East Fork of the Illinois River (Maps 1 and 2). This project will provide preliminary designs for piping for this ditch and quantify the amount of conserved water that will be permanently dedicated instream through the Allocation of Conserved Water Program. Outreach under this grant opportunity will determine the other design project location(s) in the Illinois River subbasin

that will be designed under this funding opportunity.



Map 1: Location of Illinois River Watershed and the extent of fish habitat.

Illinois Valley Irrigation Modernization Partnership (IVIMP): Landowner Outreach Map



Map 2: Location of Jimmy Little Ditch Irrigation Efficiency Project and major irrigation ditches on Althouse and Sucker Creeks.

C Applicant Category

Trout Unlimited (TU) in partnership with the Illinois Valley Soil & Water Conservation District (IVSWCD) is seeking funding as an Existing Watershed Group as defined in Section 6001(6) of the Cooperative Watershed Management Act. Both organizations have been implementing conservation projects in the since the 1950s. IVSWCD was formed in 1949. Soil and Water Conservation Districts (SWCDs) were formed nationwide based on enabling legislation from Congress that grew out of the devastating Dust Bowl and other critical conservation problems of the 1930s. This enabling legislation granted individual states the right to form SWCDs. SWCDs were established starting in the 1930s to develop comprehensive programs and plans to conserve soil resources, control and prevent soil erosion, prevent floods, and conserve, develop, utilize and dispose of water.

The IVSWCD is a local, grassroots, non-regulatory special district whose mission is to provide local landowners and managers with technical and financial assistance to best address their resource conservation issues. IVSWCD's mission parallels that of the Oregon Plan for Salmon and Watersheds in that we are striving to foster voluntary efforts to promote watershed health and conservation of threatened and endangered species.

The IVSWCD and TU formed the Illinois Valley Irrigation Modernization Partnership (IVIMP) to support local landowners in their efforts to address current issues in the watershed with irrigation water management and address limiting factors in the watershed. Current agricultural water management practices utilize outdated, inefficient irrigation systems such as open ditches and flood irrigation that limit local agricultural land productivity. In addition, agricultural diversions have dewatered streams in the watershed that reduces the quality and quantity of habitat aquatic species including ESA-listed species as well as impacting water quality. IVSWCD has been a long-standing, local, community-supported organization for developing conservation projects and TU brings expertise in water transactions, funding, and managing irrigation efficiency projects. This partnership has expertise that covers both the outreach component of the project with strong community ties and the technical aspects of designing and implementing water conservation projects.

Illinois Valley Irrigation Modernization Partnership (IVIMP) began outreach in June 2024 to irrigators in the Illinois Valley who could benefit from irrigation modernization and this outreach would continue under this funding opportunity. IVIMP progress has currently been limited by a lack of sources for funding the design of irrigation efficiency projects which is the reason for this application. There are multiple funding sources available to implement water conservation projects once designed but the IVIMP has an immediate need for design funding to be able to get the projects developed to the point that IVIMP can access these funds in a timeframe that maintains support and momentum for the project from the irrigations. IVIMP has two current projects, Sweet Cron Irrigation Modernization Project and Jimmy Little Ditch Irrigation Efficiency Project. The Sweet Cron Irrigation Modernization Project has been designed and is expected to be constructed in 2025 if funding is secured by pending applications therefore it is not part of this proposal. The Jimmy Little Ditch Association Irrigation Efficiency Project is part of this application. IVIMP seeks funding for survey and design of conveyance (ditch) efficiencies for this project as

part of the first-year project budget. The Jimmy Little Ditch Irrigation Efficiency Project will serve as an example project in garnering local support for irrigation modernization in the Illinois Valley. Jimmy Little Ditch Association are long-term community members, and their letter of support is included in this application.

D Eligibility of Applicant

The Illinois Valley Irrigation Modernization Partnership (IVIMP) is an Existing Watershed Group. TU and IVSWCD founded this partnership in 2024 to address limiting factors of the watershed and irrigation community concerns. IVSWCD qualifies as an eligible applicant for the WaterSMART Cooperative Watershed Management Program due to its special district status and active role in watershed management in Oregon. TU is legally incorporated as a 501(c)(3) non-profit organization other than institution of higher education. TU and IVSWCD are capable of promoting the sustainable use of water resources in ways that conserve the quality and quantity of water in the Illinois River Watershed and have been working on conservation projects since the 1950's.

The Illinois Valley Soil & Water Conservation District consists of a seven-member board with five zone directors and two at large directors. SWCD Directors are elected based on geography-specific criteria as outlined in the following link: https://www.oregon.gov/ODA/programs/NaturalResources/SWCD/Pages/Elections.aspx. Illinois Valley Soil & Water Conservation District represents diverse interests in the composition of the Board. The board members of the IVSWCD bring a rich diversity of interests and expertise to their roles. William Reid, the Board Chair and At-Large Director 2, combines his experience in real estate with a passion for viticulture, electronics, and investment. Jim Gurley, Zone 1 Director, is a retired tech industry professional and volunteer firefighter, who focuses on applying scientific principles to conservation efforts. Rhett Nelsen, IVSWCD Zone 2 Director, is a lifelong resident who operates a family farm and is actively involved in the Farm Bureau. Robert Webb, the Vice Chair and Zone 3 Director, has deep roots in multigenerational farming, permaculture, and the timber industry. He is the Southern Oregon Chair of the Soil and Water Conservation Commission (SWCC). Katrina Poydack, Zone 4 Director, is dedicated to forest health, fire restoration, and biodiversity. Bob Schmidt, Zone 5 Director, is passionate about beaver restoration, healthy forests, and water quality. Marcy Sowa, At-Large Director 1, with her background in community work and social science, also runs a small homestead farm in the Deer Creek watershed. Associate Directors Carol Crawford and Janice Denney bring additional expertise in trail management, equestrianism, riparian restoration, herbal medicine, environmental justice, and natural resource management. This diverse array of interests ensures a comprehensive approach to conservation and resource management within the district (https://www.ivswcd.org/board-members).

TU is the nation's largest grassroots coldwater conservation organization with a mission to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. TU works to achieve this mission on a local, state, and national level through an extensive volunteer network and dedicated staff. Headquartered outside of

Washington, D.C., TU is a 501c (3) nonprofit organization founded in 1959 that currently has approximately 258 staff working in 36 offices from Alaska to Oregon to North Carolina. TU has extensive federal grant management experience, and currently manages over 300 different federal grants, including numerous grants in partnership with the Bureau of Reclamation. TU has been involved in several watershed groups recently supported by CWMP grant funding, including the Blue River Watershed Group in Colorado, the Bitter Root Water Forum in Montana, the Sun River Watershed Group in Montana, and the Willwood Working Group #3 in Wyoming, and is therefore well-positioned to be the lead applicant on the current proposal. Additionally, TU works on the ground in communities throughout the West, finding collaborative solutions to the twenty-first-century challenges of drought, habitat loss, and aging infrastructure by convening diverse stakeholders in pursuit of shared goals.

Trout Unlimited's organizational information is available at https://www.tu.org/about/financial-legal-and-governance/. The Board consists of 10 grassroots trustees and 22 at-large trustees (https://www.tu.org/about/board-of-trustees/) and has representation from diverse backgrounds. Trout Unlimited Board are listed in Appendix A. Accounting staff at both the field and national office levels monitor grant expenditures and invoicing. Training on a variety of compliance topics—procurement, grants administration, cost principles, federal reporting, cost-share, subrecipient management, vendor screening and the grant life cycle—is offered to project managers on a regular basis. TU's associated policies, procedures and guidance on managing federal funds are assessed at least annually and updated as needed.

E Project Description

This proposal seeks to assist local irrigators in conserving and using water more efficiently as well as contributing to sustainability of natural resources in Oregon. The goals of the project are to conserve water, enhance streamflow, and address limiting factors for native fish populations through modernizing irrigation systems in order to improve irrigation water delivery, efficiency, and security in the Illinois River Subbasin. Improved instream flows are among the high-priority recovery actions listed in NOAA's SONCC Coho Recovery Plan (2014). Oregon Department of Fish and Wildlife (ODFW) and Oregon Water Resources Department have developed a Streamflow Restoration Priority Area dataset that identifies the Illinois River as the highest instream need for flow restoration from a biological perspective and the greatest opportunity for flow restoration from a water rights perspective. The specific objective for the project is to develop preliminary engineering designs for 1-3 projects that will support the goals of the project.

This proposal seeks funding for Task C: Watershed Management Project Design. Under this project, IVSWCD and TU through the Illinois Valley Irrigation Modernization Partnership (IVIMP) will develop a list of stakeholders who have irrigation water rights on ditches in the Illinois Valley Subbasin with a focus on 14 irrigation diversions on Sucker and Althouse Creeks (Map 2). These two areas are a priority for flow restoration and have been identified by Oregon Department of Fish and Wildlife (ODFW) as a priority. Initial outreach will be

guided by stakeholder interest and opportunities to meet the goals of the project. IVIMP will provide outreach to these stakeholders in order to develop irrigation efficiency projects that conserve water, modernize irrigation systems, and restore streamflow in one of the highest priority areas in the Rogue Basin. Following outreach, the IVIMP will develop preliminary designs (30-65% designs) for 1-3 irrigation efficiency projects. The number of projects will be determined by the project budget and the engineering cost of the designs.

One project has already been identified. The Jimmy Little Ditch is in Takilma, Oregon on the East Fork of the Illinois River (Map 2). This proposal will provide topographic survey, preliminary engineering designs and cost estimates for piping the ditch, and a seepage study to quantify the amount of conserved water that will be dedicated instream through the Allocation of Conserved Water Program (see Engineering Scope and Cost Estimate attached in Budget Narrative for further details). A qualified engineer will be contracted to perform these services and draft a brief basis of design memorandum that summarizes the findings. The developed designs will be available to the IVIMP to apply for grants to construct the designs. In addition, other opportunities for delivery system modernization, water conservation, and cost savings will be evaluated for feasibility such as pumping and alternative ditch alignments and provided to the Jimmy Little Ditch Association. Following design of the Jimmy Little Ditch Irrigation Efficiency Project the remaining engineering budget will be applied to 1-2 additional projects, depending on the scope of engineering required. Outreach under this grant opportunity will determine the other project location(s) in the Illinois River subbasin that will be designed under this funding opportunity. The additional projects will follow the same engineering path as the Jimmy Little Ditch: topographic survey, preliminary design, and synoptic flow study (seepage study).

F Evaluation Criteria

1. Criterion A—Watershed Group Diversity and Geographic Scope (30 points)

a. Sub-criterion No. A1. Watershed Group Diversity

The Illinois Valley Irrigation Modernization Partnership (IVIMP) is a partnership between Trout Unlimited and IVSWCD who work with key stakeholders in the basin to develop projects that restore stream flows and improve irrigation efficiencies. The IVIMP has partnered with the Jimmy Little Ditch Association to develop designs for ditch piping through this funding opportunity. The IVIMP engages and consults with the relevant local partner organizations for each developed project which include Oregon Department of Fish & Wildlife, Oregon Department of Water Resources, Natural Resources Conservation Service (NRCS), Illinois Valley Watershed Council, Bureau of Land Management (BLM), United States Forest Service, and other local partners. In addition, IVSWCD and TU are part of the Rogue Basin Partnership's Fish Passage and Instream Flow Working Group which includes SWCDs, Watershed Councils, Tribes, ODFW, State Agencies, and natural resource non-profits. This group develops potential fish passage and instream flow restoration projects and provides collaboration and technical expertise for developing projects.

- Trout Unlimited
    - Trout Unlimited is a non-profit organization that works to protect and restore rivers and streams, ensuring healthy habitats for trout and salmon. They balance the needs of fish and wildlife with agricultural and community concerns through a combination of policy advocacy, on-the-ground restoration projects, and collaboration with local stakeholders. Their efforts include improving stream flows, reconnecting fragmented river systems, and driving innovative water conservation approaches. By partnering with ranchers, landowners, Tribes, and agencies, Trout Unlimited fosters sustainable water management practices that benefit both the environment and local communities like those within the Illinois Valley.
- Illinois Valley Soil and Water Conservation District (IVSWCD)
    - The Illinois Valley Soil and Water Conservation District (IVSWCD) actively manages and protects water resources in the Illinois River watershed through various initiatives. They enhance irrigation efficiency through water conservation projects, stabilize streams to prevent erosion, and monitor surface water to ensure safety and sustainability. Additionally, IVSWCD restores habitats by planting vegetation, which supports water quality and biodiversity. They also engage with local landowners and the community, providing technical and financial assistance for resource conservation and educating on best practices for water conservation. These efforts collectively aim to improve the health of the watershed and ensure sustainable water use in the Illinois Valley.
- Jimmy Little Ditch Association
    - The Jimmy Little Ditch Association in Takilma, Oregon, works to manage and improve water resources by enhancing irrigation efficiency and ensuring sustainable water use for local agriculture. They are interested in focusing on maintaining and upgrading irrigation infrastructure to reduce water loss and improve distribution. The association collaborates with local conservation to implement best practices in water management, aiming to balance agricultural needs with environmental conservation. Through these efforts, they are working to contribute to the overall health and sustainability of the Illinois River watershed. The group is composed of individuals from various backgrounds, including representation from Tribal communities, reflecting a rich diversity of perspectives and experiences.

Partner Organizations can be considered affected stakeholders in the Illinois River Basin. Key stakeholder groups for this project include:

- Oregon Department of Fish and Wildlife (see letter of support)
    - The Oregon Department of Fish and Wildlife (ODFW) is deeply involved in managing and protecting water resources to support the state's fish and wildlife populations. They focus on maintaining and restoring freshwater habitats, ensuring adequate water quality and quantity for ecological health. ODFW pursues instream water rights, conducts flow studies, and

collaborates with various stakeholders to implement conservation projects. Their efforts help safeguard aquatic ecosystems, promote biodiversity, and support sustainable water use practices across Oregon.

- Illinois Valley Watershed Council (see letter of support)
    - The Illinois Valley Watershed Council (IVWC) works to improve water quality and quantity in the Illinois River watershed through various initiatives. They focus on restoring habitats, monitoring water quality, and engaging with local landowners and stakeholders to promote sustainable water management practices. The IVWC also addresses issues such as erosion control, stream stabilization, and the protection of threatened species like the SONCC Coho Salmon. By providing educational opportunities and collaborating with local, state, and federal agencies, IVWC aims to enhance the overall health and sustainability of the watershed.
- Rogue Basin Partnership (see letter of support)
    - The Rogue Basin Partnership (RBP) is a collaborative organization dedicated to restoring and maintaining healthy watersheds in the Rogue Basin. They unite various stakeholders, including local landowners, conservation groups, and government agencies, to address environmental challenges. RBP can significantly contribute to irrigation efficiency projects by providing technical expertise, securing funding, and coordinating efforts to improve water management practices. Their work often involves upgrading irrigation infrastructure, reducing water waste, and enhancing fish passage, which collectively supports both agricultural productivity and ecological health.
- Bureau of Land Management
    - The Bureau of Land Management (BLM) is dedicated to conserving and restoring aquatic resources on public lands. They manage riparian areas, wetlands, lakes, streams, and aquifers to ensure these ecosystems provide essential services such as habitat for wildlife, drinking water, and flood mitigation. The BLM collaborates with various stakeholders, including tribal, federal, state, and local governments, as well as non-governmental organizations, to promote sustainable water use and protect water supplies. Their efforts support a balanced approach to resource management, ensuring that water resources are available for diverse uses while maintaining ecological health.
- United States Forest Service
    - The U.S. Forest Service (USFS) plays a vital role in managing and protecting water resources within national forests and grasslands. They ensure the health of watersheds, which are crucial for providing clean drinking water, supporting wildlife habitats, and sustaining recreational activities. The USFS works on restoring and maintaining riparian areas, wetlands, and streams, implementing best management practices to reduce erosion and improve water quality. They also collaborate with various stakeholders, including local communities, tribal nations, and other agencies, to promote

sustainable water use and conservation efforts, ensuring that these resources remain viable for future generations.

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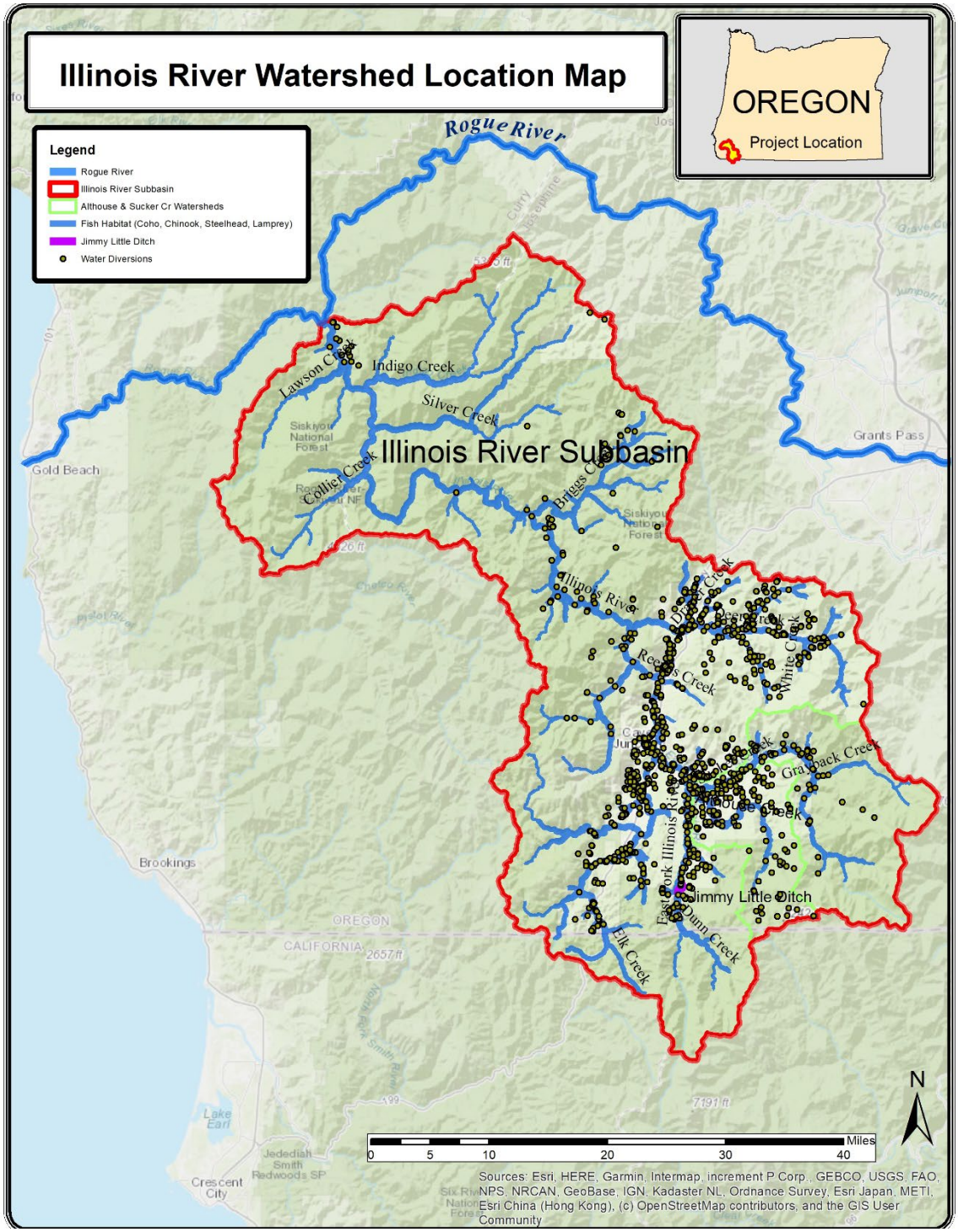
b. Sub-criterion No. A2. Geographic Scope

IVSWCD represents diverse interests in the composition of the Board. Outreach efforts will target the full range of stakeholders in the Illinois River Basin (Map 3; HUC 17100311) who hold water rights. The Basin is unique because of the diversity of properties that hold water rights. Water users range from small rural properties that provide secondary income, small family farms, vineyards, hay producers, large commercial operations, and large ranches. Water users range from operators who have been on their property for multiple generations to new commercial operators to recent retirees. There have been large scale changes to land ownership in the community and crop composition that have impacted water use over the last decade which has driven the need for improved water delivery systems and irrigation modernization.

The project area was determined based off an analysis completed by ODFW and OWRD to identify flow restoration priority areas. These areas were identified based on a combination of two factors: species' ecological need by season and existing water rights in the watershed and their potential for flow restoration.



Map 3: Location of Illinois River Subbasin (HUC 8), fish habitat, and irrigation diversions.

2. Evaluation Criterion B— Developing Strategies to Address Critical Watershed Needs (35 points)

a. Sub-criterion No. B1. Critical Watershed Needs or Issues

Illinois Valley Irrigation Modernization Partnership's (IVIMP) goals are to address limiting factors in the watershed including dewatered streams; reduced habitat quantity and quality for native fishes including ESA-listed coho salmon; impaired water quality; leaking and inefficient irrigation ditches; drought impacts; and outdated, inefficient irrigation systems. The Illinois Valley in Josephine County, Southwestern Oregon is a rural, underserved community located along the Illinois River and its tributaries. The Illinois River and its tributaries suffer from dewatering due to agricultural water withdrawals that have led to a reduction in habitat quantity and quality for native fishes including ESA-listed Coho Salmon. This is a widely acknowledged and primary limiting factor to fish production, growth, and survival in the Rogue. In addition, the Illinois River and many of its tributaries including Althouse Creek are 303(d) listed for temperature which is correlated to streamflow. The SONCC Coho Recovery Plan repeatedly cites the need for improved instream flows as a high priority recovery action for ESA-listed Coho Salmon. Improving streamflows is also supported by ODFW's Native Fish Conservation Policy and Rogue Spring Chinook and Fall Conservation Plans.

Many local irrigators are interested in irrigation efficiencies but have a limited ability to implement these practices due to the lack of technical and financial resources. Irrigators rely on open ditch systems and flood irrigation practices that were developed based on the available technology of the mid 1800's. Flood irrigation has an efficiency of 30%. Open ditch systems typically lose at least 30% and up to 100% of water diverted to seepage and transmission losses. Many ditches have difficulty delivering the fill allotment of water to the far fields even under a rotation system. Agricultural production is often limited by the cost and time required for irrigation installation and management or the ability to deliver the water to the fields. Drought conditions; changes in land ownership and community composition; changes in agricultural practices necessitate the upgrade of these antiquated systems in order to sustain long-term financial viability and use of these rural properties for agriculture and local food production.

The Illinois Valley in Southwestern Oregon (tract number 41033361600) in Josephine County, has a population of 7,626. This tract is identified as disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The expected building loss rate due to natural hazards each year is in the 93rd percentile. However, the expected population loss rate from fatalities and injuries due to natural hazards each year is in the 25th percentile, not above the 90th percentile. The projected flood risk to properties from tides, rain, riverine, and storm surges within the next 30 years is in the 89th percentile, not above the 90th percentile. Conversely, the projected wildfire risk to properties from fire fuels, weather, humans, and fire movement in the next 30 years is in the 90th percentile. Additionally, 89% of people in this tract live in households where income is less than or equal to twice the federal poverty level, placing it above the 65th percentile. The average annual energy costs divided by household income are in the 80th percentile, not above the 90th percentile. The level of PM2.5 in the air is in the 93rd

percentile, above the 90th percentile, and 89% of people live in low-income households. Linguistic isolation, where no one over age 14 speaks English very well, is in the 12th percentile, not above the 90th percentile. The median income in this tract is in the 92nd percentile, above the 90th percentile, while the poverty rate is in the 88th percentile, not above the 90th percentile. The unemployment rate is in the 91st percentile, above the 90th percentile, and 11% of people aged 25 years or older have less than a high school diploma.

a. Sub-criterion No. B2. Project Benefits

This project is a partnership whose goals are to improve water quality, restore streamflows, improve irrigation efficiencies, and provide water security for local irrigators. The Illinois Valley in Josephine County, Southwestern Oregon is a rural, underserved community located along the Illinois River and its tributaries. Our goal is twofold: to enhance irrigation efficiency and production for local farms while contributing to streamflow restoration. Additionally, the project aligns with conservation efforts for native fish species, particularly the Endangered Species Act-listed Coho Salmon. By enhancing instream flows, we create a healthier aquatic habitat and support the recovery actions outlined in NOAA's Final Recovery Plan for ESA-listed SONCC Coho Salmon as well as chinook salmon, summer and winter steelhead trout, and Pacific Lamprey. Through the Oregon Water Resource Department's Allocation of Conserved Water program or other mechanisms, we will secure legal protection for the conserved water instream. By permanently dedicating conserved water to native fish habitats, we promote long-term sustainability and ecosystem health and resiliency.

This project will occur in one of the highest-priority watersheds in the Rogue River Basin for flow restoration and address limiting factors specifically identified by multiple plans for recovery of federal and state-listed fish species. Extensive water withdrawals occur in the Illinois River watershed impacting the stream systems natural flow regime. Reducing the number of withdrawals will increase the habitat quantity and quality and improve fish passage for native migratory fishes including federally listed as threatened Coho Salmon. This would address a primary limiting factor to fish production in the Rogue River Basin. Improving streamflow is a high-priority recovery action listed in NOAA's Final Recovery Plan for SONCC Coho salmon. Improvements in stream flow can keep stream reaches habitable for juvenile fishes, or at the very least, can ameliorate thermal barriers that prevent fish from accessing quality cool water refuge.

ODFW Rogue–South Coast Multi-Species Conservation and Management Plan (2021) states that low flows are primary limiting factor for summer and winter steelhead and coho in the Rogue Basin (p51). "Changing climate and ocean conditions caused by greenhouse gas emissions pose a risk to all plan species through effects on the freshwater and marine habitats that support them. Work to address these limiting factors is the primary way that the impacts of climate change will be mitigated. Climate change is expected to exacerbate these limiting factors, amplifying the negative effects of passage barriers, lack of peripheral connection, high water temperatures, and low summer flows on plan species." The Rogue Restoration Action (Rogue Basin Partnership, 2015) states "increase instream flows to ecologically significant levels in all priority streams to support fish and water quality by 2025. Reduce hydrologic modification of flows year-round to support fish and wildlife,

channel, and floodplain processes, and to buffer the impacts of climate change in priority stream reaches.

The shift from flood irrigation will reduce water waste and ensure more precise watering, ultimately improving crop yields. Production is often limited by the cost and time required for irrigation installation and management and the upgraded system will allow the business to expand while conserving water. With sprinkler irrigation, the landowner can precisely manage the quantity, timing, and placement of irrigation water. By converting from flood to sprinkler irrigation water efficiency will increase from about 30% to 85% efficiency. Piping projects will conserve water through eliminating seepage and evaporation in open ditches leading to average water savings of over 30%.

Irrigation efficiency and flow restoration projects in the Illinois Valley will address several critical watershed issues. By improving irrigation infrastructure, these projects will reduce water loss and enhance water distribution, which is essential for a region identified as disadvantaged and facing high risks from natural hazards. These efforts will mitigate the expected building loss rate due to natural hazards and help manage the projected flood and wildfire risks. Additionally, by ensuring more efficient water use, these projects will support low-income households that struggle with high energy costs and poor air quality. Stakeholders who will benefit include local farmers, who will have more reliable water supplies; low-income residents, who will see improved living conditions; and the broader community, which will experience enhanced environmental health and resilience. The projects will also engage and benefit diverse groups, including Tribal communities, by promoting sustainable water management practices.

The watershed group will complete designs for irrigation efficiency and flow restoration projects in the Illinois Valley, specifically targeting areas like the Jimmy Little Ditch in Takilma, Oregon. These projects will involve site-specific designs and engineering to replace outdated irrigation infrastructure with modern, efficient systems. This includes installing pipelines to reduce water loss and improve water distribution, as well as implementing measures to restore natural flow regimes in the watershed.

The potential benefits of these projects are significant. Improved irrigation efficiency will ensure that water is used more effectively, reducing waste and supporting local agriculture. This is particularly important for the disadvantaged communities in the Illinois Valley, where efficient water use can help mitigate the high risks from natural hazards such as floods and wildfires. Additionally, restoring natural flow regimes will enhance the ecological health of the watershed, supporting biodiversity and improving water quality. Irrigation modernizations are expected to decrease natural hazards, manage flood and wildfire risks more effectively, and improve living conditions for low-income households by ensuring a more reliable water supply. These efforts will also contribute to better water quality and overall environmental health, benefiting the entire community, including Tribal communities and other diverse stakeholders.

2. Evaluation Criterion C—Readiness to Proceed (20 points)

This proposal seeks funding for Task C: Watershed Management Project Design of 1-3 projects. One irrigation efficiency project has already been identified and is ready to be

engineered as soon as funding is available. Additional projects will be developed through outreach that will be guided by stakeholder interest and opportunities to meet the goals of the project. There are approximately 2,000 surface water points of diversion in the Illinois Valley. Under this project, IVSWCD and TU through the Illinois Valley Irrigation Modernization Partnership (IVIMP) will develop a contact list of stakeholders who have irrigation water rights on ditches in the Illinois Valley Subbasin with a focus on 14 larger diversions in Sucker and Althouse Creek watersheds (Map 2). These two areas are a priority for flow restoration and have been identified by the Oregon Department of Fish and Wildlife (ODFW) as a priority. If the water rights holders of the 14 diversions do not have interest in irrigation modernization or the sites do not have the potential to meet the objectives of this project, additional water rights holders will be contacted with a focus on sites that have high potential for benefit (senior water rights, larger diversions, flood irrigated acres). IVIMP will provide outreach to stakeholders in order to develop irrigation efficiency projects that conserve water, modernize irrigation systems, and restore streamflow in one of the highest priority areas in the Rogue Basin. The IVIMP will develop preliminary designs (30-65% designs) for 1-3 irrigation efficiency projects. The number of projects that will be engineered under this project budget and the site-specific cost of the engineering designs. For additional projects that are identified by this project but do not fit within the current budget, IVIMP will work to secure funding from future funding opportunities.

The Jimmy Little Ditch Irrigation Efficiency project has already been identified and a letter of support has been provided by the Jimmy Little Ditch Association (see attached). The Jimmy Little Ditch is in Takilma, Oregon on the East Fork of the Illinois River (Map 2). This project will provide topographic survey, preliminary engineering designs and cost estimates for piping the ditch, and a synoptic flow study (seepage study) to quantify the amount of conserved water that will be dedicated instream through the Allocation of Conserved Water Program (see Engineering Scope and Cost Estimate attached in Budget Narrative for further details). A qualified engineer will be contracted to perform these services and provide a basis of design memorandum that summarizes the findings. The developed designs will be available to apply for grants to construct the designs. Other opportunities for delivery system modernization, water conservation, and cost savings will be evaluated for feasibility such as pumping and alternative ditch alignments and provided to the Jimmy Little Ditch Association. Following design of the Jimmy Little Ditch Irrigation Efficiency Project the remaining engineering budget will be applied to 1-2 additional projects, depending on the scope of engineering required. Outreach under this grant opportunity will determine the other project location(s) in the Illinois River subbasin that will be designed under this funding opportunity. The additional project(s) that will be developed with the remaining budget are expected to follow the same engineering path as the Jimmy Little Ditch: topographic survey, preliminary design, and synoptic flow study (seepage study).

The proposal involves the following tasks:

Task 1. Project Management

- Task schedule: 3/2025-3/2029

- Description of task activities: Conduct site visits with engineering contractor. Prepare and execute agreements. Review materials developed by engineering contractor. Project reporting.
- Milestones: Contract with engineering firm for Jimmy Little Irrigation Efficiency Project (7/2025). Contract with engineering firm for 1-2 other projects when identified by outreach (12/2027).
- Deliverables: Project Reporting. Final Report.
- Responsible party: Project Manager (Trout Unlimited).

Task 2. Outreach/Coordination

- Task schedule: 3/2025-3/2029
- Description of task activities: Identify water users to provide outreach to. Conduct site visits with interested water users to identify opportunities and build a relationship. Coordinate with project partners on potential projects.
- Milestones: Site visits to interested water users (12/2027).
- Deliverables: List of contacted water users.
- Responsible party: Trout Unlimited and Illinois Valley Soil and Water Conservation District.

Task 3. Engineering

- Task schedule: 4/2025-12/2028
- Description of task activities: Contracted engineering firm will complete topographic survey, synoptic flow study, topographic mapping, diversion upgrade feasibility analysis, conceptual pipeline designs, and design basis memorandum on Jimmy Little Ditch Irrigation Efficiency Project and 1-2 other projects to be identified as budget allows. Coordinate with water users and project partners. For details refer to Engineering Estimate provided in the budget narrative section.
- Milestones: Completed topographic survey, synoptic flow study, topographic mapping, diversion upgrade feasibility analysis, conceptual pipeline designs, and design basis memorandum for Jimmy Little Ditch Irrigation Efficiency Project (12/2026) and 1-2 other projects to be identified as budget allows.
- Deliverables: Design Basis Memorandum(s).
- Responsible party: Contracted engineering firm (TBD), Trout Unlimited, and Illinois Valley Soil and Water Conservation District.

Team Members:

- Julie Cymore, Project Manager & Rogue River Basin Water Project Coordinator, Trout Unlimited has been working in water resources for 15 years. She has been

managing all aspects of irrigation efficiency projects including outreach, funding, design, permitting, construction, reporting, and monitoring in the Rogue Basin for over 10 years. Trout Unlimited is the leading expert for instream flow restoration and irrigation efficiency projects in the Rogue River Basin.

- John Belville, District Manager, Illinois Valley Soil and Water Conservation District has been working in the fields of conservation, recreation, and agriculture for the past 13 years with a focus on project management since 2020. IVSWCD has been working on water conservation projects in the Illinois Valley since the 1950's.
- Engineering Firm, TBD.

3. Evaluation Criterion D—Presidential and Department of the Interior Priorities (15 points)

a. Climate Change

The Rogue Basin experiences hotter, drier summer weather conditions than coastal basins. This increases the strain on limited water resources as well as reduces aquatic passage for the significant and diverse fish populations of the Rogue. These impacts will only increase with the effects of climate change. According to the ODFW's Rogue–South Coast Multi-Species Conservation and Management Plan, upstream barriers and low stream flows were identified as primary limiting factors for summer and winter steelhead, coho, and other native fishes in the Upper Rogue. "Changing climate and ocean conditions caused by greenhouse gas emissions pose a risk to all [Plan] species through effects on the freshwater and marine habitats that support them. Work to address these limiting factors is the primary way that the impacts of climate change will be mitigated. Climate change is expected to exacerbate these limiting factors, amplifying the negative effects of passage barriers, lack of peripheral connection, high water temperatures, and low summer flows on [Plan] species."

Climate change projections suggest an increased probability of warmer and drier summers. Such scenarios will increase demand on water resources and having a protected instream water right can facilitate access to thermal refugia, thus increasing growth and survival. In addition, projects that provide water security such as piping will support local economies and communities that rely upon these water resources. A primary mechanism that native fishes will employ to survive climate change is migration to and from thermal refuge. Also, maintaining flow will help support native riparian vegetation buffers that also help maintain suitable water temperatures and protect stream banks from erosion during higher flow events predicted by most climate change models. Climate change projections suggest an increased probability of warmer and drier summers in an already hot and dry climate. Such scenarios also include increased demand on water resources for consumptive uses such as irrigation and industry and having protected instream water rights in place prior to full realization of these climate change scenarios is of critical importance. After all, fish habitat is predicated on one thing: water.

An irrigation efficiency and flow restoration design project in the Illinois Valley will address the impacts of climate change by reducing the demand on water resources while

increasing stream flow. Modernizing irrigation systems will reduce water loss and improve distribution. This will help combat climate change by conserving water, a critical resource that is becoming scarce due to a long-term trend toward aridification. By restoring natural flow regimes, the project will enhance the ecological health of the watershed, supporting biodiversity and improving resilience to extreme weather events. Strengthening water supply sustainability will ensure that the community has reliable access to water, even during droughts or periods of reduced rainfall, thereby increasing overall resilience to climate change.

b. Benefits to Disadvantaged, Underserved, and Tribal Communities

The Journal of Internal Medicine defines a Population at Risk as one consisting largely of "poor, frail, disabled, economically disadvantaged, homeless, racial and ethnic minorities, persons with low literacy, victims of abuse or persecution, and persons with social risk factors such as isolation." Josephine County meets the low-income scoring priority criteria. The median household income is $4,801 lower than 80% of Oregon's median household income which is $52,534. Zip codes in the proposed project areas rank among the top 20 poorest zip codes in Oregon according to IRS data.

The Illinois Valley in Southwestern Oregon (tract number 41033361600) in Josephine County, has a population of 7,626. This tract is identified as disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The expected building loss rate due to natural hazards each year is in the 93rd percentile. However, the expected population loss rate from fatalities and injuries due to natural hazards each year is in the 25th percentile, not above the 90th percentile. The projected flood risk to properties from tides, rain, riverine, and storm surges within the next 30 years is in the 89th percentile, not above the 90th percentile. Conversely, the projected wildfire risk to properties from fire fuels, weather, humans, and fire movement in the next 30 years is in the 90th percentile.

Additionally, 89% of people in this tract live in households where income is less than or equal to twice the federal poverty level, placing it above the 65th percentile. The average annual energy costs divided by household income are in the 80th percentile, not above the 90th percentile. The level of PM2.5 in the air is in the 93rd percentile, above the 90th percentile, and 89% of people live in low-income households. Linguistic isolation, where no one over age 14 speaks English very well, is in the 12th percentile, not above the 90th percentile. The median income in this tract is in the 92nd percentile, above the 90th percentile, while the poverty rate is in the 88th percentile, not above the 90th percentile. The unemployment rate is in the 91st percentile, above the 90th percentile, and 11% of people aged 25 years or older have less than a high school diploma.

c. Disadvantaged and Underserved Community Benefits:

The Illinois Valley in Southwestern Oregon (tract number 41033361600) is a rural, underserved community in Josephine County that has a population of 7,626. This tract is identified as disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The expected building loss rate due to natural

hazards each year is in the 93rd percentile. However, the expected population loss rate from fatalities and injuries due to natural hazards each year is in the 25th percentile, not above the 90th percentile. The projected flood risk to properties from tides, rain, riverine, and storm surges within the next 30 years is in the 89th percentile, not above the 90th percentile. Conversely, the projected wildfire risk to properties from fire fuels, weather, humans, and fire movement in the next 30 years is in the 90th percentile. Additionally, 89% of people in this tract live in households where income is less than or equal to twice the federal poverty level, placing it above the 65th percentile.

The average annual energy costs divided by household income are in the 80th percentile, not above the 90th percentile. The level of PM2.5 in the air is in the 93rd percentile, above the 90th percentile, and 89% of people live in low-income households. The median income in this tract is in the 92nd percentile, above the 90th percentile, while the poverty rate is in the 88th percentile, not above the 90th percentile. The unemployment rate is in the 91st percentile, above the 90th percentile, and 11% of people aged 25 years or older have less than a high school diploma.

An irrigation efficiency and flow restoration design project will significantly benefit the disadvantaged communities of the Illinois Valley by addressing several critical issues. By modernizing irrigation infrastructure, the project will reduce water loss and improve water distribution, which is crucial for a community facing high risks from natural hazards such as floods and wildfires. Efficient water use will help mitigate the expected building loss rate and manage flood and wildfire risks more effectively. Additionally, these improvements will support low-income households by ensuring a more reliable water supply, reducing energy costs, and improving air quality. The project will also enhance the overall environmental health of the area, benefiting the entire community, including those who face rural isolation and economic challenges associated with generational poverty. Through these efforts, the project will promote sustainable water management practices, contributing to the resilience and well-being of the Illinois Valley.

d. Tribal Benefits:

This project will benefit Chinook salmon, Coho salmon, Pacific Lamprey, and steelhead. Salmonids and Pacific lamprey. These species are a cultural, spiritual, ceremonial, medicinal, subsistence and ecological significant species for many Tribes including the local Takelma and the Cow Creek Band of Umpqua Tribe of Indians and these species populations will benefit from this project.

This project will directly benefit Tribal communities by ensuring more sustainable and reliable water resources. Enhanced irrigation infrastructure will reduce water loss and improve water distribution, which is crucial for not only maintaining modern agricultural practices but, significantly, supporting traditional uses of water. Restoring natural flow regimes will also help protect and revitalize aquatic habitats that are culturally and ecologically significant to Tribal members. These efforts will contribute to the overall health of the watershed, promoting biodiversity and environmental resilience, which are vital for the well-being and cultural practices of the Tribe. Additionally, the project will

foster collaboration and engagement with Tribal communities, ensuring their needs and perspectives are integrated into water management practices.

Irrigation efficiency projects in the Illinois Valley can directly benefit Tribes by ensuring more sustainable water use, which is crucial for maintaining traditional practices and cultural sites that rely on healthy ecosystems. Improved irrigation can lead to better water quality and quantity in rivers and streams, supporting culturally significant aquatic populations that are vital for Tribal fishing rights and food sources. Additionally, these projects can help protect and restore native plant species used in traditional medicines and crafts, fostering a stronger connection to cultural heritage and enhancing overall community well-being.

TU collaborates with a variety of interests including tribal governments. For example, in 2015 TU received funding from the Meyer Memorial Trust to help develop and implement a collaborative flow restoration program in the Umpqua and Rogue Basins. The Cow Creek Band of Umpqua Tribe of Indians partnered with TU and local water users on that effort. Specifically, TU and the Cow Creek Tribe's natural resource staff coordinated to identify and develop priorities in these basins. TU continues to work with the Cow Creek Tribe and will continue collaborating on future projects in SW Oregon.

Appendix A: Trout Unlimited Board Members Brief Biography

Officers

- Terry Hyman, Washington, DC. Chairperson. 7 years. Terry is the managing partner of Northwood Healthcare Partners, a healthcare private investment firm. Previously, he was a Managing Director of Flexpoint Ford.
- Rich Thomas, Starlight, PA. Chairperson, National Leadership Council. 5 years. Rich has been employed with AT&T for over 30 years. He has served at all levels of Trout Unlimited. Most recently, he served as secretary for the National Leadership Council.
- Chris Wood, Washington, D.C. President & CEO. 12 years. Before joining Trout Unlimited in September 2001, Chris Wood served as the senior policy and communications advisor to the Chief of the US Forest Service. He has co-authored three books.
- Linda Rosenberg Ach, San Francisco, CA. Secretary. 3 years. Linda is president of the Rosenberg Ach Foundation. She is a past chair and current board member of California Trout (CalTrout) and serves on the Advisory Council for the Public Policy Institute of California (PPIC) Water Policy Council.
- Larry Garlick, Palo Alto, CA. Treasurer. 5 years. Larry is retired after a 30-year career in high tech. He serves on the Advisory Board of Trust for Public Land Northern Rockies, on the Board of Swan Valley Connections in MT, and as an Emeritus Board Member of Special Olympics of N. CA and NV.
- Sharon Sweeney Fee, Livingston, MT. 1 year. Secretary, National Leadership Council. Sharon has been a volunteer leader with Trout Unlimited since 2004 and has a PhD in nursing. She works as a Regulations Advisor for Western Governors University.

Trustees

- R. Scott Blackley, Leesburg, VA. 5 years. Scott is the chief financial officer for Oscar Health. He is the former CFO for Capital One. He has been a member of Trout Unlimited for over a decade and is a former member of Trout Unlimited's Coldwater Conservation Fund.
- John Burns, Needham, MA. 1 year. the Founder and CEO of Relentless Consumer Partners, an investment company focused on high potential emerging consumer brands. Prior to Relentless he served as CEO and Board member of TB12.
- Amy Cordalis, Arlington, VA. 2 years. Amy is a member of the Yurok Tribe, has been General Counsel for the Yurok Tribe since 2016.
- Josh Crumpton, Wimberley, TX. 3 years. Josh is the owner and operator of Spoke Hollow Outfitters, and the primary steward of Spoke Hollow Ranch.
- Mac Cunningham, Basalt, CO. 4 years. Mac is president of The Cunningham Companies, a group of vertically integrated real estate companies. He has served at all levels of Trout Unlimited.
- R. Joseph De Briyn, Los Angeles, CA. 3 years. Joe is a Managing Partner of Musick, Peeler & Garrett LLP. He served as chairperson of The Jackson Hole One-Fly and was a trustee of Woodbury University and L.A.'s Catholic Education Foundation.
- Paul A. Doscher, Weare, NH. 3 years. Paul retired as the vice president for land conservation at the Society for the Protection of New Hampshire Forests, the state's largest land trust and conservation organization.

- Larry Finch, Wilson, WY. 3 years. Larry Finch is a general partner of Sigma Partners, a leading technology venture capital fund. A member of the St. Francis Yacht Club, Finch was chairperson of the St. Francis Six-Meter Syndicate that won the World and European Championships.
- Peter Grua, Boston, MA. 3 years. Peter Grua is a managing partner at HLM Venture Partners ("HLM"), a Boston-based, venture capital investment firm focused on the healthcare industry.
- Chris Hill, Washington, DC / Haines, AK. 3 years. Chris is the Senior Director of the Our Wild America Campaign for Sierra Club. She is a board member for Alaska Wilderness League, One Green Thing, The Mennen Environmental Foundation, and a member of the Leadership Team for Artemis Sportswomen.
- Patsy Ishiyama, San Francisco, CA. 8 years. Patsy is the part owner of Henry's Fork Lodge in Island Park, Idaho, and an active board member for the Ishiyama Foundation and the Golden Gate National Parks Conservancy.
- Thomas Jones, Durango, CO. 6 years. Tom is a retired Verizon executive. Tom has chaired boards for the West Shore Symphony Orchestra, the Fort Wayne Philharmonic and Music in the Mountains, and served at many levels within Trout Unlimited.
- Alex Maher, Jackson, WY. 6 years. Alex co-founded Live Water Properties, LLC, in Jackson Hole and is a member of numerous hunting and angling non-profits.
- Greg McCrickard, Towson, MD. 6 years. Greg McCrickard is a vice president of T. Rowe Price Group, Inc. and T. Rowe Price Associates, Inc. He is a member of Trout Unlimited's Coldwater Conservation Fund.
- Phoebe Muzzy, Houston, TX. 5 years. Phoebe is a board member and President of the Teton Valley Ranch Camp. She has served on the Texas Children's Hospital Advisory Council as a founding member along with several other non-profits.
- Al Perkinson, New Smyrna Beach, FL. 6 years. Al Is the CEO and co-founder of BAJÍO Sunglasses and has been recognized for his extensive conservation contributions, including being named one of the 25 most influential people in conservation by Outdoor Life Magazine.
- Greg Placone, Greenville, SC. 1 year. Greg advises a range of clients, primarily general contractors and owners, as a construction litigator in matters involving complex commercial disputes and federal government contracting on projects throughout the Southeast.
- Candice Price, Kansas City, MO. 3 years. Candice is the founder and CEO of Urban American Productions, and the first African American woman to executive produce an outdoor sports reality television show – Urban American Outdoors (UAO).
- Donald (Dwight) Scott, New York, NY. 4 years. Dwight is a senior managing director of Blackstone and president of GSO Capital Partners. He is a member of the Board of Trustees of KIPP, Inc. and the Wall Street for McCombs Board.
- Kathy Scott, Norridgewock, ME. 4 years. Kathy is a lifelong educator. An officer on the Maine State Councils of Trout Unlimited and the Atlantic Salmon Federation, she is an active and passionate conservation advocate.

- Judi Sittler, State College, PA. 3 years. Judi is a retired special education teacher and psychologist. She is a longtime volunteer with extensive leadership experience in youth education and diversity work for the Pennsylvania Council.
- Joe Swedish, Silverthorne, CO. 1 year. Joseph Swedish is a co-founder and partner at Concord Health Partners, a healthcare focused investment firm with a strategic model that optimizes the alignment of interests between investors and portfolio companies.
- Terry Turner, Gladstone, OR. 4 years. Terry has been the owner of Terry's Custom Rods for the past 20 years. As a volunteer, Terry has served in leadership positions for the Oregon Council since 2009.
- Jeff Witten, Columbia, MO. 6 years. Jeff is a former registered professional engineer and marketing executive. Previously, Jeff was the NLC Representative for Missouri and chaired the Climate Change workgroup.

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

Nonprofit Organization
Indirect Cost Negotiation Agreement

EIN: 38-1612715

Date: 03/25/2024

Organization:

Trout Unlimited, Inc.
1777 N. Kent Street, Suite 100
Arlington, VA 22209

Report Number: 2024-0154

Filing Ref.:
Last Negotiation Agreement
dated: 03/03/2023

The indirect cost rates contained herein are for use on grants, contracts, and other agreements with the Federal Government to which 2 CFR Part 200 apply subject to the limitations contained in Section II.A. of this agreement. The rates were negotiated by the U.S. Department of the Interior, Interior Business Center, and the subject organization in accordance with the authority contained in applicable regulations.

Section I: Rate

Start Date	End Date	Rate Type	Rate Details				
04/01/2024	03/31/2025	Predetermined	**Name**	**Rate**	**Base**	**Location**	**Applicable To**
			Indirect	16.00 %	(A)	All	All Programs
04/01/2025	03/31/2026	Predetermined	**Name**	**Rate**	**Base**	**Location**	**Applicable To**
			Indirect	16.00 %	(A)	All	All Programs

(A) Base: Total direct costs, less capital expenditures, water lease payments, the portion of subawards in excess of the first $25,000, and other distorting items. Consultant costs incurred with this entity are considered essential (substitutes for employees) to the organization as a whole. Contractor costs incurred through a procurement contract, rather than a subaward, require extensive oversight and management by this entity and are included in total direct costs.

Treatment of fringe benefits: Fringe benefits applicable to direct salaries and wages are treated as direct costs; fringe benefits applicable to indirect salaries and wages are treated as indirect costs.

Treatment of paid absences: The costs of vacation, holiday, sick leave pay and other paid absences are included in the organization's fringe benefit rate and are not included in the direct cost of salaries and wages. Claims for direct salaries and wages must exclude those amounts paid or accrued to employees for periods when they are on vacation, holiday, sick leave or are otherwise absent from work.

Section II: General

A. **Limitations:** Use of the rate(s) contained in this agreement is subject to any applicable statutory limitations. Acceptance of the rate(s) agreed to herein is predicated upon these conditions: (1) no costs other than those incurred by the subject organization were included in its indirect cost rate proposal, (2) all such costs are the legal obligations of the grantee/contractor, (3) similar types of costs have been accorded consistent treatment, and (4) the same costs that have been treated as indirect costs have not been claimed as direct costs (for example, supplies can be charged directly to a program or activity as long as these costs are not part of the supply costs included in the indirect cost pool for central administration).

B. **Audit:** All costs (direct and indirect, federal and non-federal) are subject to audit. Adjustments to amounts resulting from audit of the cost allocation plan or indirect cost rate proposal upon which the negotiation of this agreement was based will be compensated for in a subsequent negotiation.

C. **Changes:** The rate(s) contained in this agreement are based on the accounting system in effect at the time the proposal was submitted. Changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate(s) in this agreement may require the prior approval of the cognizant agency. Failure to obtain such approval may result in subsequent audit disallowance.

D. **Rate Type:**

1. Fixed Carryforward Rate: The fixed carryforward rate is based on an estimate of the costs that will be incurred during the period for which the rate applies. When the actual costs for such period have been determined, an adjustment will be made to the rate for a future period, if necessary, to compensate for the difference between the costs used to establish the fixed rate and the actual costs.

2. Provisional/Final Rate: Within six (6) months after year end, a final indirect cost rate proposal must be submitted based on actual costs. Billings and charges to contracts and grants must be adjusted if the final rate varies from the provisional rate. If the final rate is greater than the provisional rate and there are no funds available to cover the additional indirect costs, the organization may not recover all indirect costs. Conversely, if the final rate is less than the provisional rate, the organization will be required to pay back the difference to the funding agency.

3. Predetermined Rate: A predetermined rate is an indirect cost rate applicable to a specified current or future period, usually the organization's fiscal year. The rate is based on an estimate of the costs to be incurred during the period. A predetermined rate is not subject to adjustment.

E. **Rate Extension:** Only final and predetermined rates may be eligible for consideration of rate extensions. Requests for rate extensions of a current rate will be reviewed on a case-by-case basis. If an extension is granted, the non-Federal entity may not request a rate review until the extension period ends. In the last year of a rate extension period, the non-Federal entity must submit a new rate proposal for the next fiscal period.

F. **Agency Notification:** Copies of this document may be provided to other federal offices as a means of notifying them of the agreement contained herein.

G. **Record Keeping:** Organizations must maintain accounting records that demonstrate that each type of cost has been treated consistently either as a direct cost or an indirect cost. Records pertaining to the costs of program administration, such as salaries, travel, and related costs, should be kept on an annual basis.

H. **Reimbursement Ceilings:** Grantee/contractor program agreements providing for ceilings on indirect cost rates or reimbursement amounts are subject to the ceilings stipulated in the contract or grant agreements. If the ceiling rate is higher than the negotiated rate in Section I of this agreement, the negotiated rate will be used to determine the maximum allowable indirect cost.

I. **Use of Other Rates:** If any federal programs are reimbursing indirect costs to this grantee/contractor by a measure other than the approved rate(s) in this agreement, the grantee/contractor should credit such costs to the

affected programs, and the approved rate(s) should be used to identify the maximum amount of indirect cost allocable to these programs.

J. **Other:**

1. The purpose of an indirect cost rate is to facilitate the allocation and billing of indirect costs. Approval of the indirect cost rate does not mean that an organization can recover more than the actual costs of a particular program or activity.

2. Programs received or initiated by the organization subsequent to the negotiation of this agreement are subject to the approved indirect cost rate(s) if the programs receive administrative support from the indirect cost pool. It should be noted that this could result in an adjustment to a future rate.

3. This Negotiation Agreement is entered into under the terms of an Interagency Agreement between the U.S. Department of the Interior and the cognizant agency. No presumption of federal cognizance over audits or indirect cost negotiations arises as a result of this Agreement.

4. Organizations that have previously established indirect cost rates—exclusive of the 10% *de minimis* rate—must submit a new indirect cost proposal to the cognizant agency for indirect costs within six (6) months after the close of each fiscal year.

Section III: Acceptance

Listed below are the signatures of acceptance for this agreement:

By the Nonprofit Organization	By the Cognizant Federal Government Agency
Trout Unlimited, Inc.	US Department of the Interior
DocuSigned by: James Hughey 084B9FFEBC004DB...	DocuSigned by: Craig Wills B47DB1F4A5DB4BF...
Signature	Signature
James Hughey Name:	Craig Wills Name:
Chief Financial Officer Title:	Division Chief Indirect Cost & Contract Audit Division Interior Business Center Title:
3/29/2024 Date	3/29/2024 Date

Negotiated by: Melissa Mittman
Telephone: (916) 930-3811
Email: melissa_mittman@ibc.doi.gov

Next Proposal Due Date: 09/30/2025

Trout Unlimited, Inc.
Fringe Benefit Rates for Fiscal Year 2025

Benefit	% of Labor
PTO	16.68%
Health	18.27%
Taxes	8.50%
403b	6.75%
Workers Compensation	1.37%
Total	**51.56%**

JIMMY LITTLE DITCH – PRELIMINARY DESIGNS FOR FLOW EFFICIENCY

Date: 8/29/2024

SCOPE NARRATIVE

The goal of our involvement will be to provide a flow study, feasibility study for providing upgrades to the existing diversion, and conceptual-level through permit-level designs for piping Jimmy Little ditch in Josephine County, Oregon. We assume that the TU will be responsible for property access and coordination with stakeholders.

Task 1 - Project Management, Coordination, and Meetings

- The budget for this task covers time spent performing project management and administration duties.

Deliverables:

- ***Meeting Notes (.pdf)***
- ***Monthly Invoices (.pdf)***

Task 2 – Synoptic Flow Study

- The budget for this task covers a synoptic flow study of the existing Jimmy Little Ditch. Measurements of flow at the diversion and key locations along the ditch (3 locations total) will be taken to evaluate seepage losses of the existing ditch. This work will be performed by three people and can be coordinated with the topographic survey (see *Topographic Mapping*). Ideally flow measurements would be taken at the beginning and end of the irrigation season. Results will be summarized in a brief (2-page) technical memorandum with results in tabular form.

Assumptions:

- ***TU will coordinate access with landowners and users will agree not to take water the day of the study.***

Deliverables:

- ***Flow data workup (.xlsx)***
- ***Technical Memorandum (.pdf & .docx)***

Task 3 – Topographic Mapping

- Publicly available LiDAR data (2012) will be used as the basis for topographic mapping and supplemental ground topographic survey data will be collected as needed. This includes ground topographic survey of the existing diversion and a long profile and cross sections of the existing ditch(es). If GPS-RTK signal is available, ditch cross sections will be surveyed every 100 feet (approximately 1.25 miles based on provided GIS data), otherwise, measurements will only be taken at structures using level and rod.

Deliverables:

- ***Topographic basemap (.pdf & .dwg)***

Task 4 – Diversion Upgrade Feasibility Analysis

- The existing diversion for the Jimmy Little ditch is a maintenance issue for water users, but not on the ODFW fish passage priority list. The feasibility of upgrading the diversion will be evaluated. This may include a gravity diversion or pumping system. Any design recommendations for upgrading the diversion will not be progressed as part of this scope. Rather, a feasibility analysis will be conducted to see if upgrades to the diversion would be cost-effective. Results of this analysis will be summarized in a brief (2-page) technical memorandum.

Deliverables:

- ***Brief Technical Memorandum (.pdf & .docx)***

Task 5 – Conceptual Pipeline Designs

- **Hydraulic Modeling:** Based upon the topographic mapping of the existing ditches, a one-dimensional hydraulic model of the proposed pipeline using hydraulic modeling software will be prepared. The hydraulic model will support determining the size of pipe required for the design.
- **Figure and Rough Order of Magnitude Cost Estimate:** A conceptual plan for piping the Jimmy Little ditch will be developed, assuming no modifications to the intake structure (i.e. gravity pipeline). This plan will be presented as a GIS figure. A rough order of magnitude cost estimate for the pipeline designs will be prepared.
- **Review Meeting:** The Project Team will convene for a meeting by teleconference to discuss the concept design and any modifications desired before progressing to 65% designs.

Deliverables:

- ***GIS Figure (.pdf)***
- ***Rough Order of Magnitude Cost Estimate (.pdf & .xlsx)***

Task 6 - 60% Designs

- 60% designs will be developed for piping the existing ditch. The 60% drawings will be sufficiently accurate and complete to determine project layout, impacts, opportunities, constraints and quantities. Typically, the 60% Drawings will be suitable to serve as a basis for permit applications. The 60% cost estimate will be in a format that represents the anticipated final bid form, with recommended units of measurement specified for individual work items. A brief Design Basis Memorandum will be written to support the 60% design submittal.

Deliverables:

- ***65% design drawings (.pdf)***
- ***65% cost estimate (.pdf and .xlsx)***
- ***Design Basis Memorandum (.pdf)***

WATERWAYS CONSULTING, INC.

EXHIBIT B - ESTIMATED BUDGET FOR CONSULTING SERVICES **8/29/2024**

Client: Trout Unlimited
Project Name: Jimmy Little Ditch

#	Task Description	Budget Allocation
1	Project Administration	$5,000
2	Synoptic Flow Study	$15,000
3	Topographic Mapping (Field and Office)	$17,000
4	Diversion Upgrade Feasibility Analysis (Tech Memo)	$15,000
5	Concept Pipeline Design (GIS Figure, Hydraulic Modeling)	$17,000
5	60% Pipeline Design (Plans, Cost Estimate, Tech Memo)	$30,000
		$99,000.00

Direct Expenses	Allocation
Office Expenses, Field Supplies, Travel Costs	$3,000.00
	$3,000.00
	$102,000.00

Oregon
Tina Kotek, Governor

Department of Fish and Wildlife
Rogue Watershed District Office
1495 East Gregory Road
Central Point, OR 97502
(541) 826-8774
Fax (541) 826-8776

August 29, 2024

Bureau of Reclamation
WaterSMART Cooperative Watershed Management Program

With the adoption of the Rogue South Coast Multispecies Plan (RSP, ODFW 2021) the Oregon Department of Fish and Wildlife (ODFW) now has in place conservation plans guiding management for all anadromous species in the Rogue watershed. The RSP identifies the primary factors limiting the production of wild steelhead, coho salmon and cutthroat trout (in the interior Rogue, protection and restoration must focus on water quantity, water quality, and fish passage), and provides an update on climate projections and impact on these species.

The East Fork of the Illinois River provides high valuable habitat for fall Chinook and coho salmon (federally Threatened species), winter steelhead, Pacific lamprey and coastal cutthroat trout. Unfortunately, for the majority of the species above, low summer into fall streamflow creates significant, negative conditions to their survival.

Irrigation efficiency projects can help to reverse the negative effects of low flow conditions by providing any additional amount of water into over-allocated streams. Additionally, outreach targeting key watersheds such as Sucker and Althouse Creeks has not been attempted before and ODFW believes the timing for this outreach is optimal right now.

This application aligns very well with actions in the RSP (and other Plans) designed to increase the production of anadromous fish as “low flows in summer and fall are a primary limiting factor for all populations.”

Projects such as this can and will make a difference for fish in the interior Rogue and now is the time for Oregon to invest in water conservation.

Sincerely,

Peter Samarin
Rogue Assistant District Fish Biologist

Jimmy Little Ditch Association
10325 Takilma Rd
Cave Junction, OR 97523

8/29/24

To Whom It May Concern,

The Jimmy Little Ditch Association, representing landowners in the Illinois Valley, is writing to express our full support for the Bureau of Reclamation's WaterSMART Cooperative Watershed Management Program (CWMP) grant proposal. This project is critical to both the economic vitality of our farms and the health of the East Fork of the Illinois River.

The proposed irrigation modernization work will enhance the efficiency of water use across four parcels of land in our association, offering significant economic benefits by increasing crop yields and improving farm operations. Modernized irrigation systems will allow us to reduce water consumption, enabling more resilient agricultural practices that are better equipped to withstand ongoing and future drought conditions. By shifting from traditional flood irrigation to more precise systems, we anticipate greater productivity while reducing operational costs—a win for our farms and our local economy.

In addition to the economic gains, this project directly invests in the local ecosystem by returning conserved water to the East Fork of the Illinois River. Enhancing streamflow supports the salmon population and other native species that depend on these waters, fostering long-term environmental resilience. Healthy, thriving waterways are a cornerstone of our region's sustainability, and this project aligns perfectly with our community's commitment to protecting our natural resources.

We deeply appreciate the dedication and expertise of John Belville of the Illinois Valley Soil & Water Conservation District and Julie Cymore of Trout Unlimited in spearheading this effort. Their leadership in navigating the grant application process and their vision for balancing economic and environmental goals are truly commendable. We fully support their work and are confident that this project will have a lasting, positive impact on both our farms and the surrounding watershed.

Thank you for considering our proposal, and we look forward to seeing these important advancements come to fruition.

Sincerely,

Tri Huynh

Signed by: F502F0CA69804D6...

8/30/2024

Katrina Poydack

Signed by: F8CB1E052728438...

8/30/2024

Michael Garnier

DocuSigned by: 85668C89DC774D6...

8/29/2024

Aaron Howard

Signed by:
Aaron Howard
8991665033BC4CC...

8/29/2024

Jimmy Little Ditch Association

ROGUE BASIN
PARTNERSHIP

August 28, 2024

Bureau of Reclamation
WaterSMART Cooperative Watershed Management Program

RE: Illinois Valley Irrigation Efficiency and Flow Restoration Project grant application

To whom it may concern,

The Rogue Basin Partnership (RBP) supports the Illinois Valley Soil and Water Conservation District's (IVSWCD) WaterSMART grant application for the Illinois Valley Irrigation Efficiency and Flow Restoration Project. This project is being developed in conjunction with Trout Unlimited (TU), a leader in streamflow restoration in Oregon.

RBP exists to help its member organizations work more collaboratively, strategically, efficiently and effectively in our collective efforts to conserve and restore the 3.3 million acre Rogue River Basin. The WaterSMART application for water conservation and streamflow restoration in the Illinois Valley aligns perfectly with our mission. This proposal also supports responsible, local agriculture in the Rogue Valley. Furthermore, RBP's data-based, collaboratively developed Rogue Restoration Action Plan lays out a 10-year effort to conserve, restore and preserve the Basin. On page six, the Plan sets out three goals particularly relevant to this proposal:

- Increase in--stream flows to ecologically significant levels in all priority streams to support fish and water quality by 2025.
- Reduce hydrologic modification of flows year-round to support fish and wildlife, channel and floodplain processes, and to buffer the impacts of climate change in priority stream reaches.
- Increase protection of existing in-stream flows in priority streams.

The IVSCWD's proposal will include education and outreach for landowners and water users and will promote water conservation, improved water management, while fostering collaboration among diverse stakeholders. By improving irrigation practices and restoring natural streamflows, this project will contribute to the sustainability of our water resources, support local farmers, and enhance the resilience of our ecosystem. Support and funding provided by this grant will be instrumental to ensuring the long-term health and sustainability of the Illinois River Watershed.

Sincerely,

Sara Mosser
Executive Director
Rogue Basin Partnership

P.O. Box 352
331 E. Cottage Park Dr., Ste. 1B
Cave Junction, OR 97523
Phone: 541-592-3731
officemanager@ivstreamteam.org
Illinois Valley Watershed Council (specialdistrict.org)

Bureau of Reclamation
WaterSMART Cooperative Watershed Management Program

August 26, 2024

Dear Members of the Selection Committee,

I am writing to express my dedicated support for the Illinois Valley Irrigation Efficiency and Flow Restoration Project grant application submitted through the Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase I. This prospective project, located in the Illinois River Watershed in Josephine County, Oregon, within approximately ten miles of Cave Junction, represents a critical initiative for our community and the environment.

The Illinois River Basin, which our watershed group focuses on, is a vital resource for the region. The Jimmy Little Ditch, Year 1 Project, located in Takilma, Oregon, is a key component of this initiative. This project aims to enhance irrigation efficiency and restore natural flow regimes, which are essential for maintaining the ecological health of the watershed and supporting local agriculture.

Additionally, outreach efforts will be directed towards irrigators in the Illinois Valley, with a particular emphasis on the Althouse and Sucker Creek areas. These efforts are crucial for engaging the community and laying footwork that will lead to two additional irrigation efficiency and flow restoration projects in high-priority areas of the watershed. By improving irrigation practices and restoring natural water flows, this project will contribute to the sustainability of our water resources, support local farmers, and enhance the resilience of our ecosystem.

The Illinois Valley Irrigation Efficiency and Flow Restoration Project aligns with the goals of the WaterSMART Cooperative Watershed Management Program by promoting water conservation, improving water management, and fostering collaboration among diverse stakeholders. The support and funding provided by this grant will be instrumental in achieving these objectives and ensuring the long-term health and sustainability of the Illinois River Watershed.

I wholeheartedly endorse this project and urge you to consider the significant benefits it will bring to our community and the environment. Thank you for your consideration of this important initiative.

Sincerely,

Kevin O'Brien, Executive Director

Bureau of Reclamation
WaterSMART Cooperative Watershed Management Program

Dear Members of the Selection Committee,

I am writing on behalf of the Takilma Community Association (TCA) to express our support for the Illinois Valley Irrigation Efficiency and Flow Restoration Project grant application submitted through the Bureau of Reclamation's WaterSMART Cooperative Watershed Management Program Phase I. This initiative represents a meaningful opportunity for our community and the environment, particularly within the Illinois River Watershed in Josephine County, Oregon.

The TCA has long been committed to protecting our community's natural resources while balancing the needs of local agriculture and sustainable water management. The Jimmy Little Ditch, Year 1 Project, located in Takilma, Oregon, is a key component of this effort. The project aims to enhance irrigation efficiency and restore natural flow regimes, which are critical for maintaining the ecological health of our watershed while supporting agricultural practices.

Our organization acknowledges the importance of a thorough and responsible approach. While we fully support efforts that return water to our rivers and improve irrigation practices, we remain cautious about the methods employed, such as the potential use of a concrete dam or heavy equipment within the stream channel. We trust that careful consideration and environmental impact assessments will be integral to the planning and implementation of this project.

Additionally, we appreciate that this project is designed with a phased approach, including outreach efforts to irrigators in high-priority areas such as the Althouse and Sucker Creek watersheds. Engaging the broader community is crucial for the long-term success of initiatives like this, as it fosters collaboration and builds a foundation for future restoration efforts.

The Illinois Valley Irrigation Efficiency and Flow Restoration Project aligns with the goals of the WaterSMART Cooperative Watershed Management Program by promoting water conservation, improving water management, and encouraging collaboration among diverse stakeholders. With the right planning and execution, we believe this project has the potential to significantly benefit our watershed, community, and environment.

In conclusion, the TCA recognizes the importance of balancing the need for agricultural efficiency with the preservation of our natural environment. We are committed to supporting initiatives that contribute to the resilience of our ecosystem and align with our community's values. We urge you to consider the positive impact this project can have and are hopeful that it will proceed with the careful attention it deserves.

Thank you for your consideration.

Sincerely,

Kate Dwyer

Takilma Community Association

Illinois River Watershed Location Map

Legend

- Rogue River
- Illinois River Subbasin
- Althouse & Sucker Cr Watersheds
- Fish Habitat (Coho, Chinook, Steelhead, Lamprey)
- Jimmy Little Ditch

Rogue River

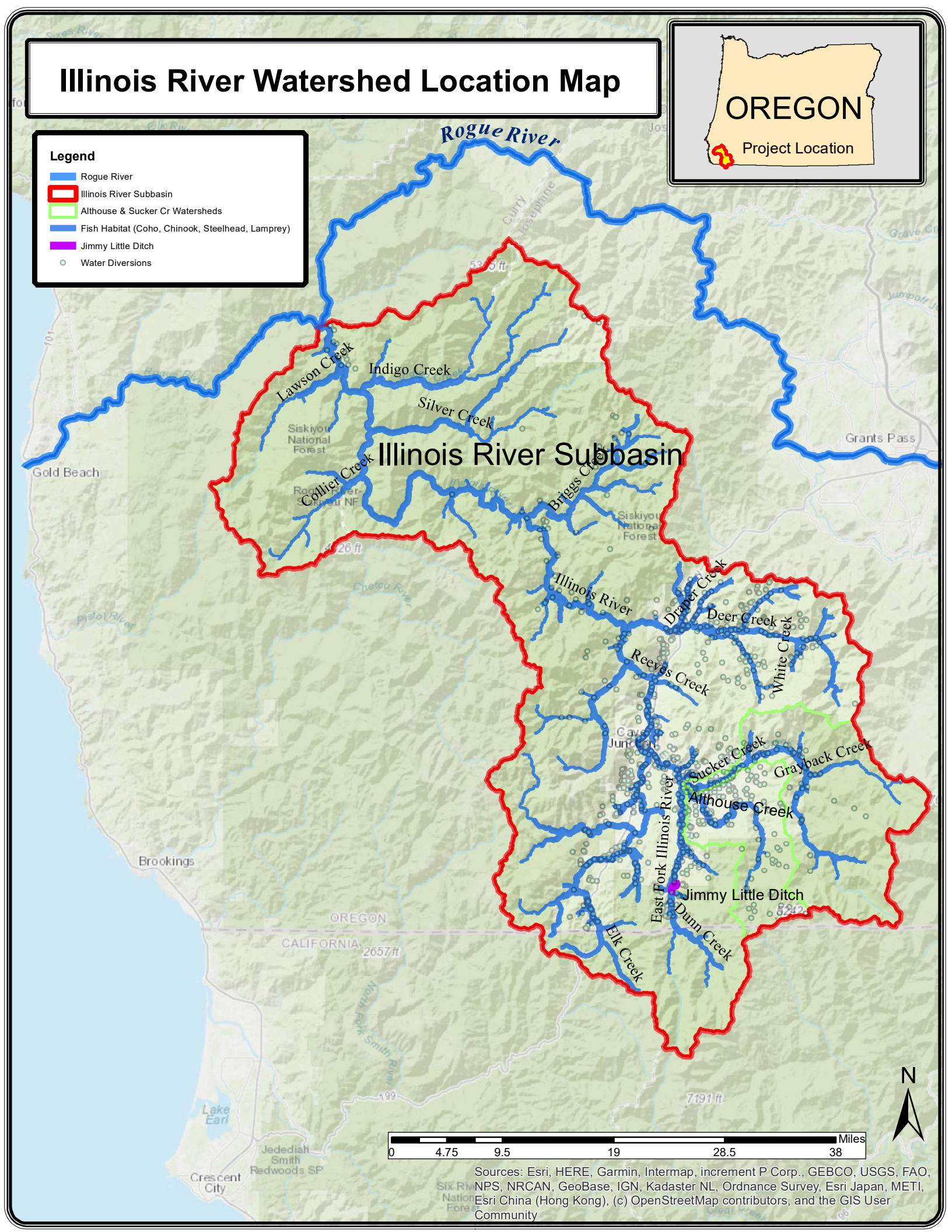
Illinois River Subbasin

Lawson Creek
Indigo Creek
Silver Creek
Collier Creek
Briggs Creek
Illinois River
Draper Creek
Deer Creek
White Creek
Reeves Creek
Sucker Creek
Grayback Creek
Althouse Creek
East Fork Illinois River
Jimmy Little Ditch
Dunn Creek
Elk Creek

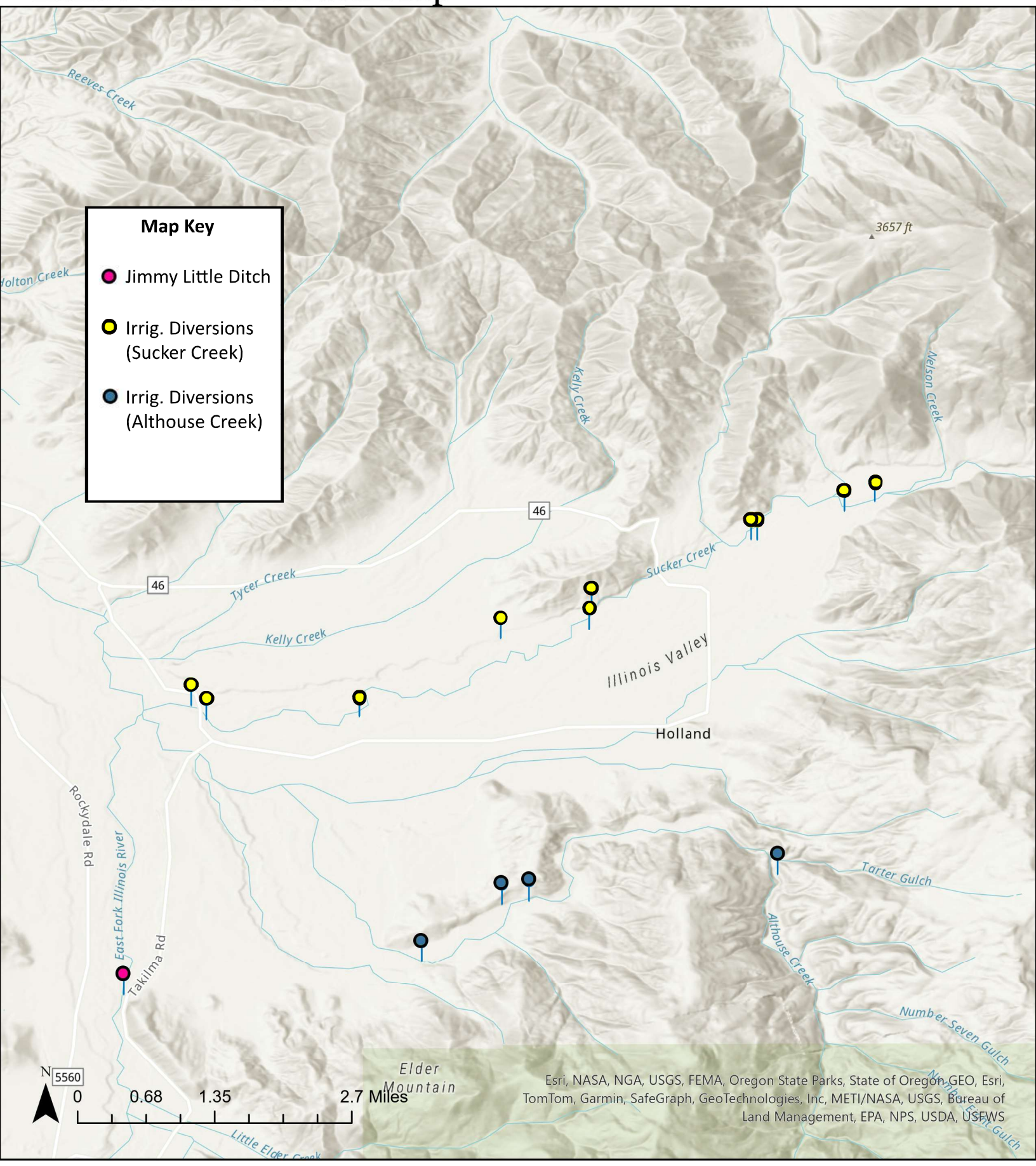
Gold Beach
Grants Pass
Brookings
Cave Junction
Crescent City
Lake Earl
Jedediah Smith Redwoods SP
Siskiyou National Forest
OREGON
CALIFORNIA
2657 ft
7191 ft
5242

N

0 4.75 9.5 19 28.5 38 Miles


Illinois River Watershed Location Map
OREGON
Project Location
Legend
Rogue River
Illinois River Subbasin
Althouse & Sucker Cr Watersheds
Fish Habitat (Coho, Chinook, Steelhead, Lamprey)
Jimmy Little Ditch
Water Diversions
Rogue River
Illinois River Subbasin
Lawson Creek
Indigo Creek
Silver Creek
Collier Creek
Briggs Creek
Illinois River
Draper Creek
Deer Creek
White Creek
Reeves Creek
Sucker Creek
Grayback Creek
Althouse Creek
East Fork Illinois River
Jimmy Little Ditch
Dunn Creek
Elk Creek
Gold Beach
Grants Pass
Brookings
Crescent City
Siskiyou National Forest
OREGON
CALIFORNIA
N
0
4.75
9.5
19
28.5
38
Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Illinois Valley Irrigation Modernization Partnership (IVIMP): Landowner Outreach Map



Permit and Environmental and Cultural Clearances Statement
Illinois Valley Irrigation Efficiency and Flow Restoration Project

By Illinois Valley Soil & Water Conservation District and Trout Unlimited

This proposal does not propose any ground disturbing activities and will not require any permits or clearances.