

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

**Applicant contact information:** April Olbrich, Coordinator, Tualatin River Watershed Council, P.O. Box 338, Hillsboro, OR 97123-0338; telephone: 503-846-4810; email: [trwc@trwc.org](mailto:trwc@trwc.org)

**Location:** Tualatin River Watershed also called the Tualatin Basin (see Appendix 1 for additional details)

**Key Project Partners:** Clean Water Services; Washington County; Joint Water Commission and Cities (municipal water uses); Agricultural interests including irrigators, the farming community and nurseries; Forestry interests: industrial and small private forestland owners; Business/industrial & Chamber of Commerce interests including Westside Economic Alliance; Instream water interests (including state and federal fish and wildlife agencies and local and state organizations); Homebuilders; Environmental Interests: Tualatin Riverkeepers, WaterWatch; the Wetlands Conservancy; Oregon Forest Resources Institute; Citizens; Citizen Participation organizations/neighborhood associations; Tualatin Soil and Water Conservation District; Education: Pacific University, Portland Community College (Rock Creek); Oregon Climate Research Institute; Other Key Project Partners may be identified as the planning and scoping process proceeds.

### **Executive Summary**

The Tualatin Basin is home to over 570,000 residents, abundant natural resources, and provides a strong economic base for the State of Oregon, all of which require a dependable supply of clean water. Continued population and economic growth will continue to increase water demands. As observed during the past year's drought conditions the current system was stressed meeting the current instream and out of stream needs.

The Tualatin Basin has a long history of collaboration centered on water issues including flow release coordination, addressing environmental and endangered species regulations and future water supply issues. Building on these collaborations, water interest are ready to work together to address future water needs in anticipation of a projected doubling of its population over the next 40 years, increased multiple water demands and the environmental issues created by changing climate patterns.

The Tualatin River Watershed Council (TRWC) is in a unique position to bring together its partners to develop and refine efforts to integrate water quantity, quality and ecological health into a plan. Because the Tualatin Basin includes both urban and rural as well as industry, agriculture, forestry and a growing population, it is an ideal place to test planning strategies.

TRWC proposes a pilot project with a community engagement process resulting in a Tualatin Basin integrated water resources plan that align with the OWRD place-based guidelines. We expect to highlight the potential to work collaboratively in developing solutions that include changes of policy, institutional processes, and a list of potential projects which benefit a variety of interests that include water supply, water quality, ecological health and floodplain management.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

**Description of the convener and/or co-convener.** Tualatin River Watershed Council (TRWC) and Oregon Water Resources Department (ORWD).

**A-Past/present history in water planning efforts.** Past planning efforts include those where TRWC convened stakeholder groups to compile and prepare the watershed plans such as: Tualatin River Watershed Action Plan (1998), Lower Gales Creek Habitat Enhancement Plan (2003); Gales Creek Restoration Action Plan (2015). In many other instances, TRWC staff or volunteer board members were invited to participate and to lend expertise or perspective, e.g., using Willamette River water to supply future municipal water uses for several Tualatin Basin cities.

**B-How your organization intends to be involved in future water planning efforts**

As a stakeholder group with broad representation, TRWC is often asked by governmental agencies, at multiple levels, as well as private interests to serve as a forum for the exchange of ideas and the opportunity to test new directions in water resource policies. This pilot project uses the strengths of the council in a multi-year, facilitated process to review current and planned projects while identifying new proposals. The integrated water resources plan framework developed by ORWD is a way of confirming the integrity of the current projects and then testing new proposals for their ability to achieve the objectives of that framework. This allows the watershed council to demonstrate a proactive approach where projects are vetted against the multi-disciplinary perspective of the framework.

**C- Your target population and geographic areas (specific watershed you plan to address)**

The Tualatin River watershed encompasses most of Washington County as well as small portions of Clackamas and Multnomah counties; it has a mix of various land uses: 39% forestry, 35% agricultural and 26% urban, residential and industrial. While nearly 75% of the watershed is rural in character, more than 95% of the population lives in the urbanized area and that population is growing by about 1.8% annually. That means that Washington County's infrastructure must accommodate more than 10,000 new residents every year. Appendix 1 provides more details.

**D- Why your organization is an appropriate convener of place-based planning effort**

The Tualatin River Watershed Council (TRWC) formed in 1996 as a diverse stakeholder organization, is composed of agencies, non-profits and individuals whose mission is to foster better stewardship and understanding of Tualatin River watershed resources, address natural resources issues; and ensure sustainable watershed health, functions and uses. TRWC has developed a reputation to provide a neutral and unbiased forum for discussion of diverse viewpoints and has established trust with its member stakeholder groups. TRWC and its partners enjoy a large comprehensive technical base or reports, studies and databases about the basin and its characteristics. Certainly it is incomplete and there exists the desire to expand the foundational information, where cost-effective. TRWC has also engaged OWRD staff as well as current and former members of the Oregon Water Resources Commission during the developmental stages of the Integrated Water Resources Strategy Framework with discussion about how to make place-based planning (PBP) effective.

**E- What resources and skills your organization will bring to the place-based effort.**

With a 20-year collaborative history, TRWC has an understanding of the complexities of the Tualatin Basin and the natural resource functions and trust relationships within the stakeholder groups and organizations. Together, we have foundational plans and data sets on the comprehensive ecosystem of the basin. The level of collaboration, trust and knowledge means that this pilot project is not "starting from scratch". With 20-years behind the council's efforts, this project sets the perspective for the next 20-years.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

### **Integration, Partnership & Stakeholder Engagements**

#### **A. Partners you work with & what resources/skills they bring to the effort.**

TRWC has three levels of partners. These include 1) TRWC members - stakeholder organizations, agencies and individuals that comprise TRWC. TRWC members represent cities and counties; agricultural, forestry and business interests; education, environmental and fisheries interest; urban infrastructure providers, i.e., drinking water, sewage and storm water treatment, and parks; and citizens. TRWC members include agencies with current and future projects and plans for aquifer storage and recovery facilities and restoration projects

2) Current TRWC partners that have formed partnerships to conduct feasibility studies for future water needs and sources for future drinking and municipal water and instream needs. Other partners include state and federal natural resource agencies which operate in the region.

3) Other entities such as partners with whom TRWC has history with or will reach out to work with, such as environmental nongovernmental entities as well as other partners may be identified through this process.

#### **B. How this effort will integrate with & build on other plans, projects and processes;**

This effort will integrate and use past studies and plans such as the 1998 Tualatin River Watershed Action Plan that identified actions that organizations, agencies and residents could take to improve water quality and quantity and assist natural resources processes. See Appendix 2 as an example of data collection and plans available for the Tualatin River watershed.

**C. How you plan to meaningfully engage and collaborate with a balanced representation of water interests;** TRWC would join with ORWD as co-conveners to engage its stakeholder members to approach various groups, request their participation and listen to their concerns and priorities in order to have a balanced representation of water interest. TRWC is currently reaching out to partners through “listening sessions” to identify partner priorities, issues and areas of concern as well as exploring opportunities to collaborate. We believe this strategy, personal contacts, the use of social media tools, and other activities, such as tours, will keep the engagement level high.

**D. How you will ensure a transparent and open process;** TRWC will work with a facilitator selected whose skill sets include an understanding of water issues, experience in working with divergent interests and a focus on collaboration resulting in reaching consensus. With a skilled facilitator, participants help shape the process so that it will be transparent and open and develop a work plan and schedule so that agendas and minutes are clear and meetings are focused. The process may include citizen and organizational surveys and/or focus groups around current and proposed plans for the basin as well as their views of the health of the watershed.

**E. An example of how you have worked in the past with varied partners and conducted public outreach successfully in the past.** TRWC partnered with consultant Cascade Environmental Group, LLC to prepare a Gales Creek Sub-basin Restoration Action Plan, a planning process that required several years. The process included a technical advisory committee composed of TRWC restoration committee members and state and federal agency partners who reviewed data and provided input; landowners shared their concerns and issues at an open house which was included in the plan. Planning steps included identifying, compiling and reviewing Gales Creek and Tualatin Basin data, studies and reports which led to identifying critical data gaps; performing a limiting factors analysis for species of concern to be addressed in specific Gales Creek sub-watersheds and prioritization of restoration actions in these sub-watersheds.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

**Statement of Need: Current and anticipated water issues or challenges in your watershed, touching specifically on water quantity, water quality and ecological health.**

**Water Quantity:** The Tualatin Basin is water-quantity limited for instream and out-of-stream needs. The basin is supplied by a combination of water from rainfall, groundwater and stored water, both inside and outside the Tualatin Basin. Anticipated future water issues and challenges include increased demands for water for doubling of a population by 2050; increasing in-stream flows during low flow seasons (summer and fall) for native fish and wildlife because of over allocation of stream flow and weather pattern changes (less rainfall, longer duration of increased temperatures, potential for increased invasive plant and animal species), the potential decrease of groundwater resources, regulatory changes and natural resource process changes. Appendix 3 includes the updated “fill data” for Henry Hagg Lake, the principal reservoir for the basin; in 2015, instream water rights for drinking water were curtailed sooner in the season than usual.

**Water Quality:** Current water issues include streams being impacted by temperature, phosphorous, ammonia, dissolved oxygen and sedimentation from a variety of sources. Future water quality challenges include increased development and impervious surfaces that result in unfiltered storm water entering Tualatin basin streams at the same time the basin experiences new DEQ requirements for Clean Water Services (CWS) permits and other requirements. Appendix 4 includes a summary of critical issues addressed in this permit and will be submitted as supplemental materials.

**Ecological Health:** In the past, over 50 percent of the land in the Tualatin Basin was converted from forest, prairie, and wetlands to agricultural land and urban centers. Streams were channelized, wetlands drained, large wood removed from streams, roads built with inadequate culverts that blocked fish passage, native vegetation removed from riparian corridors increasing invasive vegetation and stream temperature in addition to reducing habitat and food supply for native fish and wildlife. Many of these past practices have changed and beneficial practices are being implemented which aim to reverse results of past impacts. Climate change will likely cause new ecological challenges such as the impact of “flashiness” of sudden storms or shifts in mammalian or aquatic species due to habitat degradation.

**How these challenges are being addressed.** Agencies such as Clean Water Services increase stream flows during low water flow periods through water releases from Scoggins Dam and work with agricultural partners with water rights to maintain instream flows and supplement needed irrigation water through Tualatin Valley Irrigation District pipe delivery. Many public and private landowners are implementing projects to improve riparian corridors, replace passage barrier culverts, install large wood debris to slow flows and improve habitat, re-meander streams and provide connections to their floodplains. Development planning regulations have been expanded to assure compliance with enhancement of natural resource standards arrived at through community consensus. Partnered landowner incentive programs have been successful in increasing riparian vegetation which will lead to future reduced stream temperatures.

Many of these current approaches can be enhanced through PBP as data gaps are filled, new partners are identified or best practices tweaked to be more effective and efficient. For example, the National Pollution Discharge Elimination System (NPDES) permit for Clean Water Services will bring with it inherent tensions between organizations and people as CWS revises its Construction and Design standards for storm water regulations. PBP may assist in helping achieve the right mix of incentives and rules to generate consensual solutions. In the agricultural areas, there may be ways to promote changes for more irrigation efficiency by borrowing best practices from other regions. Other areas where PBP may be effective include increased recreational uses of river corridors, restoration of upland forests and oak savannas and determining the future of the successful “Tree for All” riparian buffer native tree and shrub planting programs.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

### **Proposed Approaches**

**How your planned approach will be consistent with the principles described in the *Integrated Water Resources Strategy and Placed-Based Planning Guidelines*.** We note that the Guidelines were the catalyst for initiating our discussions and for that reason we reached out to OWRD for a briefing, and to past Commissioner John Jackson for input. It is our intent to implement the planning process as described in the guidelines. Our TRWC planned approach will recognize the public interest in water, include a meaningful process for public involvement and maintain a balanced representation of interests. We recognize that actions must comply with existing laws and policies and result in a strategy that balances current and future instream and out-of-stream needs in all water system, evaluating tradeoffs between ecosystem benefits and traditional management of water supplies.

TRWC will look to utilize incentive-based approaches and integrate into the process a mechanism basing decisions on best available science and local input that includes lessons learned, a framework that has flexibility and mechanisms that allow for learning, adaptation and innovative approaches.

### **The major activities you plan to undertake to meet the goals laid out in the *Guidelines*;**

- 1) Invite 20-30 stakeholder groups to convene and initiate the process; select a facilitator; contact, invite and involve a balance of watershed interests, an additional 20-30 stakeholders; work with stakeholder groups to define planning scale and develop a work plan that ensures a meaningful public process. Develop a communication/outreach strategy and tools as well as a general outline of the balance of the process.
- 2) Characterize Tualatin Basin water resources, water quality and ecological issues including compiling and analyzing existing information and identifying critical information gaps and the process to obtain such information. Obtain assistance from partners and others to assemble data reports. Review past citizen surveys conducted by partners in recent years.
- 3) Quantify and summarize existing and future needs and demands including instream and out-of-stream uses, water quantity, quality and ecosystems and climate change and natural hazard components. Form and operate policy and technical groups, convene outreach to stakeholder groups for assessments of gaps. Conduct any public opinion polling or focus groups as necessary.
- 4) Develop integrated solutions to meet long-term water needs that include review of efficiency and conservation measures, built and natural storage, groundwater storage, transfer and rotation agreements, non-traditional techniques, infrastructure, watershed and habitat restoration, instream flow protections, water quality protections and monitoring. The PBP process itself shall generate some policy innovations in areas not currently identified in this proposal. Seek final approval of stakeholder group boards and other project sponsors. Schedule and hold several community meetings, open to the public. There will be some sessions scheduled with specific organizations and consultations with their staff to gain input and advice. All PBP meetings for decision making will be advertised and noticed as public meetings.
- 5) Develop an integrated water resources plan that includes alternative analyses, prioritization of actions and project specific implementation plans/strategies with respective organization which may adopt or accept the entire plan or a portion. Publish any final reports and completion of grant requirements to OWRD.

### **The rough timeline for accomplishing the planning steps laid out in the *Guidelines*.**

We estimate a timeline varying from 24 to 36 months. A more specific timeline will be developed in the first planning step.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

### **Anticipated Results**

#### **How place-based planning will help to solve water challenges in your watershed;**

By working in collaboration, Tualatin Basin water partners will learn about each other's needs and challenges and explore innovative solutions in order to meet these needs. If agencies and interest groups adopt the principles of place-based planning, it will encourage everyone to think of all the needs of the basin, not just their own particular need or concern. Existing projects will benefit from the lens of place-based planning. For example, PBP could bring additional considerations on water supply issues for energy generation or conservation, the effect of how climate change on the mix of resources or a pilot project for built storage. The recent efforts to brew "river beer" demonstrate that all water is recycled found in Appendix 5, to be submitted later. PBP can explore that theme in more detail.

#### **The anticipated short-term and long-term outcomes or benefits to your community that are expected to result from the proposed process.**

Short-term benefits and outcomes would include greater collaboration among stakeholder groups to resolve potential conflicts in water needs and uses. As participants work together and build trust, it becomes easier for them to contact each other about challenges and opportunities and to find innovation solutions and set courses of action.

Long-term benefits and outcomes would include strategies and projects that would enable the Tualatin Basin to sustainably meet its instream and out-of-stream water needs. The long-term in this context is intentionally generational. The establishment of a collaborative process for stakeholder input will facilitate development and implementation of projects by defining potential issues and resolutions, opportunity for leveraging funding, and identifying potential partners.

Today's issues in the watershed developed over time and with the perspective of looking after our children's children's children (great grandchildren), the PBP process should build in long-term monitoring and set a foundation for future success. There will be follow up to this PBP process as the partners initiate policy changes, modify programs and adapt to ongoing changes in the ecosystem of the basin including cultural, economic and political changes among the people who live, recreate, learn and work in the Tualatin Basin.

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

### **Request for Department Resources**

**Estimate the amount of funding will you need to 1) conduct up to three years of collaborate water planning and 2) produce a place-based integrated water resources strategy. \$225,000.**

**Specify the amount of funding you are requesting and provide justification for the request. Organize by planning steps, since each step will require different inputs & areas of expertise.**

**Planning Step 1: Funding needed:** \$63,000 + \$6000 (in-kind)

**Justification:** Follow TRWC procurement guidelines to hire a facilitator, as advised by ORWD staff. Confirm in-kind or cash contributions. Task facilitator with developing a communications and outreach strategy and tools as well as a general outline of the balance of process.

Cost estimates: Grant funds: TRWC 80 hrs. (\$32/hr.) & fiscal adm. (10%); Facilitator: 140-210 hrs. (\$250/hr.); In-kind: meeting venues, stakeholders meetings (\$6000). OWRD, 80 hrs.

**Planning Step 2. Funding needed:** \$10,000 + \$15,000 (in-kind)

**Justification:** Obtain services of CWS staff and others to assemble existing plans and data reports (in-kind contribution). Gap analysis includes a review of citizen surveys performed by CWS and others in recent years.

Cost estimates: Grant funds: TRWC 80 hrs. (\$32/hr.) & fiscal adm. (10%)

In-kind: compilation and review by TRWC member staff/technical groups re: existing plans and data; analysis re: critical gaps (\$15,000). OWRD, 80 hrs.

**Planning Step 3: Funding Needed:** \$60,000 (\$30,000 includes survey/focus groups if needed) + \$25,000 (in-kind.) **Justification:** Form and operate policy and technical groups, convene outreach to stakeholder groups for assessment of gaps. Conduct any public opinion polling or focus groups as necessary.

Cost estimates: Grant funds: TRWC 80 hrs. (\$32) & fiscal adm. (10%); facilitation, 20 hours (\$250/hr.) and stakeholder group outreach ; Field trips (\$2000); Survey & or focus groups (\$30,000); begin identified critical gap technical reports (\$20,000)

In-kind: small group facilitation (\$8000); Technical and Policy Groups (\$10,000) Field trips (\$2000); Basin Maps. OWRD, 80 hrs. and may also include additional aid and hours for technical assistance in critical gap information/studies (\$5,000-\$10,000).

**Planning Step 4: Funding Needed:** \$77,000 + \$17,000 (in-kind)

**Justification:** At this step the process to seek approval begins so that final approval by groups such as the CWS Board of Directors, Joint Water Commission, Willamette Water Supply governing board, Tualatin Valley Irrigation District, SWCD, NRCS and other project sponsors begins. This could involve several community meetings. Some may be open to the general public and others might be scheduled with specific organizations such as the Westside Economic Alliance in a forum on water issues.

Cost estimates: Grant funds: TRWC 80 hrs. (\$32/hr.) & fiscal adm. (10%); completion of identified critical cap technical reports (\$25,000) planning team analysis regarding proposed integrated solutions and begins draft of plan (\$20,000); Community meetings facilitation and venues (\$15,000); Stakeholder group facilitation (30 hrs.); Basin maps;

In-kind: technical and policy groups (\$10,000); small group facilitation (\$2000); stakeholder groups (\$3000). OWRD, 80 hrs.

**Planning Step 5: Funding Needed:** \$15,000 + \$2000 (in-kind)

**Justification:** The extent of public hearings will depend on the typical consideration and adoption processes of the respective organization asked to approve either the entire plan or their portion. A hearing before the CWS Board of Directors and a presentation at a TRWC meeting

Tualatin River Watershed Council Letter of Interest  
Place-Based Integrated Water Resources Planning Grant

can both serve as an opportunity for a general purpose opportunity for citizens to weigh in prior to adoption. Other expenses in this step include the publication of any final reports and completion of grant monitoring requirements to OWRD. We may experience the situation where we ask groups to “accept” rather than “adopt” the entire document.

Cost estimates: Grant funds: TRWC 80 hrs. (\$32/hr.) & fiscal adm. (10%); input and revisions, finalizing integrated water resources plan by planning team (\$10,000); printing/copying;

In-kind: Stakeholder group (\$2000). OWRD, 80 hrs.

**Discuss how you intend to meet the 25% match/cost share. The match at the time of the application doesn’t need to be secured, but need to show you are seeking the match.**

TRWC is talking with members and partners regarding both cash and in-kind match contributions. Possible match contributions may include:

In-Kind: a) venue/meeting location provided through partners/TRWC members; b) small group facilitation can be provided by TRWC members; c) assembling plans and documents; d) critical gap analysis performed by technical and policy groups; e) agency vehicles for field trips; f) potential for sharing public opinion polling and focus groups for mutually desired information; and g) creation and printing of basin maps to provide groups as a way to discuss their areas of knowledge.

Cash: a) technical studies needed to fill critical gap data; b) synthesis of gap analysis; c) facilitation; d) small bus rentals for fieldtrips; and e) surveys and community engagement.

**Describe level of involvement and other forms of assistance that you’ll seek from OWRD. Please indicate if you’d like OWRD to serve as a co-convener of process.**

TRWC would like OWRD to serve as a co-convener because OWRD brings a wealth of experience in place-based planning in its development of integrated water resources planning. We may ask OWRD to assist with technical assistance in areas such as water rights analyses, modeling, scenario planning, GIS support, etc. A preliminary review of data needs from a Tualatin Basin sub-water restoration action plan included the following needs, which may also be applicable for much of the Tualatin Basin: the need for stream flow monitoring on tributaries, stream temperature monitoring, tributary stream habitat, macroinvertebrate surveys, surveys for fresh water mussels and an analysis of sediment sources. TRWC and its partners lack a comprehensive database of completed restoration projects, i.e., privately owned forested and agricultural lands as well as privately urban and rural residential properties.

OWRD staff can also be expected to contribute to project management, public outreach strategies and provide statewide perspective on the programs, projects and activities developed during the PBP process. With a three-year time frame and a variety of participants there will, undoubtedly, be project management challenges. Having OWRD staff serve as co-convener implies a higher level of interaction with the TRWC Coordinator and watershed council leadership to produce a high quality, collaborative and productive process. The active participation of OWRD staff lends credibility to the effort, opens doors to people, agencies and resources that TRWC may not be able to reach and should lead to the periodic involvement of state and federal natural resources agency leadership as appropriate.