



# Oregon

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## Water Resources Department

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## MEMORANDUM

**TO:** Water Resources Commission

**FROM:** Alyssa Mucken, IWRS Program Coordinator  
Brenda Bateman, Technical Services Division Administrator

**SUBJECT:** Agenda Item C, November 20, 2014  
Water Resources Commission

### **Place-Based Integrated Water Resources Planning Draft Guidelines**

#### **I. Introduction**

During this agenda item, staff will provide an overview of the revised place-based planning guidelines, currently in draft form, and seek policy direction from the Commission. Commissioner Dennis Doherty will serve as facilitator during this agenda item.

#### **II. Background**

Recommended Action 9A of Oregon's 2012 Integrated Water Resources Strategy (IWRS) encourages local communities to "undertake place-based integrated water resources planning." Pursuant to this recommended action, the IWRS Project Team agencies (Departments of Water Resources, Fish and Wildlife, Environmental Quality, and Agriculture) committed to developing guidelines, providing technical assistance, and seeking financial resources to support place-based planning efforts aimed at meeting instream and out-of-stream water needs.

As discussed at previous Commission meetings in 2014, the Department conducted workshops with a diverse group of stakeholders, gathering feedback on various approaches to place-based planning. In August, the Water Resources Commission received a report entitled "What We Heard," documenting a wide range of perspectives about the state's role in place-based planning, how it should be structured and carried out, and how funding could be used to support the various planning and implementation stages.

#### **III. Discussion**

Based on earlier feedback from the Commission, partner agencies, stakeholders, and the public, Department staff have developed draft place-based planning guidelines for the Commission's review. Specifically, the Department requests guidance on the following:

- **Initiating the Planning Process.** The guidelines provide flexibility for planning groups to set the geographic scale of the planning region, but they must consider the state's existing administrative basins and natural watershed characteristics. What type of approval role, if any, should the Department and its partner agencies play in the boundary-setting phase? What is the appropriate role of the Department, if any, for reviewing the composition of the planning group?

- **Public Participation.** The IWRS and draft guidelines recognize that planning must be open and transparent, engaging the public and diverse interests early on in the process. How can the state ensure that planning groups adhere to these principles? Should place-based planning groups be required to conduct meetings using procedures outlined in Open Meetings Laws, even if they are not required to under the law? Should a draft version of a place-based plan be made available, on a statewide basis, for public comment?
- **Recognition of a Place-Based Plan.** The draft guidelines require planning group members to adopt their final plan. Should the Water Resources Commission play a role in recognizing or adopting a place-based plan?
- **Releasing Pilot Guidelines.** Department staff conducted extensive public outreach earlier this year to obtain input on what should be included in the place-based planning guidelines. The draft guidelines before the Commission were developed upon reviewing the numerous public comments received. The Department is currently working with agency partners and will continue to do so following the Commission meeting to further refine the guidelines. After incorporating input from the Water Resources Commission and agency partners, the Department would like to release the guidelines for communities to test. Before the Department releases the pilot guidelines, should the Department solicit another round of formal comment?

#### IV. Next Steps

Stakeholders in the Upper Deschutes Basin have already initiated a collaborative water resources planning process, using the Bureau of Reclamation's WaterSMART framework. Testing the state's guidelines in conjunction with this effort could provide valuable information on what works well and what does not. Parties in the Deschutes basin have indicated a willingness to pilot the guidelines. Other communities have also expressed an interest in taking a place-based approach.

The Department has submitted budget requests for the 2015-17 biennium to provide grant funds for communities in need of resources to pilot-test these guidelines. During the next eight months, the Department will learn more about the status of these requests.

After a period of pilot-testing, the Department should have enough information to make modifications and improvements to the guidelines – in time for the adoption of the 2017 Integrated Water Resources Strategy.

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Attachment 1: Draft Guidelines for Piloting Place-Based Integrated Water Resources Planning

## Piloting Integrated Water Resources Planning

### Guidelines for Oregon Communities Spring 2015



#### **IWRS Project Team**

Oregon Water Resources Department  
Oregon Department of Environmental Quality  
Oregon Department of Fish and Wildlife  
Oregon Department of Agriculture

**Draft: November 2014**

***Everywhere in our State, we see healthy waters, able to sustain a healthy economy, environment, and cultures & communities.***

*Healthy waters...are abundant and clean.*

*A healthy economy...is a diverse and balanced economy, nurturing and employing the State's natural resources and human capital to meet evolving local and global needs, including a desirable quality of life in urban and rural areas.*

*A healthy environment...includes fully functioning ecosystems, including headwaters, river systems, wetlands, forests, floodplains, estuaries, and aquifers.*

*Healthy cultures and communities... depend on adequate and reliable water supplies to sustain public health, safety, nourishment, recreation, sport, and other quality of life needs.*

*~ Policy Advisory Group's Fifty Year Vision for Oregon's Water Future  
Oregon's 2012 Integrated Water Resources Strategy*

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# Why Take a Place-Based Approach to Integrated Water Resources Planning?

## Introduction

Water is one of the world's most precious natural resources. With more than 100,000 miles of rivers and streams, 360 miles of coastline, and more than 1,400 named lakes, Oregon is renowned for its water. Our rivers, streams, lakes, wetlands, springs, and aquifers provide a wide range of benefits to all Oregonians.

A clean and reliable source of water is essential for meeting our basic human needs, and for supporting Oregon's economy. Thousands of businesses and industries rely upon water in some form, to irrigate a crop, to manufacture a product, or to provide a service or experience.

Oregon's economy, in turn, is dependent upon a healthy environment where water resources play an essential part. Fish and wildlife need a sufficient quantity and quality of water—from the rivers, lakes, wetlands, and estuaries—to live, reproduce, and thrive. Fully functioning ecosystems are necessary to support our commercial and recreational needs and a quality of life unique to Oregon and the Pacific Northwest.

In recognition of the importance of water to all Oregonians, and with leadership, support, and direction from the Oregon Legislature and the Water Resources Commission, Oregon's natural resource agencies developed the state's first Integrated Water Resources Strategy (IWRS). Adopted in 2012, the IWRS serves as a blueprint for achieving the state's long term goals of improving our understanding of the status of Oregon's water resources, including our instream and out-of-stream needs (water quantity, water quality, and ecosystem needs), and implementing recommended actions to meet these needs today and into the future. One action in the IWRS, Recommended Action 9A, calls for helping communities undertake a place-based approach to integrated water resources planning.

## Place-Based Planning – A Necessary Step for Attaining a Community's Vision for the Future

Although Oregon is often thought of as a water rich place, it is not without challenges. As described in the Integrated Water Resources Strategy, the state faces many water-related challenges. Organized in broad categories called “critical issues,” these statewide challenges are summarized below.

- Limited water supplies and systems
- Gaps in data & information
- Understanding the roles & responsibilities of various water-related entities
- Future needs/demands for agriculture, municipal, instream, and other uses
- Population growth
- Economic development
- Climate change
- Energy-water nexus
- Infrastructure challenges
- Changes in land-use
- Water-related education and training
- Integrating planning activities and maintaining partnerships
- Water management/development (conservation, storage, reuse, etc.)
- Ecological health (natural storage, instream protections, invasive species, habitat)
- Public health (drinking water, toxics, pollutants, recreation)
- Funding

These issues are statewide, but they affect most communities across the state. Water supply shortages for instream and out-of-stream uses already occur in many locations throughout the state, and will likely be intensified by a changing climate and increases in future demand. Similarly, while efforts have been successful in improving water quality, new pollutants are emerging, and about 22,000 stream miles and 30 lakes and reservoirs are still impaired. Even with significant progress made in habitat and watershed

restoration, many species in Oregon are still at a fraction of their historic levels, many of which are listed as threatened or endangered under the Endangered Species Act.

Although every river basin in Oregon is unique, in terms of widely varying ecological issues, community values, and economic dynamics, every community has its own water challenges that if left unaddressed, will likely increase in the future.

Failing to address these challenges can impact the quality of life for Oregonians and hinder communities from reaching their economic, social, and environmental vision for the future. Water is essential for economic growth and development, job creation, and the livelihoods of many farmers and ranchers across the state. Similarly, water is necessary to support fish and wildlife, recreation, and other instream uses that are important to communities. In order for a community to achieve its vision for the future – for example, to provide jobs for its citizens or to ensure that a strong vibrant fishery and recreation opportunity exists – we must consider how instream and out-of-stream water quantity, water quality, and ecosystem needs will be met today and in the future.

The nature of water makes addressing water resources challenges particularly difficult if done using a piecemeal, uncoordinated approach. Water moves across political boundaries, connecting the mountains to the valleys. The quantity and quality of our water resources is impacted by land-use practices across the landscape. To address water resources issues, solutions must be holistic and coordinated so that various actions are not working in opposite directions.

Initiating a “place-based” integrated water resources planning approach is a tool for local communities to achieve that level of coordination, by collaboratively developing a shared vision for the future and addressing specific water-related challenges. Such planning gives those who live, work, and play in a community, and care deeply about it, a stronger voice in their water future, which in turn will provide a pathway for building the political and public support needed for water resources projects (instream and out-of-stream). This will be particularly helpful in demonstrating that projects are well-vetted and supported at the local level, and merit funding or financial support. Furthermore, communities that undertake a place-based approach can help inform and influence statewide efforts, including future revisions to the IWRS, providing an opportunity for the state to facilitate solutions and advance policy. In essence, place-based integrated water resources planning will allow communities to identify their water resources needs and then develop solutions and a suite of projects that will help meet those needs now and into the future.

## Purpose and Use of these Guidelines

These guidelines are a tool for local communities wishing to initiate a collaborative water resources planning process, using the framework of the state of Oregon’s Integrated Water Resources Strategy. These guidelines are for piloting purposes – to road test the concept of integrated water resources planning (“place-based planning”) at the community or local level.

These pilot guidelines were developed by the Oregon Water Resources Department, through a series of stakeholder workshops and public input, and assistance from several natural resource agencies. Place-based planning is not a requirement; these

### Share your Thoughts

These guidelines are written knowing that piloting integrated water resources planning at a local level will inform the long-term vision of a place-based planning program in Oregon. During this pilot phase, the state can adjust or adapt the guidelines to provide greater clarity or direction.

The IWRS Project Team welcomes input from local communities employing these guidelines.

Send comments to:

[waterstrategy@wrdd.state.or.us](mailto:waterstrategy@wrdd.state.or.us)

guidelines are meant to support the voluntary efforts of communities wanting to take a proactive role in planning for their water future.

The state, as part of implementation of the IWRS, has committed to providing technical assistance and seeking resources to further place-based integrated water resources planning efforts within Oregon communities.

## Four Elements of Place-Based Planning

A place-based plan should address the following four elements:

- 1. Build a Collaborative & Integrated Process**  
Create a structure and process that fosters collaboration, bringing together various sectors and interests to work toward the common purpose of maintaining healthy water resources to meet the needs of the community and the environment. Ensure a balanced representation of interests and a meaningful process for public involvement.
- 2. Characterize Water Resources, Water Quality, & Ecological Issues**  
Describe and assess current water supplies, water quality, and the status of ecosystem health to determine any challenges and potential opportunities.
- 3. Quantify Existing and Future Needs/Demands**  
Define how much water is needed to meet current and future water needs – instream and out-of-stream – water quantity, water quality, and ecosystem needs/demands. Plans should address how climate change, population growth, and land use affect water resources and the ability to meet these needs within the community. Meeting water needs should be considered within the context of specific watersheds, accounting for the hydrological, geological, biological, climatic, socio-economic, cultural, legal, and political conditions of a community.
- 4. Develop Solutions for Meeting Long-Term Water Needs**  
Recommend a suite of actions to address the community's water-related challenges and to meet instream and out-of-stream needs.

If planning groups are seeking recognition from the state for their efforts, using the framework of the state's Integrated Water Resources Strategy, local entities should adhere to these guidelines, along with the following basic fundamentals:

- Recognize the public interest in water, state authorities, and responsibilities.
- Comply with existing state laws and policies.
- Ensure balanced representation of all interests.
- Have a meaningful process for public involvement (e.g., hold public meetings).
- Adhere to the 2012 IWRS Guiding Principles.
- A place-based plan, on its own, cannot change existing laws or jeopardize existing water rights. However, the plan can make recommendations regarding changes to state law, policies, or programs.

Within a basin or sub-basin, multiple plans governing the use and protection of water resources may already exist. Examples include water management and conservation plans (by a municipal water provider, or irrigation district); fish conservation and recovery plans, BiOp implementation plans; basin plans for



water allocation; the Forest Practices Act and Total Maximum Daily Loads (TMDLs) for improving water quality and many local implementation plans. There are also local land-use plans; watershed restoration action plans; and locally developed agricultural water quality management plans. Taken together, these plans and their respective strategies engage many agencies and entities at every level.

In envisioning a place-based planning approach, these existing regulations, plans, and programs do not go away, but instead provide a baseline of information, history, and rules that should be considered, coordinated, and built upon. An integrated water resources plan can help bring together these plans and programs in a more strategic and effective way, providing greater opportunities for coordination and funding while making progress on multiple fronts.

## Planning Element #1: Build a Collaborative & Integrated Process

### Defining the Planning Scale

Planning groups have the flexibility of establishing their own geographic planning scale, so long as it meets certain criteria. The Water Resources Department's existing administrative drainage basins are a good starting point for place-based planning (see Figure 1). Planning groups can focus on smaller geographic areas, such as a sub-basin, or a group of sub-basins, within these boundaries. For example, planning groups could focus on the upper, middle, or lower section of a basin, but should utilize watershed-based boundaries, and take into account situations where the source of water for certain uses (e.g., drinking water or irrigation) is located in an adjacent basin.

Planning groups should seek advice from the IWRS Project Team agencies during this initial phase to review the planning boundaries, and determine agency participation. If federal projects or land management programs exist within the planning area, groups should consult with those agencies to determine planning participation as well.

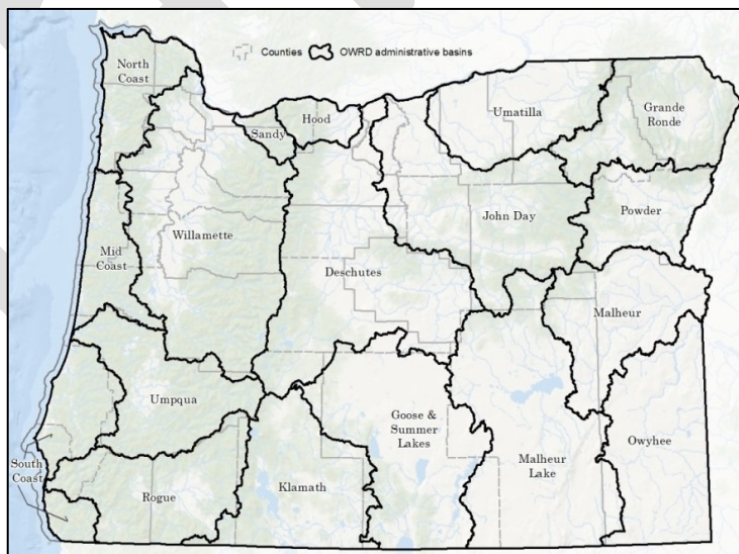
### Involving State Agencies as Partners

The role of state agencies in development of a place-based plan is to provide guidance, data and information, and generally, offer support, advice and direction throughout development of the plan. If resources allow, the Water Resources Department could serve as a non-voting planning member. The Department could also act as a liaison for those natural resource agencies not able to commit staff resources to participate in planning or other face-to-face meetings. A state agency could play a co-convening role, if requested by local communities and if resources allow. The Department and its IWRS partner agencies can help planning groups incorporate the goals and objectives of the Integrated Water Resources Strategy at the local level, and understand the regulatory structures in place today.

### Convening the Process

Since developing a place-based plan is completely voluntary, the local community will need to initiate the effort and convene the process. These guidelines do not suggest who the convener should be; but rather,

Figure 1: Administrative Basins in Oregon (OWRD)



they describe the role and responsibilities of a convener. The Policy Consensus Initiative (PCI) provides resources to help facilitate collaborative planning, and has developed basic principles to help a convener understand their role in the planning process. Planning groups should refer to PCI's resources, particularly the "Role of a Convener," an excerpt of which is included in Appendix B. The convener, and any sponsoring entities, should communicate to the Water Resources Department of its intentions to organize a planning group, and develop a place-based plan.

### Involving Diverse Interests

The planning group will need to decide its own structure for involving diverse interests, and provide a description within its plan. Most importantly, the structure needs to ensure that the planning body represents a balance of interests from different sectors. Diverse representation is a key tenet of integrated water resources management. Each basin will be unique, in terms of its distribution of interests and stakeholders. Having diverse interests engaged and invested from the beginning will help ensure a process that meets both instream and out-of-stream needs. Remember that these needs encompass water quantity, water quality, and ecosystem needs, considering both surface water and groundwater resources.

The place-based plan should describe how the planning members were determined, including a list of those that were invited to participate. Interest groups will need to decide for themselves what individual(s) best represents their interests for planning group participation. The plan should describe those responsible for its development and implementation. The description should contain enough detail to help stakeholders and the public understand how to communicate with the planning group and participate in plan development.

Generally, interests in any given community will include:

- Local governments, such as cities and counties
- Tribal governments
- Municipal water and wastewater entities
- Industry (i.e. major industries or employers in the community)
- Agriculture
- Forestry
- Conservation/environmental groups
- Power companies
- Small business
- Public land managers
- Private landowners
- Special districts (e.g., irrigation, public utilities, flood control, parks/recreation, drainage, ports, etc.).

In determining the composition of a planning group, it is important to ensure that all persons potentially affected by a place-based plan have a voice in decision-making. This includes environmental justice communities, particularly members of minority or low income communities, tribal communities, and those traditionally under-represented in public processes.

#### **Policy Question:**

Should OWRD, or possibly the IWRS Project Team, review and approve/not-approve the formation and organizational structure of place-based planning groups, for the purposes of pilot testing these guidelines? Other states take the opportunity at this juncture to evaluate boundaries or suggest planning members, if key players seem to be missing from the process.

## The Public Process & Consensus Decision-Making

Reaching decisions within the planning group must be an inclusive and transparent process. Making decisions by consensus is an effective technique, meaning that one or two in the group may dissent, while the rest of the group supports the decision—or can “live with it.” Getting to consensus provides a solid foundation upon which to build a plan and subsequent related actions, because it signals long-term support and commitment from a diverse set of stakeholders and partners.

Any place-based plan needs to employ a strong communication strategy, not only to ensure public participation in plan development, but to also engage the broader community on implementation of the plan. Publicize, in advance, meetings of the planning group, and accept public comment during every meeting.

Ensure a means of online communication as well, by setting up a website, and posting materials regularly. Consider using a list-serve, and/or email account that can be used to quickly and widely disseminate information. Use these media, as well as print or other venues, to advertise upcoming meetings and public comment opportunities. Planning groups should comply with the state’s Public Meetings Law. Refer to Appendix C for references, including a “quick guide” developed in 2010 for local and state officials, members of Oregon boards and commissions, citizens, and non-profit groups.

## Planning Element #2: Characterize Water Resources, Water Quality, & Ecological Issues

The purpose of this planning element is to help planning partners collectively identify challenges currently facing the community, and to start mapping potential solutions or opportunities to address any water quantity, water quality, or ecological issues. This planning element represents the data gathering and assessment phase.

A place-based plan should tell the story of what makes the area unique, describing the economic, social, and landscape characteristics of the community. This includes the physical characteristics of water resources, such as major rivers, tributaries, and aquifers, noting whether they are rain, snow, or spring-fed systems. Extensive planning efforts in the 1960s through the early 1990s examined water resources issues for most areas of the state and described how water could be used in the future. Planning groups should consider existing basin program policies, objectives, and classifications (OAR Chapter 690, 500-520), and any other legal protections, when characterizing water resources issues.

In addition to surface water, describe the availability of groundwater resources, to the extent known. Describe, if possible, where additional data is needed. Note any groundwater protected areas and the status of groundwater in these areas. Existing data or basin investigations are available from the Water Resources Department and the U.S. Geological Survey. Refer to Appendix C for technical resources and publications.

The place-based plan should describe water quality –both surface water and groundwater– in the planning area. Items to consider for water quality include: designated beneficial uses, impaired water bodies, groundwater management areas, total maximum daily loads, permitted discharges, non-point sources of pollution, and any monitoring or relevant publications that can be used to characterize surface water or groundwater quality conditions.

The place-based plan should include a general description of the ecological health of the planning area. This section should include a description of key species and habitats. Describe the historical and current presence of fish species, any migratory fish, any species listed under the Endangered Species Act with their current status, and any species included in ODFW’s State Sensitive List. Include a discussion of limiting

factors that affect aquatic habitats in the watershed. As an example, Oregon's Conservation Strategy provides a list of limiting factors to consider: water quantity (low flows), water quality, invasive species, water temperature, sedimentation, passage barriers, degraded riparian condition and loss of habitat complexity.

### Planning Element #3: Define Existing and Future Needs/Demands

The purpose of this planning element is to identify how much water is needed to support current and futures uses of water, to examine where water supplies do not meet instream or out-of-stream needs / demands, and where existing supplies are likely to fall short in the future.

Planning groups should quantify existing and future instream and out-of-stream water needs in the watershed, using a 50-year planning horizon, and accounting for future pressures such as climate change, population growth, and changes to land-use. Keep in mind that such needs encompass water quantity, water quality, and ecosystem needs. Many of these needs may already be quantified in municipal or agricultural water management plans, TMDL plans, habitat restoration plans, forest management plans, or conservation and species recovery plans. Planning groups should identify where conflicts among uses are most likely to arise in the future. This is critical information that will shape how solutions are developed later in the planning process.

#### Out-of-Stream Needs/Demands

Describe existing water rights in the basin, generally. Are consumptive uses (e.g., municipal, agricultural, industrial, domestic, etc.) being met today? Are such uses met by surface water, groundwater, or storage, or non-traditional sources of water, including recycled water, treated effluent, rainwater catchment, or the use of stormwater? Evaluate the supply reliability of existing infrastructure (storage reservoirs, delivery systems, etc.). The local watermaster may have information regarding the history and frequency of water shortages during dry years in the community. Oregon's Water Rights Information System and annual water use reports will be useful for understanding existing water uses.

#### Instream Needs/Demands

Describe existing instream needs in the community to determine if such needs are currently being met. Consider existing protections (e.g., instream water rights, pending applications, scenic waterway flows, or flows specified in project operations) to support fish, wildlife, or pollution abatement. Also assess flow needs to support other uses, such as navigation, recreation, or hydropower. Groundwater often contributes flow in surface water bodies and supports various ecological functions; therefore, groundwater should be considered for assessing instream needs. Determine how often instream flows are met in wet or dry years and the likelihood such flows will be met in the future. Refer to the Integrated Water Resources Strategy for more information on the suite of flows that are needed to support instream uses.

#### An Example of a Place-Based Plan: Yakima River Basin Integrated Plan in Central Washington

Developed by a diverse group of federal, state, tribal, and local partners, the goals of the Yakima River Basin Integrated Plan are to protect, mitigate, and enhance fish and wildlife habitat; provide increased operational flexibility to manage instream flows to meet ecological objectives, and improve the reliability of the water supply for irrigation, municipal supply and domestic uses. The Plan contains a suite of actions:

1. Reservoir fish passage
2. Structural and operational changes to existing facilities
3. Surface water storage
4. Groundwater storage
5. Habitat/watershed protection and enhancement;
6. Enhanced water conservation
7. Market reallocation

The Yakima Integrated Plan addresses the basin's current water resource and habitat problems, and includes an adaptive management framework to address potential future changes in water needs or hydrology, including potential climate change effects.

## Climate Change

As planning groups are conducting assessments under Planning Element #2 (characterizing resource issues) and Planning Element #3 (defining needs/demands), planning groups will need to identify vulnerabilities to climate change in (a) human systems, (b) natural systems, (c) infrastructure and the built environment. Projected climate change impacts include a longer freeze-free season, increased water demand due to warmer summertime temperatures, and higher spring flows/lower summer flows in snowmelt dominated basins.

Planning groups should assess whether natural and built systems are vulnerable to certain natural events, such as droughts, wildfires, floods, or possibly seismic events. The frequency, duration, intensity, and impacts of past events and potential impact of future events should be considered. Planning groups may wish to consider developing a multi-year, worst-case planning scenario for the community.

## Planning Element #4: Define Integrated Solutions for Meeting Long-Term Needs

Developing the solutions toolbox is paramount for meeting a community's instream and out-of-stream water needs, today and into the future. Considering the diversity of water challenges, planning groups will likely need to consider a suite of tools, examining various options for meeting unmet needs/demands. This can include maintaining current practices, if they are sufficient to protect desired uses. Use of the following tools can help bridge any gaps identified. The following are suggestions for planning groups to consider, listed in no particular order:

### (a) Water-Use Efficiency and Conservation Measures

Place-based plans should consider improving water-use efficiency and conservation as a means to meet water needs. The state's allocation of conserved water program is a water right transfer tool that puts water back instream while allowing water to be applied to additional acreage. At the individual level, irrigators can reduce on-farm water use by implementing a number of new technologies and other practices. Several irrigation districts throughout Oregon have made their delivery systems more efficient in recent years, finding ways to save water, reduce costs, and improve the reliability of deliveries to water users.

Water conservation opportunities exist within municipal water systems as well. Delivery system upgrades and household-level programs that install low-flow toilets, faucet aerators, and high efficiency shower heads can be effective tools for reducing water use and meeting additional demands. Rebate or outreach programs sponsored by municipal water providers have been effectively used in Oregon in the past and continue to be used to complement future system upgrades.

Landscaping can also account for a significant use of water; installing efficient irrigation systems or selecting plants that require less water can also be effective tools, along with other landscaping techniques. (Refer to IWRS Action 10A for more information).

### (b) Water Storage – Built and Natural

Storage as a water management tool includes natural storage, built storage (above-ground storage and below-ground), and operational changes to existing storage projects.

The state of Oregon has a policy that gives high priority to storage that optimizes instream and out-of-stream public benefits and beneficial uses. Multi-purpose storage is preferred over single-purpose storage. If planning groups are considering new storage as a potential water management tool, the following should be considered:

- Purpose (e.g., type, location and extent of use, benefits);

- Legal (e.g., state, federal and local legal requirements);
- Social (e.g., recreational, public support, cultural, historic);
- Technical (e.g., siting issues, public safety and structural integrity);
- Financial (e.g., project financing including site costs, cost sharing and repayment, and operating, maintenance and rehabilitation costs);
- Economic (e.g., project benefit/cost analysis);
- Land use (e.g., ownership, comprehensive plans, coordination);
- Environmental (e.g., impacts on streamflows, fisheries, wildlife, wetlands, habitat, biological diversity, water quality and opportunities for mitigation);
- Other (e.g., direct and indirect impacts).

For existing storage projects within the watershed, planning groups should evaluate storage capacities; authorized purposes, and operational practices to determine if management adjustments could help meet any unmet needs/demands.

Planning groups should consider the enhancement of watershed storage capacity through natural processes using non-structural means. These non-structural means include maintaining forested and riparian areas, protecting or restoring floodplain functions, preserving wetlands, and restoring upland meadows. (Refer to IWRS Actions 10B and 11A for more information).

#### (c) Water Right Transfers & Rotation Agreements

Water right transfers are available for certificated water rights and allow the water right holder to change the point of diversion, place of use, or type of use. The state provides options for permanent transfers, temporary transfers, and instream leases. Transfers can be used to move water to where it is needed, or to provide mitigation water for new consumptive uses of water. One of the basic tenets of a water right transfer is ensuring that other instream or out-of-stream uses are not injured as a result of the changes to the use. Whether a transfer or a lease, the change will not be authorized if other instream or out-of-stream water right holders are injured as a result of the change.

In addition to transfers, there are a number of other innovative management methods that can provide some flexibility and alternatives. For example, water users with existing water rights can enter into signed agreements to rotate use of the water and make the most economical use of a limited supply. Other examples of permanent and temporary options include dry year options, and forbearance agreements.

#### (d) Non-Traditional Water Supply Techniques

Planning groups should consider recycled or reclaimed water projects as a water management strategy. Some Oregon communities have installed purple pipe as a means to use reclaimed water for golf courses or other greenways. Such a system requires a parallel system of infrastructure, alongside traditional wastewater and stormwater pipes. The ability to use reclaimed water for non-potable uses means that large amounts of water can by-pass the treatment facility and process, usually reserved for potable water supplies. (Refer to IWRS Action 10C for more information).

Desalination provides an avenue for communities to address water scarcity by treating brackish groundwater or saltwater. As climate change impacts local water supplies communities may wish to undertake desalination projects to meet their water needs. Such projects would need to seek approval through existing water quality permitting and water right allocation pathways, and where appropriate, identify policy gaps that create barriers to desalination implementation. The identification of these barriers would allow the state to pursue policy changes if needed so that desalination can occur where appropriate, without jeopardizing existing water rights, identified beneficial uses, or imperiled species.

### (e). Infrastructure

Oregon's water infrastructure needs are many and growing. As water and wastewater systems age, maintenance becomes a greater need for many Oregon communities. Many of the conveyance structures, dams, and other infrastructure in Oregon are more than 100 years old and in need of repair or replacement. As communities grow and technologies improve, the need for new, safe infrastructure continues to grow as well. The need for new infrastructure often brings an increased demand for energy. Some wastewater treatment facilities in Oregon have already made successful gains in trimming energy use with new pumps, drives, motors, and other energy efficient equipment. Developing regional partnerships with other water providers can be a key component to a successful infrastructure program.

Planning groups should consider taking stock of water-related infrastructure in the community to determine whether maintenance or upgrades are necessary, and whether plans are in place to save for and invest in maintenance of infrastructure. For dams and levees within the planning area, a thorough structural review should be undertaken to assess the integrity of the infrastructure for earthquakes and large flood events. In addition, the planning group may want to evaluate whether storage capacity has been reduced, by sedimentation for example, or by state's direction for public safety reasons. (Refer to IWRS Action 7A and 7B for more information).

### (f). Watershed & Habitat Restoration

Planning groups will need to consider actions to improve and maintain the ecological health of their community. Watershed restoration efforts have been occurring throughout Oregon for many years, with the objective of improving habitat and riparian areas to healthy conditions to support fish, wildlife, and a variety of ecosystem services.

Oregon's Integrated Water Resources Strategy recommends building upon existing ecological planning and restoration efforts, and largely draws upon the Oregon Plan for Salmon and Watersheds and the Oregon Conservation Strategy. In particular, removing fish passage barriers and screening diversions are key actions for protecting and restoring instream habitat and habitat access for fish and wildlife.

**Improving Ecosystem Health**  
The Integrated Water Resources Strategy contains four recommended actions to improve or maintain the health of Oregon's ecosystems: improve watershed health, resiliency, and capacity for natural storage; develop additional instream protections, prevent and eradicate invasive species, and protect and restore instream habitat and habitat access for fish and wildlife. Planning groups can look to the IWRS for potential tools to consider including in a place-based plan.

Oregon's network of watershed councils, soil and water conservation districts, and non-profit conservation organizations are at the forefront of on-the-ground restoration projects. Planning groups should consider building upon the expertise and strategic action plans of local organizations, such as these.

### (g). Instream Flow Protections

The protection and maintenance of instream flows are necessary to support ecosystem health. Oregon's policy on instream flow protection recognizes that benefits are provided by water remaining where it naturally occurs.

Protecting streamflows that are needed to support public uses is a high priority for the state. The long-term goal of the state's policy is to establish an instream water right on every stream, river and lake that can provide significant public benefits. Where streamflows have been depleted to the point that public uses have been impaired, methods to restore the flows should be developed and implemented. These activities must be consistent with the preservation of existing rights, priority dates, and with the principle that all of the waters within the state belong to the public to be used beneficially without waste.

Many watersheds throughout the state contain protections for instream flows through instream water rights, permit conditions, by-pass conditions, scenic waterway designations, and biological opinions. There are a number of tools available to meet instream flows, including streamflow measurement and management, transferring senior water rights instream, instream leases, and regulation for senior instream water rights. Streamflow restoration projects should seek cooperation and coordination between instream water interests and out-of-stream water users. The Water Resources Department and the Department of Fish and Wildlife have jointly identified priority areas for streamflow restoration throughout the state.

A place-based plan should identify opportunities for meeting instream flow needs. If instream flow requirements do not exist for a particular stream, river, or lake within the planning area, or if conflicting federal or state targets exist, the planning group may want to consult and seek recommendations from the Oregon Department of Fish and Wildlife on how to proceed in determining the appropriate instream flow. (Refer to IWRS Action 11B for more information on instream protections).

#### (h). Water Quality Protections

The Integrated Water Resources Strategy contains recommended actions to improve and protect water quality by keeping Oregon's water safe for many uses, such as drinking water, healthy ecosystems, aquatic life, agriculture, and industry.

Some of the state's water quality priorities are set forth in water quality management plans (e.g., SB1010 plans, Forest Practices Act, TMDLs and associated implementation plans) and groundwater protection plans. Ultimately, a place-based plan should identify opportunities for protecting and improving water quality in the planning area. This could be through the implementation of existing plans, undertaking recommended actions in basin assessments, or developing new tools and collaborative strategies among community partners. Planning groups should consider potential pollutant sources and solutions, such as, stormwater impacts and the use of low impact development, septic system issues and community outreach and assistance, toxic issues and pharmaceutical take back programs. Below are two examples from the Integrated Water Resources Strategy that demonstrate how to protect and improve water quality and public health:

**Drinking Water.** Planning groups should identify actions to address drinking water quality needs by considering collaborative protection strategies, and various treatment technologies. Drinking water protection should focus on both large municipal systems, as well as community or individual drinking water systems.

**Toxics and Other Pollutants.** The IWRS recommends a number of ways to reduce toxics and other pollutants. Oregon DEQ has developed strategies to reduce toxics, many of which are implemented at the local or community level. Planning groups should evaluate what strategies are in place within their community, such as the promotion of pesticide collection events, pharmaceutical take-back programs, the use of integrated pest management techniques, or raising public awareness. This should include nutrients reduction and other actions to reduce cyanotoxins in fresh and marine waters.

#### (i). Monitoring

Expanding monitoring efforts to better understand water quantity, water quality, or ecological issues and the effectiveness of our actions is a key recommendation of the 2012 IWRS. Planning groups may need to install measurement or monitoring as part of plan development, or may recommend increasing monitoring efforts as a management tool. Place-based planning efforts could help identify additional data needs, which can include monitoring and evaluating streamflow (e.g. adding real-time capabilities), groundwater levels, water quality, habitat conditions, and watershed functions. Several monitoring priorities are identified in the 2012 IWRS.



Development of new data or monitoring tools should be compatible with and available to partners, including state agencies. The Oregon Department of Environmental Quality has resources available for local entities that are monitoring water quality conditions within their watershed, including directions for quality assurance, sampling, and analysis. The place-based plan should include a description of any current or proposed monitoring activities occurring in the watershed. Refer to Appendix C for monitoring standards and other related resources.

## Plan Adoption & Implementation

On occasion, the planning group may be asked to present to the Water Resources Commission, providing updates and feedback on these pilot guidelines, as well as providing the Commission an opportunity to offer recommendations and general input.

A place-based plan should be completed within a reasonable time frame. For the purposes of piloting these guidelines, plans are expected to be completed within three years of initiating the planning process. The state recognizes, however, that communities are at different stages of planning; some communities have already initiated discussions, collected data, or conducted assessments, whereas others are in the very early stages of organizing themselves. For these reasons, it is important to keep state agencies informed throughout the planning process to adjust completion timeframes, if needed.

Planning group members should formally approve their plan. Individual planning members should seek an affirmative vote from their respective governing board or commissions to confirm any funding or political commitments made by planning group. It may be worthwhile for the place-based integrated water resources plan to be appended to a local jurisdiction's comprehensive land-use plan. This will largely depend on the recommendations contained in the place-based plan and those involved in its development.

Implementation of a place-based plan will likely involve various partners and result in a suite of projects and/or long-term programs. Some projects may need additional analyses (i.e., feasibility studies) that are beyond the scope of a place-based plan. It is very likely that permits or some type of state or federal approval will be needed for certain projects, as well as funding, likely from multiple sources. Planning groups may need to develop a more detailed implementation strategy or workplan to ensure that all of the hard work of creating the community's integrated water resource plan is carried out by various public and private partners.

### **Policy Question:**

Should the Water Resources Commission formally recognize a completed place-based plan? This could come in the form of a general approval of the final plan, with the Department reviewing the plan on its merits of adhering to these guidelines, and offering a staff recommendation to the Commission.

## Appendix A: Guiding Principles from Oregon's Statewide Strategy

### Accountable and Enforceable Actions

Ensure that actions comply with existing water laws and policies. Actions should include better measurement and enforcement tools to ensure desired results.

### Balance

The place-based strategy must balance current and future instream and out-of-stream needs supplied by all water systems (above ground and below ground). Actions should consider and balance tradeoffs between ecosystem benefits and traditional management of water supplies.

### Collaboration

Support formation of regional, coordinated, and collaborative partnerships that include representatives of all levels of government, private and non-profit sectors, tribes, stakeholders, and the public. Collaborate in ways that help agencies cut across silos.

### Conflict Resolution

Be cognizant of and work to address longstanding conflicts.

### Facilitation by the State

The State should provide direction and maintain authority for local planning and implementation. Where appropriate, the State sets the framework, provides tools, and defines the direction.

### Incentives

Where appropriate, utilize incentive-based approaches. These could be funding, technical assistance, partnerships / shared resources, regulatory flexibility, or other incentives.

### Implementation

Actions should empower Oregonians to implement local solutions; recognize regional differences, while supporting the statewide strategy and resources. Take into account the success of existing plans, tools, data, and programs; do not lose commonsense approach; develop actions that are measurable, attainable, and effective.

### Interconnection/Integration

Recognize that many actions (e.g. land-use actions) in some way affect water resources (quality and/or quantity); recognize the relationship between water quantity and water quality; integrate participation of agencies and parties.

### Public Process

Employ an open, transparent process that fosters public participation and supports social equity, fairness, and environmental justice. Advocate for all Oregonians.

### Reasonable Cost

Weigh the cost of an approach with its benefits to determine whether one approach is better than another, or whether an approach is worth pursuing at all. Actions should focus on reducing the costs of delivering services to the state's residents, without neglecting social and environmental costs.

### Science-Based, Flexible Approaches

Base decisions on best available science and local input. Employ an iterative process that includes "lessons learned" from the previous round. Establish a policy framework that is flexible. Build in mechanisms that allow for learning, adaptation, and innovative ideas or approaches.

### Streamlining

Streamline processes without circumventing the law or cutting corners. Avoid recommendations that are overly complicated, legalistic, or administrative.

### Sustainability

Ensure that actions sustain water resources by balancing the needs of Oregon's environment, economy, and communities.

## Appendix B: The Convener's Role & Responsibilities

The following information contains excerpts from the Policy Consensus Initiative's document titled, "The Role of a Convener." For the full version or to find more information or resources visit:

[http://www.policyconsensus.org/publicsolutions/ps\\_6.html](http://www.policyconsensus.org/publicsolutions/ps_6.html)

### The Convener

A convener is a person—typically a well-known public leader with credibility and stature—who brings a diverse group of people together to resolve a problem collaboratively. Experience over the past 25 years has demonstrated that conveners are often essential to achieving successful outcomes in collaborative processes, especially when the solutions reached require action by multiple sectors and levels of government.

Conveners get people involved in finding effective solutions together; they do not seek to impose their own solutions. Experience has shown that elected officials and other respected civic leaders can be very effective as conveners or co-conveners of collaborative processes, so long as they act in impartial ways. By virtue of their office, elected leaders have the power to convene people from a variety of sectors to work on public problems. Other respected leaders, by virtue of the credibility and social capital they have built in their communities, regions, or states, also have the power to convene. When leaders serve as conveners or co-conveners of collaborative processes, the outcomes of these processes are more likely to receive support and to be formally adopted and implemented.

### Selecting a Convener

The process for selecting a convener needs to be transparent, so that the parties and the public understand who made the selection. During the assessment, the parties should be asked who would make a good convener. The purpose of the question is not to have the parties choose the convener, but rather to understand their perceptions about the kind of person who is needed to gain the cooperation of all interests in working toward a solution.

The most important criteria for selecting a convener is that the person be highly respected and statesmanlike—someone with a reputation for serving the public interest, with no particular axe to grind or perspective to push on the issue at hand. Sometimes people will come to the table primarily because of the convener's status—because the stature of the convener makes them feel they are doing something important and worthwhile.

### Best Practices for a Convener

To be effective, conveners should abide by the following key guidelines:

#### 1. *Be inclusive.*

Conveners should be sure that a wide variety of people from different perspectives are involved. They should welcome participants from all interests—not just those with obvious interests, but also those with the economic, political, or technical resources that will help make for successful outcomes.

#### 2. *Establish a neutral meeting place.*

When the issue is complex and divisive, the convener must establish an impartial process and a safe space for people to open up about their beliefs and opinions. It is often helpful to get assistance from an experienced facilitator to plan and conduct the process.

3. *Be impartial to the solution.*

Participants must believe that the convener is not predisposed to one side or another and is trying to find a solution that all sides can embrace. The convener may need to work in a bipartisan fashion with a co-convener from the other side of the aisle, to ensure the perception of impartiality.

4. *Direct, rather than dominate, the discussions.*

The convener must enable people to talk with each other, rather than talking only to the convener. It is often useful for someone else to facilitate the discussions so the convener can listen and ask questions. Besides, conveners will rarely have time to run all of the meetings.

5. *Frame the meeting and the issue.*

The convener must establish a purpose for each meeting and help to ensure that the issue is framed in a way that enables all people to work together productively. Defining and naming the issue jointly can ensure that everyone is willing to contribute to the solution.

6. *Keep people moving and working together.*

The convener should provide feedback to the group on their progress. Where institutional impediments or red tape crop up, the convener should consider using his or her own capabilities to overcome them.

7. *Demonstrate ongoing visible commitment.*

The convener can help keep participants at the table by demonstrating that they care about the progress the group is making. Even if the convener cannot be present at every meeting, he or she should send signals demonstrating on-going interest.

8. *Make sure there is an outcome.*

The convener can help a group get to closure by establishing timetables for the process and reminding people of those timetables. The best outcome involves written agreements that spell out an action and implementation plan, including specifying different people's responsibilities.

## Appendix C: Technical Resources & Publications

This appendix is a starting point for planning groups looking for pertinent data and information, technical reports, statewide or regional plans and assessments, and agency contacts.

### Public Process, Meetings

*Oregon's Public Meeting Laws – Reference Guide (2010)*

<http://www.open-oregon.com/wp-content/uploads/2010/06/publicMEETINGSreader.pdf>

*Oregon Attorney General's Public Records and Meetings Manual (2011)*

[http://www.doj.state.or.us/pdf/public\\_records\\_and\\_meetings\\_manual.pdf](http://www.doj.state.or.us/pdf/public_records_and_meetings_manual.pdf)

*Policy Consensus Initiative's Resources for Leaders and Conveners*

[http://www.policyconsensus.org/publicsolutions/ps\\_6.html](http://www.policyconsensus.org/publicsolutions/ps_6.html)

### Water Quantity Data

*Near Real-Time Streamflow Data*

[http://apps.wrd.state.or.us/apps/sw/hydro\\_near\\_real\\_time/](http://apps.wrd.state.or.us/apps/sw/hydro_near_real_time/)

*Historical Streamflow and Lake Level Data*

[http://apps.wrd.state.or.us/apps/sw/hydro\\_report/](http://apps.wrd.state.or.us/apps/sw/hydro_report/)

*Monthly Water Use Data*

[http://www.oregon.gov/owrd/pages/wr/water\\_use\\_report.aspx](http://www.oregon.gov/owrd/pages/wr/water_use_report.aspx)

*Groundwater Level Data*

[http://www.oregon.gov/owrd/pages/gw/well\\_data.aspx](http://www.oregon.gov/owrd/pages/gw/well_data.aspx)

*Groundwater Studies and Publications*

[http://www.oregon.gov/owrd/pages/gw/gw\\_pubs.aspx](http://www.oregon.gov/owrd/pages/gw/gw_pubs.aspx)

*Critical Groundwater Areas (Map)*

[http://www.oregon.gov/owrd/pages/gw/gw\\_critical\\_allocations.aspx](http://www.oregon.gov/owrd/pages/gw/gw_critical_allocations.aspx)

*Water Availability Database*

*OWRD's model for estimating water availability can provide useful information on whether any new water is available during different months of the year to support future uses.*

[http://apps.wrd.state.or.us/apps/wars/wars\\_display\\_wa\\_tables/MainMenu1.aspx](http://apps.wrd.state.or.us/apps/wars/wars_display_wa_tables/MainMenu1.aspx)

*Water Rights Database*

<http://www.oregon.gov/owrd/pages/WR/wris.aspx>

*Water Rights (GIS themes)*

<http://www.oregon.gov/owrd/Pages/maps/index.aspx>

### Water Quality Data

*Wastewater Permits Database*

<http://www.deq.state.or.us/wq/sisdata/sisdata.asp>

*Water Quality Monitoring Data*

<http://deq12.deq.state.or.us/lasar2/>

The Oregon Water Quality Index  
<http://www.deq.state.or.us/lab/wqm/wqimain.htm>

Impaired Water Bodies  
<http://www.deq.state.or.us/wq/assessment/assessment.htm>

Designated Beneficial Uses (Water Quality)  
<http://www.deq.state.or.us/wq/standards/uses.htm>

Groundwater Management Areas (Water Quality)  
<http://www.deq.state.or.us/wq/groundwater/gwmas.htm>

## Ecological Data

*Fish Distribution Data*  
<https://nrimp.dfw.state.or.us/nrimp/default.aspx?pn=fishdistdata>

*State Species Sensitive List*  
[http://www.dfw.state.or.us/wildlife/diversity/species/sensitive\\_species.asp](http://www.dfw.state.or.us/wildlife/diversity/species/sensitive_species.asp)

*Streamflow Restoration Priority Areas (Maps)*  
<https://nrimp.dfw.state.or.us/nrimp/default.aspx?pn=streamflowmaps>

*Instream Water Rights in Oregon (Map)*  
[http://filepickup.wrd.state.or.us/files/Publications/Place\\_Based\\_IWRS/ISWR\\_SWW\\_Map.JPG](http://filepickup.wrd.state.or.us/files/Publications/Place_Based_IWRS/ISWR_SWW_Map.JPG)

*ODFW's Compass Tool*  
*Online mapping that showing the passage barriers and status*  
<https://nrimp.dfw.state.or.us/compass/>

*2013 Statewide Fish Passage Priority List*  
<http://www.dfw.state.or.us/fish/passage/>

*Fish Screening Information*  
<http://www.dfw.state.or.us/fish/screening/index.asp>

*DSL's Technical Resources for Wetlands*  
[http://www.oregon.gov/dsl/WETLAND/Pages/technical\\_resources.aspx](http://www.oregon.gov/dsl/WETLAND/Pages/technical_resources.aspx)

## Monitoring-Related Resources

*Measurement and Computation of Streamflow, Volumes 1 & 2: USGS Water Supply Paper 2175*  
<http://pubs.usgs.gov/wsp/wsp2175/>

*Stage Measurement at Gaging Stations (2010)*  
<http://pubs.usgs.gov/tm/tm3-a7/>

*Discharge Measurements at Gaging Stations (2010)*  
<http://pubs.usgs.gov/tm/tm3-a8/>

*Volunteer Water Quality Monitoring Resources*  
<http://www.deq.state.or.us/lab/wqm/volmonresources.htm>

## Climate Change Resources

*IPCC Fifth Assessment Report (2013)*  
<http://www.ipcc.ch/report/ar5/>

*Northwest Climate Assessment Report (2013)*  
<http://occri.net/wp-content/uploads/2013/11/ClimateChangeInTheNorthwest.pdf>

*Oregon's Climate and Health Profile (2014)*  
<https://public.health.oregon.gov/HealthyEnvironments/climatechange/Pages/Climate-and-Health-Profile.aspx>

DLCD's Website: Planning for Climate Change  
<http://www.oregon.gov/LCD/CLIMATECHANGE/Pages/index.aspx>

## Natural Stressors: Drought, Floods, Earthquakes etc.

*AWRA's Proactive Flood and Drought Management Applied Strategies (2013)*  
[http://www.awra.org/news/AWRA\\_report\\_proactive\\_flood\\_drought\\_final.pdf](http://www.awra.org/news/AWRA_report_proactive_flood_drought_final.pdf)

*Oregon Resilience Plan (2013)*  
[http://www.oregon.gov/OMD/OEM/osspace/docs/Oregon\\_Resilience\\_Plan\\_Final.pdf](http://www.oregon.gov/OMD/OEM/osspace/docs/Oregon_Resilience_Plan_Final.pdf)

*Oregon's Natural Hazard Mitigation Plan*  
*Local plans, developed by cities and counties, may also be useful in understanding past hazard events in a community.*  
<http://www.oregon.gov/LCD/HAZ/pages/NHMP.aspx>

*Oregon Hazards Explorer*  
<http://oregonexplorer.info/hazards>

## Infrastructure

*OWRD's Dam Inventory*  
[http://apps.wrd.state.or.us/apps/misc/dam\\_inventory/default.aspx](http://apps.wrd.state.or.us/apps/misc/dam_inventory/default.aspx)

*Oregon Association of Clean Water Agencies*  
<http://www.oracwa.org/c-energy.html>

*U.S. Army Corps of Engineers National Inventory of Dams*  
<http://geo.usace.army.mil/pgis/f?p=397:12>

## Statewide or Regional Plans & Assessments

*Oregon's Integrated Water Resources Strategy*  
[http://www.oregon.gov/OWRD/pages/law/integrated\\_water\\_supply\\_strategy.aspx](http://www.oregon.gov/OWRD/pages/law/integrated_water_supply_strategy.aspx)

*Oregon Conservation Strategy*  
[http://www.dfw.state.or.us/conservationstrategy/read\\_the\\_strategy.asp](http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)

*Oregon Plan for Salmon and Watersheds*  
<http://www.oregon.gov/OPSW/pages/index.aspx>

*Appendix C: Technical Resources & Publications (continued)*

*TMDLs in Oregon*

*This site contains links to Total Maximum Daily Load and Water Quality Management Plan documents prepared for water bodies in Oregon designated as water quality limited on the 303(d) list.*

<http://www.deq.state.or.us/wq/tmdls/tmdls.htm>

*Agricultural Water Quality Management Plans (SB 1010)*

<http://geo.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=e48e9d32e854458a8079b10852c3100b>

*DEQ Basin Assessments*

*Basin assessments have been completed for the North Coast, Deschutes, Rogue, and Powder River Basins.*

<http://www.deq.state.or.us/wq/watershed/watershed.htm>

*OWRD Basin Programs*

*Some stream systems are only classified for certain uses during certain times of the year. These classifications are used, in conjunction with other laws or rules, to determine whether the state can allow new uses of water. Basin programs exist for most of the state's major drainage basins, and are described in Oregon Administrative Rules Chapter 690, Division 500 – 520.*

*North Coast Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_501.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_501.html)

*Willamette Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_502.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_502.html)

*Sandy Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_503.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_503.html)

*Hood River*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_504.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_504.html)

*Deschutes*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_505.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_505.html)

*John Day Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_506.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_506.html)

*Umatilla Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_507.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_507.html)

*Grande Ronde*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_508.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_508.html)

*Powder River Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_509.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_509.html)

*Malheur Lake Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_510.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_510.html)

*Owyhee Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_511.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_511.html)

*Malheur Lake Basin (Provision)*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_512.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_512.html)

*Goose and Summer Lakes Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_513.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_513.html)

*Rogue Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_515.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_515.html)



## Appendix C: Technical Resources & Publications (continued)

### *Umpqua Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_516.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_516.html)

### *South Coast*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_517.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_517.html)

### *Mid-Coast*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_518.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_518.html)

### *Columbia River Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_519.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_519.html)

### *Middle Snake River Basin*

[http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_690/690\\_520.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_520.html)

## Contacts

### *Integrated Water Resources Staff Contacts*

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#### *Oregon Department of Agriculture*

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### *Watershed Councils*

[http://www.oregon.gov/OWEB/GRANTS/docs/councilcapacity/June\\_2014\\_Map\\_Watershed\\_Councils.pdf](http://www.oregon.gov/OWEB/GRANTS/docs/councilcapacity/June_2014_Map_Watershed_Councils.pdf)

### *Soil and Water Conservation Districts*

<http://geo.maps.arcgis.com/apps/Viewer/index.html?appid=9cee1a8b865140d5b71253975fb7fe6d>

### *DEQ's Basin Coordinators*

<http://www.deq.state.or.us/wq/tmdls/docs/basincoordinators.pdf>

### *Watermasters in Oregon*

[http://www.oregon.gov/owrd/pages/offices.aspx#Region/Watermaster\\_Map](http://www.oregon.gov/owrd/pages/offices.aspx#Region/Watermaster_Map)

### *ODFW Field Offices*

[http://www.dfw.state.or.us/agency/directory/map\\_district\\_offices.asp](http://www.dfw.state.or.us/agency/directory/map_district_offices.asp)

## Funding

### *SB1069 Feasibility Grants (OWRD)*

[http://www.oregon.gov/owrd/Pages/LAW/conservation\\_reuse\\_storage\\_grant\\_program.aspx](http://www.oregon.gov/owrd/Pages/LAW/conservation_reuse_storage_grant_program.aspx)

### *Water Supply Development Grants (OWRD)*

[link coming soon!]

*Appendix C: Technical Resources & Publications (continued)*

*Section 319 Grants (DEQ)*

<http://www.oregon.gov/deq/WQ/Pages/nps319.aspx>

*Infrastructure Financing Programs (IFA)*

<http://www.orinfrastructure.org/Infrastructure-Programs/>

*Habitat Restoration (OWEB)*

[http://www.oregon.gov/OWEB/GRANTS/pages/grant\\_faq.aspx](http://www.oregon.gov/OWEB/GRANTS/pages/grant_faq.aspx)

*Oregon Water and Wastewater Funding Guide (Rural Community Assistance Corporation, April 2014)*

[http://www.rcac.org/assets/Oregon/RCAC%20Oregon%20Guide%20April%202014\\_FINAL.pdf](http://www.rcac.org/assets/Oregon/RCAC%20Oregon%20Guide%20April%202014_FINAL.pdf)

draft

## Appendix D: Quick Guide for Place-Based Planning

*The quick guide is not a comprehensive list of all planning elements, but provides suggestions for general topic and key elements to consider while developing a place-based plan.*

### Planning Element #1: Building a Collaborative & Integrated Process

Place-based planning is intended to foster collaboration, bringing together various sectors and interests to work toward the common purpose of maintaining healthy water resources to meet the needs of the community and the environment. This phase of the process is intended to ensure a balanced representation of interests and a meaningful process for public involvement.

#### Identify the interest to undertake place-based planning

- Adher to basin fundamentals; 2012 IWRS Guiding Principles

#### Define the Planning Scale

- Establish the geographic planning scale
- Correspond with the state's existing basins; may focus on smaller areas
- Seek agency advice and determine participation

#### Identify State Agency Partners

- Technical contacts
- Guidance
- Support

#### Select a Convener

- Elected official or of similar stature
- Understand roles/responsibilities (refer to Appendix B)
- Notify OWRD of intention to develop a place-based IWRS

#### Involve Diverse Interests

- A balance of interests from different sectors
- Include all persons potential affected

#### Build the Public Process & Consensus Decision Making

- Must be an inclusive and transparent process
- Develop communication strategy
- Follow Public Meetings law

## Planning Element #2: Characterize Water Resources, Water Quality, & Ecological Issues

In this step, water resources, economic, social and ecological information for the planning area is collected, assessed, and summarized; utilizing existing plans, assessments and other data. The planning group studies the resource data and clearly defines existing conditions to determine challenges, including data gaps. This step is crucial in developing a clear understanding of the community's water challenges and needs.

### Communities and Economy

- Economic, social, landscape characteristics
- Cultural attributes
- Unique features

### Physical Characteristics of Water Resources

- Major rivers
- Tributaries
- Reservoirs
- Aquifers
- Water conveyance systems
- Upland conditions
- Water source (rain, snow or spring fed systems)

### Surface and Groundwater Quality and Quantity

- Availability
- Existing protections
- OWRD basin programs
- Beneficial uses (water quality)
- Impaired water bodies
- Groundwater management areas
- Total maximum daily loads
- Permitted discharges

### Ecological Health of the Watershed

- Key species & habitats
- Historical and current fish species
- Sensitive, threatened and endangered species
- Limiting factors

### Planning Element #3: Define Existing and Future Water Needs/Demands

The purpose of this planning element is to identify how much water is needed to support current and futures uses of water, to examine where water supplies do not meet instream or out-of-stream needs / demands, and where they are likely to fall short in the future. Place-based plans should encompass water quantity, water quality, and ecosystem needs, identifying the community's water opportunities, problems, shared concerns, or perceived threats.

#### Current Water Use

- Existing water uses/water rights (surface and groundwater)
- Source of water (surface water, groundwater, storage, recycled water, treated effluent, etc).

#### Existing Instream Needs

- Instream water right flows
- Scenic waterway flows
- Fish and wildlife
- Water quality
- Aesthetics

#### Existing Out-of-Stream Needs

- Irrigated agriculture and other agricultural uses
- Municipal uses
- Industrial uses
- Domestic uses

#### Analyze and Account for Coming Pressures

- Energy development
- Climate change
- Drought, floods, and other natural stressors
- Infrastructure
- Population growth

#### Planning Element #4: Define Integrated Solutions for Meeting Long-Term Water Needs

This step is to develop the plan for meeting a community's instream and out-of-stream water needs, today and into the future by solving identified problems, taking advantage of opportunities, and meeting the social, economic, and environmental needs of the community. Considering the diversity of water challenges, planning groups will likely need to consider a suite of tools or alternatives to meet unmet needs/demands and should integrate existing plans.

##### Water-Use Efficiency & Conservation

- Allocation of conserved water program
- Infrastructure upgrades
- Household level conservation programs

##### Water Storage - Built & Natural

- Capacity & operations
- Above & Below
- Natural storage (forests, floodplains, wetlands, snowpack )

##### Water Right Transfers & Rotation Agreements

- Permanent transfers
- Temporary transfers
- Instream leases
- Rotation agreements among water users

##### Non-Traditional Water Supply Techniques

- Recycled or reclaimed water projects
- Gray water
- Desalination

##### Infrastructure

- Aging or outdated
- Storage capacities
- Regional partnerships
- Energy demands

##### Watershed & Habitat Restoration

- Ecological health
- Existing plans/efforts
- Fish passage barriers/screening

##### Instream Flow Protections

- Instream water rights
- Streamflow restoration priorities
- Measurement

##### Water Quality Protections

- Pollution reduction strategies
- Nonpoint source projects
- Source water protection
- Nutrients reduction
- Education and outreach

##### Monitoring

- Measurement (streamflows/water use)
- Effectiveness
- Quality assurance
- Shared information