Policy Option Package #101: Place-Based Planning Community Support

Purpose: Water is the foundation for our quality of life, economies, and ecosystems. Oregon communities need to plan for how they will meet their instream and out-of-stream water needs in the midst of limited supply and a changing climate. In most parts of the state, surface water is fully allocated in summer months. Similarly, across the state, aquifers are becoming fully appropriated. In order to sustain current and future economic growth, while supporting environmental health, communities must consider how they will meet their water needs now and into the future. Place-based integrated water resources planning is a voluntary, locally initiated and led effort in which a balanced representation of water interests within a hydro-geographic area (e.g., basin, watershed or groundwater area) work in partnership with the state to characterize current water resources and issues; understand current and future instream and out-of-stream water needs and demands; and identify solutions to address water needs. Undertaking place-based integrated water resources planning supports Recommended Action 9.A of the Integrated Water Resources Strategy.

In 2015, the Oregon Legislature passed SB 266 authorizing the State to pilot place-based integrated water resources planning to partner with communities to understand and meet their water resources needs. The Department also received \$750,000 to help communities pilot the approach. In 2016, the Oregon Water Resources Commission awarded four grants to four basins: Upper Grande Ronde, Lower John Day, Malheur Lake, and the Mid-Coast. The primary purpose of this package is to support four existing place-based planning areas and to evaluate the place-based planning approach to water planning.

Since 2016, each of the four planning groups has diligently worked in partnership with the Department to develop a place-based integrated water resources plan through a five-step planning process. Each of the places have crafted governance agreements that outline how diverse partners work together, increased awareness of water issues within and beyond their communities, compiled and synthesized water-related data from state and federal agencies, and created a venue to share local knowledge. Both the Department and the four planning groups agree that it will take additional time and resources to develop place-based plans and work to implement them. Therefore, the Department is seeking additional funding to support the four places and seeking legislation to extend the sunset of Senate Bill 266 (2015) from 2019 to 2023.

Collaborative planning takes time, but can yield benefits in the form of reduced conflict over water resources and greater capacity to implement projects that will help address instream and out-of-stream needs. Other basins in Oregon are interested in conducting place-based planning. Before establishing place-based planning as a permanent program, there is a need to evaluate the place-based planning approach, determine if it or other types of planning are best for Oregon, and to decide how to proceed with helping communities plan for their water future. This package, therefore presents a way to evaluate place-based planning and conduct a planning needs assessment in order to determine how best the State of Oregon can partner with communities in water planning.

How Achieved: In meeting with stakeholders, there was strong support for providing financial and technical assistance to the four planning groups to help them complete their plans and work on implementation. There was also an interest in evaluating the place-based approach to water planning and assessing planning needs before determining whether to make the program permanent. As a result, the Department is proposing legislation to extend Senate Bill 266 through June 30, 2023, as well as proposing this funding package to provide assistance to the four planning groups and to evaluate the program.

In order for planning groups to successfully finish planning and transition to plan implementation, it is essential for the State to provide technical assistance to help the pilots fill critical data gaps about their water resources and demands, as well as financial assistance to sustain facilitation and project coordination support. OWRD is requesting \$650,000 to support the four planning groups. The portion of funds provided to each planning group will be determined based on need and how far along the group is in the planning process. Funds will be used by the Department and the planning groups for technical work, data, trainings, facilitation, coordination, group gatherings, and other support necessary to sustain a multi-interest collaborative process. After the plan is adopted, the Department proposes to provide staff resources and cost-match funds for coordination and facilitation to shift the group from planning towards working on implementation for one to two years.

In addition to the funding, this package proposes to make permanent a full time planning coordinator position that has been critical to supporting the planning groups, and will continue to be needed as they develop a plan and shift to implementation. The position will also help facilitate the evaluation of the program, including implementing any recommendations of the evaluation. In addition to place-based planning, planning coordinators also often provide other coordination or support to basins undertaking other types of water-related planning.

An evaluation of the place-based planning approach will allow the Department to incorporate the experiences of the four planning groups into the program design of place-based planning. The independent evaluation would identify that lessons learned, successes, potential improvements, as well as how the State should partner in water planning. As part of this, the evaluation will also include an inventory of completed, ongoing, and expected water planning efforts in order to bettter identify the need for State investment in water planning. Likewise an assessment of interest in place-based and other water planning will help the Department identify those basins interested in planning and their readiness. Such as assessment will also help basins identify what federal, state, local, or private resources are available for their water planning. Requested funds for the evaluation and the planning needs assessment is \$100,000.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|----------------|----------------------|------|--------|------|-----------|-----------|
| 9919001 | C8504 AP | Nat Res Spec 4 | Planning Coordinator | PF | 21 | 0.88 | \$229,950 | \$259,654 |

Quantifying Results: The four communities piloting the approach to place-based planning have made significant investments in time and resources to move their planning efforts forward. Staff estimate that cash and in-kind match from the communities and private foundations are double the state's investment (2:1 ratio) so far. Each plan will outline the status of water resources in for the planning area, instream and out-of-stream water needs and demands, as well as solutions to meet those water needs now and into the future. The plans will then be utilized to help the community move forward on implementing the solutions, which will help them to ensure they have water necessary to sustain their economies, communities, and ecosystems. Providing funds to support the existing planning groups in 2019-2021 would result in:

- Upper Grande Ronde and Lower John Day adopting plans in mid to late 2019 and begin plan implementation. Investment in plan implementation will allow coordinated follow through on the actions identified in the plan (e.g., pursue a water supply project).
- Mid-Coast adopting a place-based plan in 2020 and begin plan implementation.
- Malheur Lake being on track to adopt a plan in 2022/2023, depending on the completion of the ongoing groundwater study in the basin.

Funding an independent evaluation of place-based planning and a water planning assessment would result in an understanding of:

- Needed improvements to the program, as well as the challenges, opportunities, strengths and weaknesses of the approach;
- How well the current place-based planning draft guidelines helped communities undertaking the place-based approach, and how the guidelines could be improved;
- How Oregon should proceed with place-based planning, and whether other types of planning is needed;
- Other planning efforts in Oregon, and the status of those efforts;
- Where water planning is needed, what kind of planning may be appropriate for basins interested in water planning, and what each needs to move forward.

Funding Source:

General Fund: \$979,950 Staffing Costs: \$229,950

Support Planning Group: \$650,000

Evaluation and Needs Assessment: \$100,000

Policy Option Package #102: Groundwater Data, Management and Protection

Purpose: This package proposes to help the Department understand and manage groundwater resources sustainably to protect existing users, while providing timely groundwater permitting reviews for potential new uses and protecting the groundwater resource to prevent loss of artesian pressure, contamination, and waste. These actions are called for in Recommended Actions 1A, 1B and 7A of the Integrated Water Resources Strategy.

Understanding the Resource: In some locations throughout the state, groundwater aquifers are no longer capable of sustaining additional development. Water managers need better groundwater information to help the Department, communities, and water users determine how to best utilize limited resources, while protecting existing and future uses. The State needs to know more about how much surface water and groundwater we have, if additional allocations can be made, and how the groundwater and surface water interact in each basin. This information is essential for communities in understanding the sustainability of current groundwater uses and their opportunities for future economic development.

The Department typically evaluates groundwater and surface water resources through cooperative, cost-share science programs with the U.S. Geological Survey (USGS), Oregon Department of Geology and Mineral Industries (DOGAMI), and other scientific partners. In general, the Department obtains this information by conducting a groundwater basin study. Basin studies can take approximately five to six years to complete and the Department currently has the capacity to conduct only one study at a time. Basin studies help define the overall groundwater budget, including groundwater recharge from surface water, groundwater discharge to surface water, and available water for new allocation. The studies develop a broad understanding of surface and groundwater systems and the results are published in peer-reviewed reports (typically USGS-published reports and DOGAMI-published geologic maps). State funds are leveraged through federal cost-match funds when partnering with these agencies (DOGAMI receives matching federal funds for qualifying geologic mapping work). Currently, the Department is working in the Greater Harney Valley and expects to complete the first phase of that study in 2020. The next priority area for a basin study is the Walla Subbasin.

Reducing Groundwater Processing Backlogs: Given the pressures of drought, increased litigation over groundwater, the limited nature of the resource, the complex nature of groundwater, and a greater interest in groundwater data and innovative management options, groundwater staff have a difficult time meeting all of the demands on their time. As a result, the Department has seen an increase in processing times for groundwater-related water rights transactions.

Protecting the Resource through Well Construction: Protecting existing water users and ensuring that groundwater is managed sustainably also requires proper well construction practices. Improper well construction can lead to serious groundwater-level declines, loss of artesian pressure, contamination of drinking water, public safety hazards, and waste. Well construction in the Columbia River Basalts, which include aquifers across a significant portion of the state (including the Willamette Valley and Columbia River Gorge), require special attention due to the complex geology and difficult construction conditions. An adequately staffed well inspection and enforcement program is critical to ensuring that wells are

constructed, maintained, and abandoned in an appropriate manner. The Department places well inspectors in the field to work with licensed well drillers and landowners that are constructing their own wells, to ensure that water supply wells are constructed in a manner that protects public health, safety, and the groundwater resource for other users. Well inspectors visit wells during construction to observe drilling procedures and practices and to see that the well meets minimum well construction standards, given the specific geologic and hydrologic conditions encountered. To be effective, well inspectors must have training in local geology and hydrogeology, and the knowledge to understand, recognize, and give direction regarding proper well construction practices for specific conditions encountered on each well.

Currently, well inspectors are funded from start card fees; however, there are insufficient funds to hire the number of inspectors that the Department is authorized to hire because of revenue shortfalls. The Department has authorization for five well inspectors, but only has resources for four, which could be further reduced by the projected increased costs of doing business. Each year, approximately 3,000 new wells are drilled; last year, the state inspected about 1,000 of them with its four well inspectors. About 11 percent of the inspected wells were found to have deficiencies or construction problems.

How Achieved: This package requests one NRS 2 Project Hydrogeologist, one NRS 4 Project Hydrogeologist, one NRS 2 hydrographer, one NRS 3 Hydrographer, and one NRS 4 Hydrologist to increase the Department's capacity to conduct an additional basin study, while also addressing some of the workload challenges in the groundwater and surface water sections; improving capacity to collect, process, and validate data; and providing resources to more timely process permit and transfer applications. This package includes both groundwater and surface water staff, as surface water data collection and analyses are necessary inputs to groundwater basin studies and having backlogs in surface water data can slow progress on groundwater studies. The request also includes one IS 6 Database Application Developer, which will be responsible for supporting development of structures for storing and querying data across the Department, with a primary focus on groundwater and surface water data. In addition to the requested increase in staffing, this package requests general fund appropriations each biennium to pay for cost-match to conduct basin studies with partners and equipment for study activities, such as the installation and maintenance of dedicated observation wells (\$100k in cost-share for DOGAMI, \$400k for Observation wells, and \$300k in cost-share for the U.S. Geological Survey). To ensure more timely processing of groundwater permit applications and other transactions, the package also includes a NRS 3 Hydrogeologist Groundwater Reviewer and one NRS 2 Water Right Application caseworker.

In regards to supporting the Well Inspection Program to prevent problems that arise from improper well construction, maintenance, or abandonment, this package includes several proposals. First, in order to stabilize the Start Card Fund, the package proposes to move one NRS 3 hydrogeologist from Start Card to General Fund. Second, given that the Well Inspection Program has no General Fund support, the package proposes to add one NRS 2 General Fund Well Inspector, which will help to prevent loss of artesian pressure, contamination, or waste by providing timely inspections of well construction, review of well logs, and education of drillers and pump installers to ensure construction standards are met. This will help provide some stability to the program by diversifying funding sources. Finally, many of the areas in the state that have seen significant groundwater level declines and other issues due to improperly constructed wells are within sensitive Columbia River Basalt (CRB) aquifer systems. The Department has issued special standards for some of these areas; however, further work and special attention is needed to ensure

proper well construction, alteration, and abandonment of water wells in these areas. As a result, the Department proposes to add one NRS 2 Well Inspector and one NRS 3 Well Construction Specialist that will specifically work on Columbia River Basalts.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|-------------------------------|----------------------------------|------|--------|--------|-------------|-------------|
| 9919002 | C0872 AP | Operations & Policy Analyst 3 | Public Engagement Coordinator | PF | 21 | 0.88 | \$187,584 | \$212,807 |
| 9919003 | C8502 AP | Natural Resource Specialist 2 | CRB Well Inspector | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919004 | C8502 AP | Natural Resource Specialist 2 | Well Inspector | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919005 | C8503 AP | Natural Resource Specialist 3 | CRB Well Construction Specialist | PF | 21 | 0.88 | \$196,819 | \$221,790 |
| 9919006 | C8502 BP | Natural Resource Specialist 2 | Project Hydrogeologist 2 | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919007 | C8503 AP | Natural Resource Specialist 3 | Project Hydrogeologist 3 | PF | 21 | 0.88 | \$202,655 | \$228,460 |
| 9919008 | C8504 AP | Natural Resource Specialist 4 | Senior Hydrogeologist 4 | PF | 21 | 0.88 | \$222,572 | \$251,220 |
| 9919009 | C8503 AP | Natural Resource Specialist 3 | Hydrogeologist 3 GW Reviewer | PF | 21 | 0.88 | \$202,651 | \$228,460 |
| 4000010 | C8503 BP | Natural Resource Specialist 3 | Hydrogeologist 3 | PF | 24 | (1.00) | \$(235,608) | (\$235,608) |
| 4000010 | C8503 BP | Natural Resource Specialist 3 | Hydrogeologist 3 | PF | 24 | 1.00 | \$235,608 | \$235,608 |
| 9919010 | C1486 AP | Info Systems Specialist 6 | Database/Application Developer | PF | 21 | 0.88 | \$196,483 | \$221,187 |
| 9919011 | C8502 AP | Natural Resource Specialist 2 | Hydrographer 2 | PF | 21 | 0.88 | \$180,304 | \$202,917 |
| 9919012 | C8503 AP | Natural Resource Specialist 3 | Hydrographer 3 | PF | 21 | 0.88 | \$196,820 | \$221,790 |
| 9919013 | C8504 AP | Natural Resource Specialist 4 | Hydrologist 4 | PF | 21 | 0.88 | \$215,531 | \$243,175 |
| 9919014 | C8502 AP | Natural Resource Specialist 2 | WR Caseworker | PF | 21 | 0.88 | \$180,305 | \$202,917 |

Quantifying Results: This package will allow the Department to conduct an additional groundwater basin study every five years. This study would be in addition to the ongoing work in the Greater Harney Valley. Information obtained through studies is used by the Department to manage the State's increasingly limited groundwater resources, and maximize the consumptive and non-consumptive uses of water in each basin. Basins that are currently a priority for future basin studies include the Umatilla and its Walla Walla subbasin, as well as the Hood, Powder, and Grande Ronde basins. This package will help reduce data and application backlogs in both the surface and groundwater sections, as it will provide adequate staff necessary to process these records in the study areas. The Department would increase the number of observation wells in the state, which would lead to increases in KPM #5 (Assess Groundwater Resources). In addition, the Department anticipates a reduction in groundwater application review and processing timelines, which are in part measured by KPMs #10 and #11, (Promote Efficiency in Water Right and Transfer Application Processing).

In regards to protecting groundwater through the well construction program, metrics would include: Are well inspectors on-site and actively observing when the seal is placed in the well? Are well inspectors available to answer driller questions and technical requests the same day the requests are made? Are there more high-quality inspections made overall? Of the wells inspected, are there fewer deficiencies / construction mistakes over time?

Funding Source:

General Fund: \$3,558,247 Staffing Costs: \$2,758,247

> Geological Mapping: \$100,000 Observation Wells: \$400,000 USGS Study Funds: \$300,000

Other Funds: (\$235,608) Start Card

Staffing Costs: (\$235,608)

Policy Option Package #103: Resolving Complex Water Issues

Purpose: As Oregon's groundwater and surface water resources become fully appropriated, the State is seeing an increased need to help communities resolve complex water management issues. These issues often involve water uses to meet a variety of needs, including economic development, community growth, agriculture, recreation, and fish and wildlife. In many basins, water management is becoming more challenging with the need to address new demands, resolve tribal water rights claims, and the listing of species under the Endangered Species Act. The Department believes that collaborative solutions yield better outcomes than litigation; however, these efforts often require significant investments of time from Department staff. In resolving these issues, the Department frequently needs to coordinate data requests from individuals working to identify water management solutions; ensure all interested parties, elected officials and the public are continuously updated on meetings and efforts; and respond to requests to clarify the Department's statutes, rules, policies and practices. These multifaceted water challenges occur in basins across the state, including the Umatilla Basin, Deschutes Basin, Klamath Basin, Malheur Lakes Basin (Harney Valley Groundwater), and the Willamette Valley. As discussions progress, it is necessary for the Department to have staff involved that can communicate the State's positions and work to find creative solutions that are amenable to all interests, while also clearly identifying proposals that are beyond the Department's existing authorities. Without the appropriate staff to focus on these complex water issues, communities can become frustrated and suspicious if they are not getting information or effective and timely input from the Department, which undermines the collaborative process and potential to work through these challenging issues.

While the Department anticipates that these positions may be able to assist in other parts of the state, the three basins of priority for this package are the Willamette, Deschutes, and Umatilla Basins. The Willamette has a mulititude of issues around the implementation of the federal reallocation of stored water in the Willamette Valley Reservoir Project to municipal/industrial, agricultural irrigation, and fish-flow needs; these include the conversion of minimum perenial streamflows to instream water rights, the state/federal nexus on stored water contracts, and protection of stored water releases. The Deschutes Basin is grappling with the need to identify solutions for groundwater mitigation, endangered species requirements, growing cities, and flows necessary to address water quality concerns. The Umatilla Basin has a long history water challenges and has been proactively looking for solutions to the areas water needs. Towards that end, efforts in the Umatilla Basin include working with the Confederated Tribes of the Umatilla Reservation and other partners in the basin on a water settlement; working with the Northeast Oregon Water Users Association and others on water supply projects; and collaborating on water supply issues with the State of Washington and addressing limited groundwater suppplies in the Walla Walla Subbasin. This package supports Recommended Action 9.C of the Integrated Water Resources Strategy.

How Achieved: The Department proposes to add three positions that would be responsible for working with parties involved in complex water management issues to assist in developing solutions. Given the number and complexity of policy issues that need to be resolved within the Willamette Basin, Deschutes Basin, and the Umatilla Basin, along with ongoing issues in other parts of the state, including the Klamath Basin, the Department has determined that at least one position per basin is needed. These positions would be responsible for providing timely and accurate

information to the public and parties to ensure transparency and build trust necessary for building consensus. These positions would also brief and advise the Director on progress made, solutions being proposed, and research and resolve policy issues. These positions would ultimately help the basin resolve problems and move forward solutions. Funding has also been included to provide contract funds to engage facilitators and experts as needed to resolve these issues.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|----------------|----------------------------|------|--------|----------|-----------|-----------|
| 9919015 | C8505 AP | Nat Res Spec 5 | Regional Basin Coordinator | PF | 21 | 0.88 FTE | \$204,003 | \$231,286 |
| 9919016 | C8505 AP | Nat Res Spec 5 | Regional Basin Coordinator | PF | 21 | 0.88 FTE | \$204,003 | \$231,286 |
| 9919017 | C8505 AP | Nat Res Spec 5 | Regional Basin Coordinator | PF | 21 | 0.88 FTE | \$204,003 | \$231,286 |

Quantifying Results: The Department would track the number of complex water management issues that the Department is engaged in and that have work underway. Progress would be identified by monitoring (1) the resolution of litigation or problems as a result of collaborative solutions, (2) the agreements or solutions developed by parties, (3) collaborative efforts that are underway, and (4) solutions that are implemented.

Revenue Source:

General Fund: \$1,362,009

Staffing Cost: \$612,009

Facilitation and Contracting: \$750,000

Policy Option Package #104: Protecting the Public through Dam Safety

Purpose: Oregon currently has 969 non-federal dams subject to Department inspection. Of these, 72 dams are currently rated as high hazard, meaning that if they were to fail, they would likely result in fatalities and damage to property downstream. The condition of high hazard dams are evaluated and ranked using four classifications (the lower the condition, the higher the potential safety risk): satisfactory, fair, poor, and unsatisfactory. Based on existing information of the Department, as of February 2018, 15 high hazard dams were in poor condition, and six were in unsatisfactory condition. Currently, the Department only has resources to conduct regular visual inspections of dams, and does not have resources to conduct more in-depth assessments of dams for safety deficiencies as called for in Recommended Action 5.5C and 7C of the Integrated Water Resources Strategy. As a result, very few high-hazard dams have had a comprehensive assessment of their safety, while our understanding of seismic and flood risks has improved in recent years. These assessments are essential to evaluating seismic, flood and structural failure risk to protect the public, particularly as dams age and populations grow below dams. These assessments can help inform the need and urgency for safety actions at dams, including specific rehabilitation needs.

How Achieved: This budget package proposes \$1 million in funding to contract for assessments of dams for earthquake, flood, and structural safety issues. Specifically, in-depth assessments of dams may require a detailed review of design information, determination of potential failure modes, and an evaluation of dam materials, foundation materials, and spillway capacity and condition. They can include an analysis of seismic risk to the structure, as well as deficiencies in the ability to pass flood flows and withstand extreme flood events. Assessments can cost \$5,000-25,000 to evaluate a dam's ability to pass flood flows, and \$100,000-200,000 to evaluate the seismic integrity of dams.

In addition to funding for in-depth assessments, the Department requests one Professional Engineer to ensure that the hazard ratings of dams are appropriate and support the dam safety program. Over time, as population grows below a dam, a low-hazard or significant hazard dam may need to be upgraded to a high hazard dam. This is because hazard ratings are based on the potential for a dam failure to result in loss of life downstream. As areas below dams are developed, the hazard rating of the dam may increase.

Staffing Impact:

| | · | | | | | | | |
|----------|---------------|-------------------------|-----------------------|------|--------|------|-----------|-----------|
| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
| 9919018 | X3149 AP | Professional Engineer 2 | Dam Safety Engineer 2 | PF | 21 | 0.88 | \$278,485 | \$314,051 |

Quantifying Results: Number of dams subject to Department inspection that: 1) have their hazard ratings updated / confirmed; 2) receive a flood flows analysis; 3) receive a seismic analysis, and 4) receive a structural analysis.

Funding Source:

General Fund: \$1,278,485

Staffing Costs: \$278,485

Contract Services for Dam Assessments: \$1,000,000

Other Fund Revenue: Dam Safety Review Fee \$46,975

Policy Option Package #105: Addressing Increasing Legal Expenses

Purpose: Under the 1909 Water Code, all water in the State belongs to the public and the Water Resources Department is responsible for allocating and distributing that water for the benefit of Oregonians. Oregon follows a system of prior appropriation, which gives priority to existing users drawing water from a stream or aquifer. The issuance of new water rights must not cause injury to existing senior rights, and in the distribution of water, the holder of the oldest water right receives all of the water to which he or she is entitled, even if this means that all other holders of newer water rights must shutoff. Individuals that disagree with a decision of the Department can seek judicial review before a court.

In recent years, the Water Resources Department has experienced a rise in Department of Justice (DOJ) costs. DOJ costs can be grouped into three general categories: general advice, water right adjudication, and litigation. Monthly expenses for general advice and water right adjudication have grown slightly; however, litigation expenses have surged over the last two biennia as new court filings have increased. This is due in large part to an increase in litigation in the Klamath Basin.

Between July 2011 and June 2013, four new cases were filed. In contrast, 13 new cases were filed between July 2013 and June 2015, while an additional 25 new cases were filed between July 2015 and June 2017. Between July 2017 and June 2018, 14 new cases were filed. It can take several years for litigation to be resolved, meaning that increases in new filings can have longer-term effects on the Department's budget. As a result, as shown in the table below, the Department's costs for attorney services have increased, far exceeding the \$835,628 in the Department's base budget.

Table of Water Resources Department Line Item Budget and Costs for Department of Justice Services as of June 2018

| | Avera | ige Monthly | | Biennia | ıl · |
|-----------|----------|-------------|-----------|-------------------------------|-------------------------------------------------------------|
| Biennium | Budget | Expenses | Budget | Expenses | Budget Shortfall |
| 2011-2013 | \$31,942 | \$39,332 | \$766,606 | \$943,958 | \$177,352 |
| 2013-2015 | \$30,815 | \$50,721 | \$739,561 | \$1,217,297 | \$477,736 |
| 2015-2017 | \$33,479 | \$75,203 | \$803,502 | \$1,804,872 | \$1,001,370* |
| 2017-2019 | \$34,818 | \$84,687** | \$835,628 | \$1,016,243 as of June 2018** | \$180,615 to June 2018** ~\$1.39 m biennium projected*** |

^{*} The 2015-2017 shortfall was addressed administratively, primarily by vacancy savings. The 2017-19 LAB included about \$1 million in administrative savings for the net hiring slowdown/cost containment

[–] therefore, the Department is already holding positions open to achieve those savings.

^{**} Expenses to date are based on costs incurred between July 2017 and June 2018, which totaled \$1,016,243.

^{***} Projections for the remainder of the biennium based on the average spend of \$84,687/month plus an additional \$200k for new cases.

Litigation can be broken into sub-categories: Enforcement, Transactions, Water right adjudication, Hydroelectric, and Other. The greatest increases in the past two biennia are occurring in the enforcement and transaction categories.

Enforcement actions are undertaken pursuant to Oregon Revised Statutes Chapter 540. Enforcement actions generally result from the regulation of junior water rights to meet the needs of a senior water right holder, a lack of compliance with well construction standards, or using water illegally or inconsistent with the conditions and limitations contained in a water right.

Transactions include decisions made on water right applications, requests for extensions of time, water right transfer applications, limited licenses, and other water right related actions. ORS Chapters 537 and 540 outline procedures and criteria for transactions. Most water supplies have been fully allocated, making it more difficult to approve new water right applications, leading to more creative proposals from applicants, stakeholders and the public to allow for or restrict further appropriations.

Enforcement actions and transactions are both concluded with a "final order." ORS 536.075 provides for judicial review of agency final orders. This statute also provides that filing a petition for judicial review of a Water Resource Commission or Department final order automatically stays enforcement of the final order. In some instances, particularly in enforcement matters, this may result in harm to other senior users in the system that the Department is regulating in favor of.

The Department works with staff at the Department of Justice to manage costs. It is much more difficult to manage litigation costs than other legal services expenses, particularly since the Department rarely initiates the litigation. Since July 2011, 42 cases have been resolved. The courts have dismissed 32 of the 42 cases as a result of the petitioner withdrawing the case or the signing of a settlement agreement. Additionally, for litigation that went forward during this period, the Department prevailed on 12 of the cases and did not prevail on three.

The projected shortfall for the 2017 -19 biennium is \$1,396,857. The Department will be submitting a request to the Emergency Board; however, there is evidence of a longer-term need to adjust the Department's budget given the sustained increased costs that have continued to exceed the Department's base budget over multiple biennia, with no signs of decreasing.

How Achieved: This package proposes to address the increased Department of Justice costs through an additional allocation of \$1 million in General Fund.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|------------|---------------|------|--------|-----|---------|---------|
| N/A | | | | | | | | |

Quantifying Results: There are currently 26 cases before Oregon State Courts or Federal Courts. All of these court filings were initiated by individuals or entities other than the Department. The Department has in the past made up the costs of legal expenses by leaving vacancies open for longer periods. Leaving vacancies open causes larger backlogs associated with water right transactions, the collection of less hydrologic data, and backlogs in data processing. Increasing funds for legal expenses would reduce the uncertainty for the Department, and allow for work to proceed as expected and authorized.

Funding Source:

General Fund: \$1,000,000

Attorney General: \$1,000,000

ESSENTIAL AND POLICY PACKAGE FISCAL IMPACT SUMMARY

Water Resources Dept
Pkg: 105 - Addressing Increasing Legal Expenses

Cross Reference Name: Director's Office Cross Reference Number: 69000-010-07-00-00000

| Description | General Fund | Lottery Funds | Other Funds | Federal Funds | Nonlimited Other Funds | Nonlimited Federal Funds | All Funds |
|----------------------------|--------------|---------------|-------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------|
| Revenues | | | | | The second secon | | |
| General Fund Appropriation | 1,000,000 | | - | ~ | | · × | 1,000,000 |
| Total Revenues | \$1,000,000 | · | | | | | \$1,000,000 |
| Services & Supplies | | | | | | | |
| Attorney General | 1,000,000 | - | | - | - | e we | 1,000,000 |
| Total Services & Supplies | \$1,000,000 | - | | _ | | - | \$1,000,000 |
| Total Expenditures | | | | | | | |
| Total Expenditures | 1,000,000 | - | - | 2 | - | | 1,000,000 |
| Total Expenditures | \$1,000,000 | | (- | - | - | | \$1,000,000 |
| Ending Balance | | | | | | | |
| Ending Balance | _ | - | | - | | | |
| Total Ending Balance | - | - | _ | - | - | | - |

| Agency Request | Governor's Budget | Legislatively Adopted |
|------------------|-------------------|-------------------------------------------------------------|
| 2019-21 Biennium | Page | Essential and Policy Package Fiscal Impact Summary - BPR013 |

2019-21

Policy Option Package #106: Supporting Water Management in the Field

Purpose: Strengthening the Department's field presence and addressing field workload challenges will help implement Recommended Action 10.F of the Integrated Water Resources Strategy. Further, field staff implement other recommended actions of the Strategy, from increasing water use measurement (2.B) to improving water resource data collection (1.B). Watermaster workloads are increasing statewide due to the increasing number of water rights, wells, population, homes, and changing water management needs. The State's 21 watermasters, with the help of state and other funded assistant watermasters, are responsible for management of more than 89,000 water rights in the state, more than 230,000 wells, dam safety inspections, injury analysis of water right transactions, participation in local planning efforts, providing input on water solutions, and countless other activities. County and other funded assistant watermaster and office positions have declined from 37 in 1981 to 18 part and full time staff today. Multiple dry years have intensified competition for water resources. Each region has its own set of workload challenges that need to be addressed in order to best serve Oregonians. Certain watermaster districts, like the mid-Willamette and the Deschutes Basin, are too large and complex for one watermaster to effectively handle the workload.

Historically, there has been one hydrotech for each region in the State. The hydrotech position in the Northwest Region, responsible for maintaining 26 gaging stations, measuring streamflow and providing quality data assurance, was eliminated during a previous budget reduction. In the meantime, the duties have been shared by other staff, but station maintenance and data collection lags acceptable standards.

The complexity and constantly changing water management issues in the Klamath basin require additional staff and onsite management. The Klamath Basin watermaster office is receiving assistance from other Department staff across the state to help meet the challenges of regulation and distribution. The Department continues to hear calls from determined claim holders that there is a need for more timely and effective regulation in the basin. The continued droughts, and changing water management scenarios resulting from ESA issues and litigation require additional staff and management in the Klamath Falls office to provide adequate service to water users in the basin.

How Achieved: Four new NRS 2 regional assistant watermasters would provide immediate help to reduce workload pressures in key watermaster offices (Lakeview, Vale, two in Klamath Falls) and improve customer service. One new NRS 2 Hydrotech will address gaging station and surface water measurement needs in the western part of the state, where the Department continues to have challenges meeting standard protocols for gage maintance and quality assurance. Two new NRS 3 Watermaster positions (mid-Willamette and Crooked River) will allow division of the large watermaster districts of the Willamette Valley and the Deschutes Basin into smaller districts with more manageable workloads. One PEM C Assistant Region Manager for the Klamath Falls office will provide onsite management of the staff in that office, and an increased level of senior staff to assist with complex water management and regulatory issues in the basin. These staff, in part or in total, will help address delays in timely regulation to protect senior water users, relieve staff that have been incurring large amounts of overtime, improve the visibility of the watermaster offices to increase voluntary compliance and reduce illegal use, and collect data and measurements needed for long term management. Staff will be able to timely conduct water right, transfer, and lease application reviews, streamflow measurements, gaging station operation and

maintenance, observation well measurements, water use measurement, permit compliance checks, complaint response, water right research, well research, and most importantly, timely regulation and distribution of water for senior rights.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|----------------|--------------------------------|------|--------|------|-----------|-----------|
| 9919019 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919020 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919021 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919022 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919023 | C8503 AP | Nat Res Spec 3 | Watermaster | PF | 21 | 0.88 | \$196,819 | \$221,790 |
| 9919024 | X7004 MMS | PEM/C | Region Assistant Manager | PF | 21 | 0.88 | \$207,287 | \$233,753 |
| 9919025 | C8503 AP | Nat Res Spec 3 | Watermaster | PF | 21 | 0.88 | \$196,819 | \$221,790 |
| 9919026 | C8502 AP | Nat Res Spec 2 | Hydrotech | PF | 21 | 0.88 | \$180,305 | \$202,917 |

Quantifying Results: Results of this budget package will be quantified in several ways. First, improvements in KPMs #2 (Protection of Instream Water Rights), KPM #3 (Monitoring Compliance), KPM #8 (Number of Significant Diversions with Measurement Devices Installed), and KPM #12 (Promote Efficiency in Field Staff Regulatory Activities) is expected. Second, improvement in hydrographics data collection and submittal to the Department's central database are expected, making streamflow data available to staff and stakeholders more rapidly. Finally, the Department anticipates an increased ability to educate water users about their water rights, and as a result, increase compliance with Oregon's water laws.

Funding Source:

General Fund: \$1,502,450

Staffing Costs: \$1,502,450

Policy Option Package #107: Investing in Projects to Meet Water Needs

Purpose: Most of the surface water resources in Oregon are fully allocated during the summer months, requiring individuals and communities seeking new supplies to turn to other tools such as water conservation, reuse, storage, and other mechanisms to meet instream and out-of-stream needs. Challenges in meeting current and future demands are exacerbated by a changing climate, which will alter snowpack, temperatures, and the hydrology of many streams throughout Oregon. This will affect the availability of water, as well as increase the incidence of droughts. To adequately meet Oregon's instream and out-of-stream water demands now and into the future, Oregon needs to invest in efforts to evaluate and implement projects. That means looking more closely at innovative water conservation and reuse projects, environmentally sound storage projects, and other water projects.

The costs of the numerous feasibility studies and environmental analyses that must be conducted before a project can be built frequently add up to hundreds of thousands of dollars, presenting a considerable and often insurmountable barrier to projects moving forward. To meet this challenge, the Oregon Legislature in 2008 established the Water Conservation, Reuse and Storage Grant program (SB 1069 or Feasibility Study Grants), which provides grants for feasibility study work. There continues to be a strong demand for these grants, and it is expected that this demand will increase as the State focuses on providing a secure water future for both instream and out-of-stream needs. The 2017 Integrated Water Resources Strategy's Recommended Action 13.D identifies the need to continue to provide funding to help evaluate the feasibility of water conservation, storage, and reuse projects. Meeting instream and out-of-stream water needs through water conservation, reuse and storage projects is critical to the economy of Oregon, and for healthy watersheds, fish and wildlife, and recreation.

In addition to the need to identify and evaluate projects, there is also a high demand for funding to implement water infrastructure projects. In a 2016 survey of member cities, the League of Oregon Cities projected a need of \$7.6 billion to address water and wastewater infrastructure needs for their member cities over the next 20 years. The American Society of Civil Engineers (ASCE) has estimated similar costs. In the 2017 Infrastructure Report Card for Oregon, ASCE estimates Oregon's infrastructure need in the drinking water sector at about \$5.6 billion and in the wastewater sector, about \$3.89 billion, for a total of \$9.49 billion. These surveys demonstrate a high need to investment in water infrastructure but do not provide a complete assessment of the need. In addition to drinking water and wastewater infrastructure needs, agriculture also has significant water infrastructure needs particularly as many farmers and districts seek to install more efficient irrigation systems and implement other conservation projects. Further work is needed to understand the status of water supply infrastructure across the state.

To meet Oregon's current and future water needs, the state will need to partner with individuals and communities to implement water resources projects. This package proposes funding to implement water projects, utilizing the Water Supply Development Account (SB 839 – 2013) to provide grants and loans for water resources development projects that have economic, environmental and community benefits. To date, demand has far exceeded the amount of funding available each cycle. In 2013 and 2015 the Legislature authorized a total of \$14 million for projects in lottery revenue bond funding (bonds issued in spring of 2015 and 2017). For the 2016 application cycle alone, 37 funding requests were received seeking nearly \$51 million. The Commission awarded funding to the top nine projects, totaling \$8.9 million, leaving \$5.1 million for the 2017 funding cycle.

In 2017, Department received 32 applications and \$34 million in grant and loan requests. An additional \$15 million was authorized for the 2017-2019 biennium. The Commission awarded funding to the top four projects for a total of about \$6.2 million. This allowed the Commission to have approximately \$13.8 million in funding for the 2018 and 2019 funding cycles. In 2018, another 19 applications were received requesting nearly \$16 million.

Recapitalization of the grant and loan fund is necessary to continue to advance the State's ability to assist with the development of water resources projects to provide access to new water supplies for instream and out-of-stream uses in Oregon. Investing in water resources projects furthers a number of recommended actions in the Integrated Water Resources Strategy aimed at: continuing the Water Resources Development Program (#10.E); improving access to built storage (#10.B); improving water use efficiency and water conservation (#10.A); encouraging water reuse (#10.C); determining and protecting flows needed to support instream needs (#3.A and #11.B); and investing in water resources projects (#13.E).

This policy option package also requests a full time Program Analyst 3 position. This position is necessary for proper oversight of the program as well as to help manage sources of capital for sustainable investment in projects in both the near and long-term.

How Achieved: This request includes funding to better understand the current status of our water infrastructure, as well as invest in evaluating the feasibility and implementation of projects.

\$250,000 is proposed to conduct a water infrastructure inventory to better understand the status and condition of Oregon's water infrastructure, and anticipated needs for investments. The funding will support a contractor to collect and compile existing information to develop a comprehensive statewide inventory of the status and condition of water supply infrastructure, maintenance costs, and potentially an estimate of the value of operation. This complements a proposal in Oregon Department of Environmental Quality's Agency Request Budget (Package #161) that would assemble comparable information on Oregon's wastewater and stormwater infrastructure needs.

There is currently \$400,000 General Fund in the Department's base budget for grant awards in the Water Conservation, Reuse and Storage Grant program (also called Feasibility Study Grants). With communities more regularly experiencing water shortages, there is increased interest in pursuing conservation, storage, and reuse projects. This proposal would provide an additional \$1 million in General Fund to provide grants to investigate the viability of these projects.

In addition, this request would recapitalize the Water Supply Development Account with \$30 million in Lottery Bond Revenue in order to fund grants and loans for water projects that provide economic, environmental, and social benefits to meet Oregon's ongoing instream and out-of-stream water needs.

This policy option package also requests a full time Program Analyst 3 position. This position is necessary for proper oversight of the program as well as to help manage sources of capital for sustainable investment in projects in both the near and long-term. The position would understand the

various funding options, including other grant and loan opportunities to help the state, individuals, and communities obtain and leverage these funds. The position would conduct financial modeling and financial analysis to facilitate identification of sources of capital and manage Department funds for investment in water projects and studies. This position would also be responsible for the origination, structuring, negotiation, and closing of project financing and investments, including auditing grants and loans. The analyst would also provide guidance to individuals and communities developing financing plans for projects.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|-------------------|--------------------------------------|------|--------|----------|-----------|-----------|
| 9919027 | C0862 AP | Program Analyst 3 | Water Project Grant And Loan Analyst | PF | 21 | 0.88 FTE | \$183,962 | \$196,596 |

Quantifying Results: The long-term goal is to better meet instream and out-of-stream needs for Oregonians as a result of funded projects. The development of new water supplies will further economic growth and healthy ecosystems by providing water to meet the needs of agriculture, fish and wildlife, industries, recreation, and municipalities. In order to develop new or secure existing water supplies, communities must investigate which projects are feasible to meet the need and then pursue implementation of those projects. Oregon will be better informed and a more strategic and effective investor in projects with a statewide inventory of current water supply infrastrucure, as future grant and loan investments will be prioritized and carried out with a more comprehensive baseline understanding of water infrastrucure needs.

Feasibility Study Grants and Water Project Grants and Loans are two ways the State of Oregon can partner with communities to invest in water supply projects. Both competitive grant programs require cost-match for grants and loans awarded, allowing state funds to be leveraged and ensuring that only serious applicants apply. Feasibility Study Grants requires a dollar-for-dollar match and Water Project Grants and Loans requires the applicant to cover no less than 25% of the total project cost.

In addition to awarding and managing the grants, the Program Analyst 3 position would be responsible for leveraging state dollars for additional federal, local, or private investment. The position will promote greater access to the funding opportunities through outreach to and guidance for potential applicants across Oregon. It will also help Water Project Grants and Loans to develop into a sustainable revolving fund.

Funding Source:

General Fund: \$1,433,962 Staffing Costs: \$183,962

> Infrastructure Assessment: \$250,000 Feasibility Study Grants: \$1,000,000

Other Funds: \$30,733,733 Lottery Revenue Bonds

> Water Projects: \$30,000,000 Cost of Issuance: \$733,733

Lottery Funds: \$2,004,623 Debt Service: \$2,004,623

Policy Option Package #108: Improving Water Use Measurement and Reporting

Purpose: The goal of this package is to increase water use measurement and water use reporting to better understand current demands on water resources, particularly in areas where this information is needed for water distribution and management, protecting existing users, preventing illegal use, and as inputs into groundwater basin studies and surface water availability programs (IWRS Action 2B).

In 2000, the Water Resources Commission developed a Strategic Water Measurement Plan for improving surface water measurement statewide. As part of that effort, the Department developed a statewide inventory of 2,385 "significant surface water diversions" within 300 high priority watersheds across the state. No additional staff resources were authorized to implement the plan; as a result progress over the years – tracked by Key Performance Measure #8 – has been slow. Seventeen years after adoption, 1,059 of the significant diversions (SigPODs) have measuring devices installed and 673 are abandoned or inactive, leaving 653 diversions still needing measuring devices installed. Water use measurement can help watermasters manage water rights and enable scientists to better understand water availability; however, the prior plan did not account for watermaster measurement needs, hydrologic analysis, or groundwater use. Water use measurement is essential for basin studies and water management. In addition, the SigPODs were not integrated into a database compatible with the Department's Water Use Reporting Program. Under the Department's Water Use Reporting Program, there are more than 14,800 water rights that are required to measure and report water use in Oregon. This constitutes about 17 percent of the water rights in the state, including some that are also SigPODs. In 2016, the Department received water use data for approximately 10,260 of those water rights.

In order to move both water use measurement and water use reporting forward in Oregon, work is needed to integrate datasets, improve database functionality, and develop an approach that incorporates watermaster needs and groundwater with staff resources for implementation.

How Achieved: This package proposes field and technical services staff to increase compliance with water use measurement requirements, work with water users in the field to install measuring devices, educate water users on proper techniques for measuring water use, monitor devices previously installed, provide quality control / assurance of incoming data, and coordinate with the watermasters and other staff.

The 2017 Integrated Water Resources Strategy (IWRS) identifies a number of actions that could improve water use measurement and reporting, drawing upon analysis from the Department's 2016 *Monitoring Strategy*, the Secretary of State's December 2016 Audit Report, interviews of staff and customers, and a workgroup discussion that took place during the 2017 legislative session. Drawing from Recommended Action 2.B of the IWRS, the Department proposes to strategically increase water use measurement in the state; help water users understand reporting and measurement requirements; continue to improve the software and tools used for water-use measurement and reporting; update its strategy for improving and increasing water use measurement; and coordinate the Water-Use Reporting Program and water use measurement efforts.

Additional funding is proposed for the cost-share measurement fund, which allows the Department to partner with water users on the cost of installing measuring devices. Measuring devices can cost several hundred dollars to thousands of dollars, depending on the diversion. A database

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developer would link user-supplied data in the water use reporting system with databases of water use reads by field staff and groundwater staff, and link customer-reported groundwater use with Department-collected data at the same location. Information Services would also work to link Significant Points of Diversion data with the Water Right Information System. The database developer would work on the backlog of other database project needs across the agency, improving data accessibility and usability.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|------------|----------------------------------|------|--------|-----|-----------|-----------|
| 9919028 | C8502 AP | NRS 2 | Regional Measurement Coordinator | PF | 21 | 1 | \$180,305 | \$202,917 |
| 9919029 | C8502 AP | NRS 2 | Regional Measurement Coordinator | PF | 21 | 1 | \$180,305 | \$202,917 |
| 9919030 | C8502 AP | NRS 2 | Regional Measurement Coordinator | PF | 21 | 1 | \$180,305 | \$202,917 |
| 9919031 | C8502 AP | NRS 2 | Regional Measurement Coordinator | PF | 21 | 1 | \$180,305 | \$202,917 |
| 9919032 | C8502 AP | NRS 2 | Regional Measurement Coordinator | PF | 21 | 1 | \$180,305 | \$202,917 |
| 9919033 | C1486 IP | ISS 6 | Database/Application Developer | PF | 21 | 1 | \$196,483 | \$221,187 |
| 9919034 | C8502 AP | NRS 2 | Water Use Reporting | PF | 21 | 1 | \$180,305 | \$202,917 |

Quantifying Results: There are several metrics that can be used to quantify results. These metrics include: (1) Does the Department have a database to track all points of diversion with measuring devices? (2) Are water use-related databases, including water use reported data and water use measurement data for both groundwater and surface water, co-located? Can the user readily access and cross-reference information between data sets? (3) Is the number of points of diversions with measuring devices installed increasing? Is progress on KPM #8 improving? (4) Is the data quality received from water use reporting improving? This could be measured by the number of water use reports that are reviewed for accuracy. (5) Are data uploads and data queries easier to complete on a bulk scale? (6) Is the data available in a format that can be used for water management and planning? (7) Is water use reporting compliance increasing as tracked by KPM #13?

Funding Source:

General Fund: \$1,428,313

Staffing Costs: \$1,278,313

Water Measurement Cost Share Funds: \$150,000

Policy Option Package #109: Increase Access to Data for Decision Making

Purpose: The Department generates a lot of water-related data. However, it often requires technical expertise to analyze and package that data and to make it meaningful for members of the public, local governments, and others that seek to use that information to make decisions. Counties need more information about water availability at specific locations, when making decisions about appropriate locations for development. Similarly, recent local water planning efforts have highlighted needs for water data. In particular, communities have asked for information about surface water supplies, groundwater supplies, climate impacts on water resources, and instream flow needs.

The purpose of this package is to: develop statewide data products and tools to use in local planning; increase accessibility of existing data; and perform additional needed analysis. This package supports Recommended Actions 1.C, 5.B, 5.5A, 6.A, 9.A and 13.C of the Integrated Water Resources Strategy.

How Achieved: Engage communities around Oregon in the co-production of tools and analysis with outreach and technical staff. Develop user-friendly tools within the agency (i.e., an online platform) in order to make data and analysis accessible to communities for use in answering key questions about water supplies and future needs. Develop an easy-to-use public interface to help individuals, businesses, local governments, collaborative planning groups, and others access and understand the Department's data such as: the availability of water resources (groundwater and surface water); any restrictions that have been placed on those sources; aquifer systems and geology that may be difficult for well construction or have limited supplies; locations of scenic waterways; and locations vulnerable to extreme events such as flood and drought. To develop these data tools, a team of one NRS 4 Hydrologist, one NRS 3 Hydrographer, one NRS 3 Hydrogeologist, one ISS 4 Information Specialist, and one PAS 3Publication/Outreach Specialist would be charged with analyzing and interpreting data, as well as providing data in a format and manner that can easily be utilized both within and outside of the agency. The team would develop these tools with input from and coordination with users of the data. In addition, the package includes funds to allow the Department to contract or partner with other entities to leverage resources and technical expertise in the development of these tools to support decision-making.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Type | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|-------------------|---------------------------------|------|--------|------|-----------|-----------|
| 9919035 | C0866 AP | Program Analyst 3 | Publication/Outreach Specialist | PF | 21 | 0.88 | \$196,623 | \$222,852 |
| 9919036 | C8503 AP . | NRS 3 | Hydrogeologist 3 | PF | 21 | 0.88 | \$196,819 | \$221,790 |
| 9919037 | C1484 IP | ISS 4 | Information Specialist 4 | PF | 21 | 0.88 | \$173,716 | \$195,166 |
| 9919038 | C8504 AP | NRS 4 | Hydrologist 4 | PF | 21 | 0.88 | \$215,513 | \$243,175 |
| 9919039 | C8503 AP | NRS 3 | Hydrographer 3 | PF. | 21 | 0.88 | \$196,819 | \$221,792 |

Quantifying Results: The metric is a Y/N question: is there a publicly accessible platform where the public, local governments, planning groups, and others can go to find clear, useful information, written in layman's terms, about the status of water resources in their basin?

Funding Source:

General Fund: \$1,579,508

Staffing Costs: \$979,508

Statewide Supply Studies and Development Tools: \$600,000

Policy Option Package #110: Increasing Understanding of Water Laws and Tools

Purpose: The purpose of this package is to improve awareness of Oregon's water laws, data, and water management and conservation tools, by generating and improving Departmental outreach and informational materials. The Department does not have an individual that works specifically on developing informational materials, creating content for and updating the website, and developing and implementing materials to communicate new policies or Department activities. This leaves outreach to occur ad-hoc or as staff time allows, making it difficult to ensure that materials are consistent and written in a manner that is easily understandable for all audiences. Policy and technical staff are often pulled off other tasks when a specific urgent outreach need is identified. The Department's website often lacks timely information and the Department has few outreach materials that help the public to understand complex water laws and tools.

Given these challenges, the Department is seeking resources to be more proactive in its outreach efforts in a manner that would benefit the public, water users, staff, stakeholders, and elected officials. Recommended Action 5.5A of the Integrated Water Resources Strategy suggests that increased outreach is needed to better plan and prepare for drought, while IWRS Action 8.C stresses the importance of community outreach and education in stewarding our water resources. Outreach and education was also highlighted as key in drought preparedness and response in Recommendation E of the 2016 Report of Task Force on Drought Emergency Response.

Improved outreach about Oregon's water laws and the status of water resources across the state would help the public, businesses, and communities make informed decisions and engage with the Department and Commission in decision-making. In addition, increasing Oregonian's understanding of water laws can proactively help to reduce instances of illegal water use, while increasing compliance with Oregon's water laws. In addition, having more education and outreach materials would help watermasters and other line staff be more efficient by providing them more tools to assist the public, water users, and others in understanding water law and water management options.

How Achieved: This package proposes to add one outreach coordinator position to increase awareness of water issues, laws, and management tools. The position would add consistency to agency informational materials and ensure that materials are written in a manner that is easily understandable. Specifically, this position would:

- Develop or update one-pagers and other informational resources for public use. This includes one-pagers on various topics that the agency commonly receives questions about including but not limited to: water right transactions (transfers, leases, allocations of conserved water, etc.), exempt uses, dry wells, Department data resources, forfeiture, water use measurement and reporting, watermaster responsibilities and workloads, state scenic waterways and water law, instream water rights, storage permitting requirements, backflow prevention, the legality of rainwater harvesting.
- Assist with outreach and promoting water conservation as needed during drought, and develop a water conservation toolkit for small water providers.

- Develop informational materials and distribute to public, press, elected officials, and stakeholders to ensure that the public is informed about upcoming Department meetings, rulemakings, workgroups, task forces, and other issues.
- Help improve communication across the agency, both internally and externally, by developing information and outreach strategies that ensure the public, staff, stakeholders, water users, and elected officials are informed about Department activities.
- Ensure that the Department's website is updated regularly to help improve awareness of Department activities.
- Assist all divisions of the agency in better serving the public by evaluating and improving outreach procedures and content.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|--------------------|----------------------|------|--------|------|-----------|-----------|
| 9919040 | C0866 AP | Pub Affairs Spec 3 | Outreach Coordinator | PF | 21 | 0.88 | \$196,623 | \$222,852 |

Quantifying Results: This position's efforts can be monitored through increases in: (1) the number of handouts and other informational materials developed, (2) the number of press releases issued, and (3) other outreach practices that are improved. Over the long-term, the Department may also see an increase in KPM #14, related to availability of information and overall customer service.

Funding Source:

General Fund: \$196,623 Staffing Costs: \$196,623

Policy Option Package #111: Marijuana & Compliance with Water Laws

Purpose: There are approximately 2,000 active or pending Oregon Liquor Control Commission (OLCC) producers' licenses, and more than 20,000 medical marijuana registered grow sites in Oregon. Watermaster offices, primarily in central and western Oregon, receive dozens of complaints of illegal uses and well intereference in association with cannabis each month, and have seen significant increases in front counter traffic from producers looking to find authorized sources of water to use for marijuana cultivation. In addition, while many producers and growers are responsible water users, significant time is required to pursue investigations of potential illegal uses of water related to cannabis.

When recreational marijuana was first legalized, the Department worked with OLCC to adopt rules requiring applicants for producer's licenses to submit information on their legal source of water. As the Department receives complaints about illegal uses, staff work with OLCC staff to understand the sources of water claimed by the licensee and whether they are in fact authorized uses. The Department does not have the capacity to proactively review this information upfront, or to follow up to see if these sources are in fact being used. As a result of complaints or watermaster inquiries, the Department has found instances where water rights submitted to OLCC were not appurtenant to the property, or where water uses were inconsistent with what had been claimed as the source. Furthermore, given that many water sources were fully appropriated when marijuana was legalized, many producers have identified sources that do not require a water right. However, these sources may not provide adequate water, or may be more costly to obtain, which may incentize the use of unauthorized sources. Investigating these issues and ascertaining whether water is being used legally is a difficult task that draws watermasters and assistant watermasters away from other duties.

This package will assist the Department in addressing complaints timely, educating producers on water options, verifying that producers are have a legal source of water upon renewal or licensing with OLCC, and increasing the field enforcement presence to ensure legal water use occurs. These positions will contribute to IWRS Actions 10.F (Provide an adequate presence in the field) and 10.G (Strengthen Oregon's water quantity permitting program).

How Achieved: The Department will hire and train five NRS 2 regional assistant watermasters to be located in Bend, Medford, Grants Pass, Eugene, and Salem. These staff, in conjunction with the watermaster, will coordinate with county governments, the Oregon Health Authority and OLCC inspectors to educate producers, conduct site visits to review water use, and ensure that legal water use occurs. The staff will also review water use for OLCC license applications, proactively catching issues upfront to the extent possible. The new staff will significantly increase the field's ability to respond timely to complaints and work with producers to gain compliance if violations are found. New staff will be able to conduct research and confirm that proposed water sources are legal and available for marijuana cultivation. While cannabis related water use will be their primary focus, these staff will also be able to work on other assistant watermaster resposibilities as needed to reduce workload pressures and ensure efficient use of staff time.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|----------------|--------------------------------|------|--------|------|-----------|-----------|
| 9919041 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919042 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919043 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919044 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |
| 9919045 | C8502 AP | Nat Res Spec 2 | Regional Assistant Watermaster | PF | 21 | 0.88 | \$180,305 | \$202,917 |

Quantifying Results: The Department will track staff actions associated with marijuana production and complaints in the Field Activity database. In addition, the Department will review water use sources for all OLCC licensed and proposed licenses, including those that are proposing to sell up to 20 pounds of medical marijuana into the recreational market. The Department anticipates that over time, producer and grower understanding of Oregon's water laws will improve, their sources of water will be vetted, and complaints will be reduced.

Funding Source:

General Fund: \$901,525 Staffing Costs: \$901,525

Policy Option Package #112 Continuing Payroll Shared Services

Purpose: Since 2015, the Water Resources Department has piloted a shared payroll service model with neighboring state agencies. Over the last four years, we have created best practices, streamlined processes, and are now realizing economies of scale. The team approach to payroll processing has also enabled the agencies to consider succession planning and enabled continued support of payroll functions when a staff member is out of the office. The pilot began with four agencies and has since grown to include the following six agencies: Department of State Lands, Land Use Board of Appeals, Housing and Community Services, Department of Land Conservation and Development, Watershed Enhancement Board, and Water Resources Department. This pilot has proven to be a successful and efficient alternative for these agencies each with less than 200 FTE. The shared payroll team is now supporting approximately 550 employees.

How Achieved: During the initial pilot phase, a limited duration Accounting Technician 3 position was authorized. This package proposes to continue the shared service approach to payroll for these agencies, by making this position permanent. Making the position permanent will maintain the success if this model going forward.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|-------------------|--------------------|------|--------|-----|-----------|-----------|
| 9919046 | C0212 OAS AP | Accounting Tech 3 | Payroll Technician | PF | 24 | 1.0 | \$146,808 | \$146,808 |

Quantifying Results: The payroll shared service approach creates administrative efficiencies for the six participating agencies – by pooling resources together, we have demonstrated the ability to effectively manage a fully functioning payroll and benefits program with less staff than what would otherwise be required if each agency conducted the work separately.

Funding Source:

Other Funds: \$146,808

Staffing Costs: \$146,808



Policy Option Package #113: Supporting Agency Functions

Purpose: In order for the Department to achieve its mission, the agency must ensure that it provides the underlying support for staff to succeed in their day-to-day responsibilities and for the agency to function well. Accounting, procurement, public records, information technology and human resources professionals enable other staff across the agency to focus on the work of protecting and promoting sustainable management of Oregon's water resources. In recent years, the Department has identified a need to help these foundational staff succeed in several areas as outlined below.

Loans/Procurement: The Department has had a loan specialist associated with the Water Development Loan Fund (WDLF); although the Department has over the years received limitation authority for loans, in recent biennia none have been issued. As a result, this position, budgeted to be funded by the WDLF, has been paid for by General Fund savings to focus on compliance with contracting and procurement requirements, as well as the Water Projects Grants and Loans funding opportunity. Contracting and procurement is essential to the work of the agency, and the Department has no other staff that perform this work.

Accounting: The Department is experiencing an increase in the volume of accounting transactions as well an increased complexity in fiscal tracking and reporting. In recent biennia the Department has received over \$50 million in Lottery Revenue Bond funding for the Water Resources Development Program which requires specialized reporting and tracking. Recent changes to the statewide reporting requirements for accounts receivable have resulted in additional tracking needs for fiscal staff. There is a need for the Department to review and update its internal fiscal processes and policies to ensure compliance with statewide guidance. Fiscal staff have begun efforts to map and streamline processes; however, the increasing workloads have limited progress.

Human Resources: Human Resources is a strategic asset to improve performance and efficiency across the Department through increased training and development opportunities. The Department currently has two positions dedicated to supporting and managing the HR functions for both the Department and the Oregon Watershed Enhancement Board. These positions support approximately 200 employees throughout the state. In the last two years, there has been a steady increase in workload at the higher level due to complex employee and labor relation issues, required safety training compliance and monitoring, performance management, affirmative action and equity responsibilities, and supporting the implementation of employee initiatives. There are also increased workloads due to recent requirements to implement wellness, diversity and inclusion, and emergency preparedness actions. One position also oversees the Shared Services Payroll Team, which currently provides payroll and benefit administration for six agencies.

IT Life Cycle Replacement: The Department's computers and servers are nearing or have passed their end-of-life. This includes file servers, database servers, domain controllers, and other specialized servers as well as personal computers. These machines are managed by the Department's IT staff. Laptop and desktop computers also require replacement as new technological advances in equipment are released that will aid staff in accessing information as they perform their duties. The replacement of these machines has been done on an as-needed basis, typically with vacancy or other accrued savings, usually at the end of the biennium. The Department believes that a better approach would be to establish a

dedicated budget for life-cycle replacement, technology upgrades, and licensing for Department's computer servers, personal computers, and software applications. Additionally, the Department would like to move its computer servers off-site to the State Data Center. Having the servers located off-site will better enable the Department to provide service to internal and external customers, as well as be better prepared for an emergency. This project is in alignment with IWRS Recommended Action 1C.

Public Records: Public record requests are now taking a considerable amount of staff time. The agency received approximately 89 public records requests in 2015, 133 in 2016, and 143 in 2017, and more than 100 as of August 1, 2018. Part of the reason for the increase is that the agency began ensuring that public records requests were submitted to one person to ensure that the request was properly fulfilled. The agency needs to process public records requests timely in accordance with the law, while also ensuring that all staff that may have the records are contacted to fulfill the request, that all records are found and reviewed for sensitive information, and that the request is properly fulfilled. Current public records workloads have reduced staff's time available to spend on rules coordination, Director's office projects, and other responsibilities.

Internal Audit: The Department met the criteria in 1(c) of Oregon Administrative Rule 125-700-0125 as of Fiscal Year 2016, requiring an internal auditing function (ORS 184.360). The Department received a waiver for fiscal years 2015 through 2017, while exploring options for meeting this requirement. The Department has spoken with DAS to determine its options and has decided that the preferred choice is to hire a position to undertake the internal auditing function to comply with the requirements.

How achieved:

- Loans and Procurement: This package proposes to shift the Water Development Loan Specialist from the Water Development Loan Fund to General Fund to allow the Department to continue to comply with procurement requirements and contracting needs, as well as conduct work associated with the Water Project Grants and Loans Program.
- Accounting: This package proposes to add an Accountant 1 to assist in daily processing of accounting transactions. This position will assist fiscal staff in the updating and training of Department staff on fiscal policies. Adding this position will allow the senior accounting staff to focus on higher level accounting work as well as reviewing agency procedures to ensure compliance with all statewide fiscal policies, refine management reports which are used by senior management for decision making and focus on streamlining fiscal processes.
- Human Resources: In order to meet these increased demands and ensure compliance with employment contracts and policies, the
 Department proposes to create capacity by rebalancing the workload and shifting lower level human resources work to a third position
 classified as an HR Analyst 1. With this adjustment, the HR Section will be better positioned to proactively manage human resources
 functions for two agencies and payroll and benefit functions for six.
- Information Technology/Lifecycle Replacement: The Department has reached out to the State Data Center (SDC) to determine the cost to migrate servers and firewalls over to the SDC in a phased approach over the course of the 19-21 biennium. This package proposes funding

to cover those costs, which include computing and storage, off-site back up, and setup charges. In addition, funding is also included to upgrade outdated personal computing technology.

- Public Records: The Department is proposing a position to address public records coordination to ensure timely and accurate responses to public records requests. This position will also help to streamline records storage and retention to help make public records requests easier to process.
- Internal Auditor: The Department is proposing to add one internal auditor position to allow WRD to meet the Internal Auditing Requirement, which is anticipated to help the agency further identify opportunities for improvement on a continuous basis. Based on discussions with DAS, one auditor can likely support two agencies. The Department of State Lands has expressed an interest in sharing this position, as have other agencies. The Department proposes to enter into a shared-services agreement with another agency (likely DSL).

Staffing Impact:

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|-------------|---------------|-------------------------|----------------------------|------|--------|------|-------------|-------------|
| Position | Class/Pay Opt | Class Desc | Working title | Туре | Months | FTE | 2019-21 | 2021-23 |
| 9919047 | C1215 AP | Accountant 1 | Accountant 1 | PF | 21 | 0.88 | \$ 137,001 | \$ 141,924 |
| 9919048 | X5618 AP | Internal Auditor 3 | Shared Services Auditor | PF | 21 | 0.88 | \$ 211,290 | \$ 221,731 |
| 9919049 | X1320 AP | Human Resource Analyst | Human Resource Spec 1 | PF | 21 | 0.88 | \$ 154,118 | \$ 161,486 |
| 9919050 | C8504 AP | Natural Resource Spec 4 | Public Records Coordinator | PF | 21 | 0.88 | \$ 215,530 | \$ 215,530 |
| 7000004 | C1003 AP | Loan Specialist | Loan Specialist | PF | (24) | 1.00 | \$(262,610) | \$(262,610) |
| 7000004 | C1003 AP | Loan Specialist | Loan Specialist | PF | 24 | 1.00 | \$ 262,610 | \$ 262,610 |

Quantifying Results:

- The work of the Loans and Procurement Specialist is measured by the number of contracts executed and managed annually. In regards to the loans program, the work will be measured by (1) the launching of the loan program; (2) the number of loan applications; (3) the number of loans administered.
- Accounting: Adding this position will allow the fiscal department to be timelier, more efficient and ensure the agency is in compliance with statewide policies.
- Human Resources: Required training and development activities will be better monitored and enforced. Some of the most critical work for the department is done in our Field Services Division. Because these employees are geographically spread out, Human Resources staff have not had the capacity to have a presence in these offices. This added capacity would help ensure that employees in field offices feel supported and more connected with Human Resources, the agency, and the state as a whole.
- Information Technology: The Department will work with the State Data Center (SDC) to develop a timeline for migrating services to the SDC in three main phases. Success will be measured by completion of each of these phases and the transition.

- Public Records: The work of this position will be monitored by the number of public record requests received, and the number of days that
 it takes to fulfill the request. The Department will also monitor the progress of this position in terms of identification of best practices, and
 the streamlining of information that is stored so that it is easier to fulfill public records timely and accurately.
- Internal Auditor: Funding this position will result in an initial risk assessment of each agency supported to determine what areas should be audited. After that, the Department would anticipate one audit to be completed each calendar year for each agency the position supports. The Department would then track improvements made as a result of the audits.

Funding Source:

Total General Fund: \$1,314,904 Staffing Costs: \$874,904

IT Server and PC Life Cycle Replacement: \$440,000

Total Other Fund: \$(156,965)

Fund Shift off WDLF \$(262,610) Shared Services Agreement \$105,645

Policy Option Package #114: Mitigation to Allow for New Water Uses

Purpose: Cities, farmers, business owner and other potential water users often need additional water to meet their growing needs. Surface water and groundwater sources are increasingly limited and identifying new storage sites is a challenge. Increasingly, water right applicants would like to mitigate for their impacts in order to obtain a new water right, which otherwise might be denied. Currently, the Department has rules in place for mitigation of new groundwater permits in the Deschutes Basin above Lake Billy Chinook. The state does not have a comprehensive approach in other basins to address needs for mitigation. As a result, working with applicants who would like to explore mitigation options can take considerable staff time and is further complicated by the need for individual analysis of proposed mitigation. Establishing a more programmatic approach to mitigation will benefit water right applicants, as the Department will be better able to respond to and evaluate mitigation requests in a timely manner. This proposal is consistent with Recommended Action 10.G of the Integrated Water Resources Strategy.

How Achieved: A new NRS 4 position would be dedicated to evaluating mitigation options for individual applicants, as well as working on more programmatic water mitigation. This would allow the Department to investigate opportunities to develop mitigation rules and standards for other areas of the state outside the upper Deschutes Basin, as well as assist potential applicants in finding solutions to their water needs through mitigation or other options such as transfers. Developing rules would allow the Department to apply a consistent approach to considering mitigation proposals and enable more efficient processing, which would benefit water right applicants.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|----------------|-----------------------|------|--------|------|-----------|-----------|
| 9919051 | C8504 AP | Nat Res Spec 4 | Mitigation Specialist | PF | 21 | 0.88 | \$215,531 | \$243,175 |

Quantifying Results: As a result of this proposal, the number of applications approved with mitigation components should increase. In addition, the Department would anticipate developing rules defining standards for mitigation.

Funding Source:

General Fund: \$215,531 Staffing Costs: \$215,531

Policy Option Package #115: Updating the Integrated Water Resources Strategy

Purpose: Oregon's Integrated Water Resources Strategy (IWRS) provides a framework for improving our understanding of Oregon's water resources and needs, while also meeting both instream and out-of-stream needs. Development of this comprehensive Strategy included input from multiple state and federal agencies, as well as input from the public and an 18-citizen member Policy Advisory Group. The Water Resources Department is required by statute to update the state's Integrated Water Resources Strategy every five years. The first IWRS was adopted in 2012 and was revised and formally adopted again in December 2017.

The Department began work in 2015 on the 2017 IWRS. During 2016, the Department held several discussions with the Policy Advisory Group, and held open houses to obtain public input from around the state. The Department did not have a budget to support public outreach events, advisory group meetings, and other costs associated with production of the 2017 IWRS. Stakeholders expressed support for the Department to acquire facilitation services for the next update to the IWRS, allowing for further discussion of more complex issues.

How Achieved: Oregon's next IWRS will be due in 2022. The Department anticipates taking a collaborative approach to this update, incorporating new analysis and tackling issues not fully discussed in previous iterations. As a result, work on the 2022 update will begin in 2019. Consistent with Recommended Action 13.A of the IWRS, this package proposes \$50,000 in funding for facilitation, public involvement, and printing/distribution related-costs for the 2022 IWRS. Given that the IWRS must be updated every five years, the Department anticipates an ongoing need for this work.

Staffing Impact:

| Position | Class/Pay Opt | Class Desc | Working Title | Туре | Months | FTE | 2019-21 | 2021-23 |
|----------|---------------|------------|---------------|------|--------|-----|---------|---------|
| N/A | | | | | | | | |

Quantifying Results: This package provides resources necessary to engage Oregonians in the management of the state's water resources through the development of the IWRS. Funds will be used to solicit and gather public input through the use of public meetings, stakeholder discussions, and other formats.

Funding Source:

General Fund: \$50,000

Facilitation, printing and public involvement costs: \$50,000