Revenue Shortfall Package #070: Water Rights Transactions Fee Schedule and Dam Safety Fee Revenue Reduction Package

Purpose

The majority of the Department's fees for water right and dam safety annual fee transactions are set in statute. In 2009, the legislature restructured many of the Department’s fees and since then the Department has brought forward modifications to the water right transactions fee schedule every four years, based on projected cost increases. The fee schedule was last modified in 2017 to increase fees by approximately 15.88 percent based on the Department of Adminisitrative Service's estimated costs increases and dam safety fees were added to the four-year schedule.

The current Water Right fee schedule provides revenues of about $2.4 million to fund 21.42 FTE (24 positions) of which 17.93 FTE are in the Water Right Services Division, as well as 0.5 FTE in the Groundwater Section of the Technical Services Division, 2.0 FTE are Water Right Data Techs in the Administrative Services Division, and 1.0 Field Water Right Processing position. The current Dam Safety Annual Fee schedule provides about $300k which funds 0.95 FTE (2 positions) in the Dam Safety program. Several factors can affect revenues upon which a fee schedule is based to fall short of projections. The number of water right applications and other transactions has been less than anticipated, and has declined instead of increasing, leading to reduced revenues to support positions. As a result, despite the fee increase in 2017, in recent years the Department has kept seven positions, three funded by general fund and four funded by water right fees, unfilled as natural vacancies have occurred in an effort to administratively manage the budget.

For the 2021-2025 fee schedule, based on estimates from the Department of Administrative Services, the Department anticipates that costs will increase by 17.39 percent. Consistent with its past approach, the Department is proposing to increase fees by the anticipated increased cost – 17.39 percent.

How Achieved

Without a fee increase in the 2021-23 biennium, this package will eliminate 8.83 FTE funded by water rights fees. The fee increase package and associated legislation (LC 69001/POP 104), if approved, would allow the Department to retain 2.50 FTE of the 8.83 FTE eliminated in the Water Rights Services Division. In addition, for the Dam Safety program, this package would eliminate $40,667 in Services & Supplies, which would be restored by the fee increase, if approved, in package #104 (LC 69001).
### Staffing Impact

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### Quantifying Results

The Department anticipates that with the reduced staff, the timeliness of processing these application types will gradually decrease as the backlogs build. This means that farmers, water supply providers, entities seeking to restore streamflows, and others may have to wait longer to receive determinations on their water right applications. With reduced staff, the Department would increase challenges meeting Key Preformance Measures #10 and 11 related to processing new water right applications and transfers of existing water rights respectively, and would likely be unable to meet KPM #9 related to the processing of Water Management and Conservation Plans.
BUDGET NARRATIVE

In addition, the dam safety program is already understaffed and experiences challenges inspecting all high-hazard dams across the state, reviewing plans for new dams, and other activities of the program. Any reduction of engineering staff would further exacerbate these challenges and the challenges the Department faces in trying to protect the public and preserve water supplies through the dam safety program.

Funding Source:

Total Fund Cost: ($1,729,660)
  Other Fund
    Staffing ($1,729,660)
**Policy Option Package #101: Protecting Public Safety and Water Supplies**

**Purpose**

This package proposes to add resources to protect the health and safety of the public through the evaluation of dams, improve agency preparedness for emergencies, improve statewide resiliency to natural hazards and climate change, and address employee health and safety.

The Oregon Water Resources Department is the state agency charged with overseeing the safety of more than 900 dams across the state that are authorized to store water for agriculture, cities, industry, recreation, fisheries, and other purposes. These dams are nonfederal dams that are not under the jurisdiction of a federal dam safety program. The Department's Dam Safety Program seeks to identify and work with owners to address dam safety deficiencies to protect people and property, while preserving the many benefits that dams provide for our communities and economy.

While dams provide benefits, the consequences of failure of a dam can be significant, potentially resulting in loss of lives and damage to property and infrastructure. Although not well documented, the Department is aware of at least 55 failures of dams in Oregon since the 1800s. Most failures of dams in Oregon have been small, but several have resulted in more significant property, road and infrastructure damage, and some have flooded towns and cities. One failure resulted in the deaths of seven people in 1896. In the last 20 years, one major failure of a significant hazard dam occurred in 2005, resulting in approximately $2 million in damage; while a few other failures were low hazard dams. In addition to failures, every year at least one dam experiences a safety incident requiring urgent actions. Increased risks of severe floods as a result of climate change further heighten the Department's concern over the safety of dams across the state.

Over the years, limited resources have been dedicated to the safety of dams, and challenges in ensuring their safety are compounding. Engineering standards have evolved over time as our understanding of risks to dams and modes of failure have increased. Our understanding of seismic and flood risks in Oregon have also changed. Meanwhile, the majority of our dams are more than 50 years old, with some showing signs of degradation or experiencing safety incidents requiring urgent repairs. For example, many of the high and significant hazard dams have corrugated metal pipes that are rusting and deteriorating. Some of this deterioration is causing water to leak from the reservoir through the pipe and, over time, increases the risk of failure.

These challenges are not unique to Oregon; in the past five years, the failure of over a hundred dams in North and South Carolina during extreme flooding and hurricanes, and the safety incident at Oroville in California have demonstrated the urgency. In 2020, a dam failure in Michigan displaced approximately 10,000 people and led to lawsuits involving state agencies.
Visual inspections are the primary tool and approach the Department has to identify potential deficiencies, with its existing resources. Oregon seeks to inspect high hazard dams annually, and significant hazard dams every few years. Of the 76 dams rated high hazard, 20 are in poor or unsatisfactory condition, based on current information available to the Department.

The Department’s Dam Safety Program primarily focuses on conducting regular visual inspections of dams and conducts more detailed inspections as resources allow. All high-hazard and significant hazard dams should have a full risk assessment conducted to identify potential vulnerabilities to floods, earthquakes, internal erosion, landslides, structural deterioration, and debris. When possible, the Department has also funded more in-depth analyses of dams. These analyses are even more detailed than assessments, providing information on the deficiency of a dam and how to address that deficiency.

Funding for this work has been insufficient for decades. Significant federal funding for the detailed inspection of nonfederal dams was provided after a series of dam failures in the 1970s as part of a Phase I Inspection Program. In Oregon, these federal dollars bolstered engineering staff working on dam safety, improving the ability of the Department to evaluate dam safety deficiencies. Since the federal funding expired, some dams have had partial assessments, but no dam has had a full risk assessment in decades based on current engineering standards and modern understanding of risks.

Emergency Preparedness, Mitigation, Adaptation, and Continuity of Operations

Currently, the Department is not prepared to respond to or communicate to the media or public should a dam failure arise or in a drought emergency. While some exercises of dam safety emergency action plans have been conducted, none have included communications staff that would be essential to keeping the public informed about the emergency. The Department is not prepared for such an incident. The Department has seen this issue similarly on drought, as the Department’s lack of public information staffing inhibits the Department’s ability to provide information to the public to understand drought conditions and be better prepared for drought. The Department is further concerned that its lack of capacity in this area will disproportionately impact historically and currently underserved communities.

As the climate changes, the Department is increasingly concerned about its lack of capacity to respond to emergencies when they occur, but also to help Oregonians prepare, adapt, and mitigate risks. Currently, staff are pulled off of other duties to coordinate with other agencies on Natural Hazards Mitigation Plan updates, work associated with the Climate Adaptation Framework, and other inter-agency efforts that promote resiliency to natural hazards and climate change. These planning efforts are often critical foundations to accessing other resources, such as federal dollars, to respond to natural hazards.

Furthermore, the Department has not had resources to update and train staff on its continuity of operations plan. During the 2020 COVID-19 pandemic, the Department realized that its Continuity of Operations Plan requires significant updating, and regular training for staff as the Department identified gaps in the plan and lessons learned from the agency’s need to operate under emergency conditions.
Employee Wellness, Safety and Training

The Department does not currently have a staff person dedicated to training or safety and wellness. The Department is a small agency with the large responsibility of managing Oregon's water resources for the benefit of all Oregonians, present and future. This is only achievable when we have provided staff with the support needed to succeed and work effectively as a team. As such, a priority in the Department’s Strategic Plan is to “foster a forward-looking team dedicated to serving Oregonians with integrity and excellence” with the objective to “maintain technical excellence and improve customer service by investing in training for staff.” Furthermore, the agency is required to implement and comply with ORS 654.010, the Governor’s Executive Order on Employee Wellness, and Oregon Occupation Safety and Health Administration regulations. A comprehensive safety program is needed to reduce risks to employees that are commonly encountered in our day to day business - particularly by field and scientific staff when they are collecting data or distributing water.

This package contributes to Integrated Water Resources Strategy recommended actions 5.A (Support continued basin-scale climate change research efforts), 5.B (Assist with climate change adaptation and resiliency strategies), 5.5A (Plan and prepare for drought resiliency), 5.5B (Plan and prepare for flood events), 5.5C (Plan and prepare for the Cascadian subduction earthquake event), 7.C (Ensure public and dam safety), 8.C (Promote community education and training opportunities), and 13.B (Fund water resource management activities at state agencies). This package will help the Department further consider and conduct outreach to historically and currently underserved communities that could be impacted during a dam failure, drought, or flood, and to better to take those populations into account in climate adaptation and mitigation work, as well as in the planning, preparation and response to emergencies. In addition, it also supports implementation of all three priorities of the Department’s Strategic Plan and carry out actions identified in the Departments Executive Order 20-04 climate change report.

How Achieved

This package would improve our understanding of dam vulnerability in the state, and begin to taken necessary safety actions through:

1. Hiring two engineers to conduct assessments on dams to determine seismic, flood, internal erosion, and other safety risks, which will help to prioritize dams for repair and funding, as well as for further analysis.
2. Developing an Oregon specific flood methodology for evaluating risks to dams, given new information about the role of atmospheric rivers, and also considering climate change in extreme rainfall events in the Pacific Northwest.
3. Contracting out for engineering analyses on dams that have been identified to be at risk of failure to determine specific actions needed to bring these dam back into a safe condition.

This POP also proposes a Resiliency and Public Information Coordinator position, who would provide coordination, planning, and outreach on earthquakes, drought, floods, climate change, and dam failures to better prepare for these risks, protect public safety, and improve the resiliency of our water resources. This position would both help respond during events as well work to prepare Oregonians for these hazards that threaten our water future by:
1. Working to develop, implement, test, and execute the Department’s continuity of operations plan for the Department per Statewide Policy 107-001-010.

2. Assisting in preparing for emergencies at dams, including conducting exercises, planning for, and coordinating responses to potential dam failures, as well as improving the Department’s ability to keep the public, including historically and currently underserved communities, informed both during drought emergencies and dam safety incidents.

3. Helping Oregon communities, including historically and currently underserved communities, be more prepared for natural hazards, such as droughts, engage in other planning efforts, and assist with implementation of the Governor’s Climate Executive Order.

This package proposes to add a Training and Safety Specialist position to assist with developing, implementing, and maintaining a comprehensive training and development program for managers and staff and support statewide initiatives. This position would also be dedicated to helping implement an agency safety program in order to comply with ORS 654.010, the Governor’s Executive Order on Employee Wellness, and Oregon Occupation Safety and Health Administration regulations. The position would conduct site analyses of all worksites, identification of workplace hazards, and employee training.

**Staffing Impact**

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<th>Position</th>
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</table>

**Quantifying Results**

Progress would be measured by monitoring: (1) the number of dams the receive full risk assessments; (2) a completed flood methodology for Oregon dams taking into account increased risks associated with climate change; (3) planning and engagement efforts around public safety, drought, and climate change; (4) community and staff emergency preparedness in regards to natural hazards and dam failures; and (5) implementation and compliance with ORS 654.010, the Governor’s Executive Order on Employee Wellness, and Oregon Occupation Safety and Health Administration regulations; and (6) improved understanding of impacts to historically and currently underserved communities in regards to...
potential dam failures, drought, floods, and climate change, and development of information to engage those communities in preparedness and response activities.

**Funding Source**

Total Fund Cost: $1,901,185

General Fund Cost:
- Staffing   $901,185
- Contracting
  - Flood Methodology   $400,000
  - Dam Analysis   $600,000
Policy Option Package #102: Strategic Modernization of IT Systems and Tools

Purpose

The Water Resources Department’s 2019-24 Strategic Plan identified modernization as a key agency priority. The use of information technology systems and tools is essential to the modernization of Department programs, processes, and services: this is demonstrated by many of the process improvements undertaken in recent years that have required support of IT staff. Data is foundational for the agency, water users, and the public when making critical decisions on water allocation, distribution, planning, use measurement and reporting. Functional and accessible data systems are essential to improving our efficiency and serving the public.

Staff, the Commission, and stakeholders identified many opportunities for improvement of the agency’s data systems and information technology. For example, field staff need tools to reduce the time associated with collecting and entering data, and to make data more accessible while they are on the go. A more user-friendly database would benefit reporters of water use data, and improvements could lead to increased efficiency for staff tasked with conducting quality control. The Water Rights Services Division would benefit from new and updated systems to maximize staff resources, improve processing times, and better serve the public. The Department’s data available for use by agency staff, or planning purposes is often not accessible without agency information technology staff or other staff collecting, processing, distilling, and then interpreting the data.

The Department’s records storage and retention needs comprehensive modernization. Currently, the Department’s approach to records retention is inconsistent and cumbersome due to the large amount of paper files. The Department has boxes of old files that need to be evaluated based on the Department’s records retention schedule and scanned into an electronic records system in a manner that is searchable and easily accessed for public records requests. Staff need training on how to access files that have been scanned into the records management system, and one person needs to be responsible for ensuring that files are scanned and organized correctly into the records management system and that records are managed systematically instead of ad-hoc. In addition, with files currently in different locations and boxes, locating records for public records requests is can be a challenge to manage in a timely manner.

This package requests resources necessary to support the State and Oregonians, including staff, in their efforts to plan for and manage water critical to Oregon’s communities, ecosystems, and economy. Without modernized data systems and tools, the Department may not be able to move forward in completing work critical to ensuring the security of our water resources.

This package is critical in ensuring that the agency can carry out its Strategic Plan including its priority to “Modernize our management of Oregon’s surface water and groundwater resources to meet instream and out-of-stream uses.” This package contributes to Integrated Water Resources Strategy recommended actions 1.B (Improve water resource data collection and monitoring), 1.C (Coordinate inter-agency data collection, processing, and use in decision-making), 2.B (Improve water-use measurement and reporting, and 13.B (Fund water resources management activities at state agencies).
BUDGET NARRATIVE

How Achieved

This package proposes to add a systems analyst and database administrator to assess and document business needs, analyze current data relationships, create technical and business documentation for project proposals, design data schemas for the agency, modernize our data entry capabilities, and monitor the health of current and future databases. These will be critical for the agency to support disaster recovery, information security, and expanded data sharing.

This package will also support a migration from our agency data center to the combined state data center where we can leverage improved system performance, monitoring, and security on a larger scale than we could otherwise achieve on our own, as well as prevent the need to replace the Department’s aging infrastructure.

This package will support Department efforts to create and maintain technological tools to modernize water right application processes in the Water Rights Services Division. The modernizations will improve processing times and overall efficiency for water rights transactions that over time will include permits, transfers, instream leases and transfers and other water use authorizations.

This package would also develop, implement, and maintain an agency wide records program and ensure compliance with public records retention law. The package would provide a staff position to update agency special retention schedules and input records into the electronic system to reduce storage space, increase ability to access records, and improve productivity and decision-making. The position would train staff on best practices and how to access the records.

Staffing Impact

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Quantifying Results

Progress will be measured by monitoring OWRD Key Performance Measurement #7, “Equipping Citizens with Information: Number of times water management-related data were accessed through the WRD’s internet site.”
This package will ensure that all new applications have adequate data design to facilitate future reporting needs and reduce the likelihood of costly redesigns; this includes overseeing the upgrade of database software and ensuring a seamless conversion. This package will improve the timeliness of application and database development by working closely with internal and external stakeholders. In addition, this package will allow the Department to use information technology to provide tools to staff that help them do their work, increase productivity and focus on more on the work needed to carry out the agency's mission. With the addition of this package, the Department expects more information to be made available online and in a format that is more user friendly. Likewise, the Department also expects to increase the ability for customers to submit data and payments on-line. This package will ensure that new data initiatives will be integrated with existing data, eliminating duplicate or conflicting information. Finally, this package will ensure that all data, access, and authorization is configured and maintained in a way that allows Department to comply with State Information Security Standards (ORS 182.122).

The Department would also see improvements in records retention practices, including:

- Regular trainings of staff on records retention practices and laws.
- A standardized method for entering and organizing documents in the records management database.
- A reduction in the number of paper records stored in agency offices.
- Improved access to electronic documents for staff.
- An updated records retention schedule that is understood and used by staff.
- More timely processing of public records.
- Increased compliance with records retention and destruction timelines.

**Funding Source**

Total Fund Costs: $818,781

- General Fund
  - Staffing $593,781
  - Services & Supplies
    - Data Center Charges $225,000
Policy Option Package #103: Fund Legal Expenses to Prevent Service Impacts

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 they are entitled, even if this means that all other holders of newer water rights must shut off. Individuals that disagree with a decision of the Department can seek administrative review or judicial review before a court. Moreover, increasing scarcity of the resource can lead to disputes between water users that can implicate Department programs and further drive up legal costs.

Water is key to the health of Oregon’s environment, economy, and local communities. As demand for this limited resource increases, so does the potential for conflict. Competing uses and limited supply mean there are often no easy water management decisions. Water scarcity and complex regulations require more creative water management solutions in order to meet demand. As some water management solutions test interpretations today’s water law, there has inevitably been an increase in the number of individuals seeking clarity via contested case proceedings or litigation. As a result, legal costs for the Department are steadily rising.

In 2019, the Legislature directed the Department in a budget note to report on litigation and contested cases. The report identified several cross-cutting issues that contribute to increased legal expenses including: (1) locating water for new uses is difficult due to many areas being fully appropriated; (2) water management is complicated by the fact that groundwater and surface water are connected; (3) as we shift from abundance to limited supply and demands for water continue, proposed new uses are often only approved with complicated conditions that are often negotiated through the contested case process; and (4) water laws are numerous, complex, and often built on case law making interpretation of the law all the more challenging. More details are included in the Department’s 2019 Budget Note Report on Contested Cases and Litigation available online.

Increased litigation has been a factor in recent years. Between July 2011 and June 2013, four new cases were filed. In contrast, thirteen new cases were filed between July 2013 and June 2015, while an additional twenty-seven new cases filed between July 2015 and June 2017. Between July 2017 and June 2019, twenty-one new cases were filed. Ten new cases were filed in the one year from July 2019 through June 2020. 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 expenses for attorney services have increased, far exceeding the Department’s base budget.

The Department has experienced significant increases in legal costs in recent years, particularly in the Klamath Basin, where water disputes continue. For three of the last four biennia, the Department has achieved savings administratively to address excess legal expenses, primarily by
**Budget Narrative**

holding vacant General Fund positions for extended periods of time. These extended vacancies result in diminished services in several agency programs, thereby impeding the Department’s ability to carry out its responsibilities. In 2017-2019, the Emergency Board provided additional General Fund resources to cover the Department’s legal expenses.

This package contributes to Integrated Water Resources Strategy recommended action 13.B (fund water resources management activities at state agencies), as the Department’s legal expenses shortfall takes funding away from programs and services when the Department is required to meet the costs through administrative savings.

Table 1. Water Resources Department Line Item Budget and Costs for Department of Justice Services through June 2020

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<th>Budget</th>
<th>Expenses</th>
<th>Shortfall</th>
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| 2018 Emergency Board | Added $1,352,526 | $1,769,218 | Reverted $418,936 General Fund from E-Board Not Expended |

| 2019-2021 LAB      | $952,038 | $1,811,884* | ($859,846*) *Projections as of the June 2020 invoice |

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. Since July 2011, sixty-six cases have been resolved. The courts have dismissed fifty-three of the sixty-six 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 nine of the cases and did not prevail on four.

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, unauthorized water use, or parties seeking to require the Department to take regulatory action, where it had not. Between January 2015 and June 2019, the Department issued just under 1,500 final orders, while in 2018 alone, watermasters and their assistants conducted over 7,500 regulatory actions to protect senior out-of-stream uses and instream water rights. While it is true the Department has seen an increase in legal costs, the reality is the number of agency actions disputed is low in comparison to the number of actions taken.

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, providing substantial due process and opportunities for review. Most water supplies have been fully allocated, making it difficult to approve new water right applications. For water right transactions, contested cases and legal proceedings typically result from: (1) the applicant disagrees with the proposed denial of the
application or protests the proposed conditions required for approval of an application; (2) an existing water right holder, typically in the area, disputes proposed approval of the application out of concerns that it will result in injury to their water use; (3) a non-applicant that is not a water right holder disputes the proposed approval; or (4) in some cases, both a non-applicant and an applicant protest a decision, often for different reasons.

The Department works with staff at the Department of Justice to manage legal expenditures. It is much more difficult to manage litigation costs than other expenses, particularly since the Department rarely initiates the litigation. Due to the shared nature of water as a finite public resource, the Department is often in the middle of disputes between parties that want different outcomes. Whether the Department acts, or declines to act, it may result in litigation by either, or both parties. To prevent or reduce litigation, the Department needs to proactively invest in data, innovation, collaboration, and planning, as well as the staff needed to understand and negotiate complex water issues to support identification and implementation of solutions – which are included in other budget packages. However, addressing deficiencies in the Department’s base budget for legal expenses is necessary in order to prevent impacts to other agency programs and services that are more proactive.

How Achieved

This package proposes to address the increased DOJ costs through an additional allocation of $800,000 in General Fund. 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.

Staffing Impact

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Quantifying Results

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

Total Fund Cost: $800,000

General Fund:
  Services & Supplies
    Attorney General $800,000
Policy Option Package #104: Maintain Water Right & Dam Safety Services

Purpose

Water is essential for industry, communities, agriculture, fisheries, and other uses of water. Generally, in order to use water in Oregon, one must obtain a water right from the Department. Changes in how a water right is used must also receive approval from the Department in order to ensure those changes will not injure other existing users. Since 2009, the Legislature has supported the processing of water rights transactions by requiring applicants to pay for about 50 percent of the cost of the Water Rights Services Division staff to process these transactions, while the other 50 percent are paid for by General Fund. The water right fee schedule is reviewed every four years and was last modified in 2017.

The Department is also responsible for ensuring the safety of dams in Oregon, by evaluating new storage projects for dam safety standards, as well as evaluating the condition of existing dams in Oregon. Annual dam safety fees cover about 35 percent of the dam safety program budget and have been included in the Department’s four-year fee schedule.

The current water right fee schedule provides revenues of about $2.4 million to fund 21.42 FTE (24 positions), of which 17.93 FTE are in the Water Right Services Division, as well as 0.5 FTE in the Groundwater Section of the Technical Services Division, 2.0 FTE are Water Right Data Techs in the Administrative Services Division, and 1.0 Field Water Right Processing position.

The current Dam Safety Annual Fee schedule provides revenues of about $300,000 which fund 0.95 FTE (2 positions) in the Dam Safety program.

Several factors can affect revenues upon which a fee schedule is based to fall short of projections. The number of water right applications and other transactions have been less than anticipated, and have declined instead of increasing, leading to reduced revenues to support positions. As a result, despite the fee increase in 2017, the Department has kept seven positions, three funded by general fund and four funded by water right fees, unfilled as natural vacancies have occurred in an effort to administratively manage the budget.

For the 2021-2025 fee schedule, based on estimates from the Department of Administrative Services, the Department anticipates that costs will increase by 17.39 percent over the next four years. Consistent with its past approach, the Department is proposing to increase fees by the anticipated increased cost – 17.39 percent. This proposed fee increase does not attempt to make up for lost revenue due to the downward trend in filing rates across most types of water right fee-related transactions. The fee increase will allow the Department to buy back 2.50 FTE of the 8.83 FTE that was included in the Department’s package 070 revenue shortfall package for water right fees.

Processing water right transactions in a timely manner is essential for farmers, cities, entities seeking to restore streamflows, and other water users. The Department implements several water rights programs that can be used to mitigate climate change impacts to ecosystems and communities. Ensuring dams meet safety standards is critical to protect public safety as well as the reliability of water supplies, particularly with increased droughts and floods as a result of a changing climate.
BUDGET NARRATIVE

This bill is consistent with the Integrated Water Resources Strategy recommended actions 7.C (Ensure public safety and dam safety), 10.G (Strengthen Oregon’s water quantity permitting program), and 13.B (Fund water resources management activities at state agencies). In addition, improving the resiliency of water infrastructure through the safety of dams is a component of the Department’s Executive Order 20-04 plan to address the impacts of climate change. This work cannot be done without dam safety engineering staff. One of the Department’s objectives in its 2019-2024 Strategic Plan is to increase protection of public safety and health through its dam safety program.

How Achieved

The fee increase package and associated legislation would provide funding for the dam safety program staff and associated services and supplies costs through the 2021-25 biennium. The package would also provide water right fee funding for 11.6 FTE of the water rights processing staff as well as 0.5 FTE in the Groundwater Section of the Technical Services Division, 2.0 FTE are Water Right Data Techs in the Administrative Services Division, and 1.0 Field Water Right Processing position through 2021-2025. The legislation would be effective July 1, 2021 – the start of the fiscal year.

The legislation and this packages includes one new fee. When applicants file a transfer application to add or change well locations, there is currently no additional fee for the groundwater review that the Department performs on each well to determine if the new location will cause injury to any existing water rights. This package proposes that each additional well location in the transfer application pay a fee of $410 to account for this review. For comparison, when a new water right application is filed for a new permit, groundwater applicants pay an additional $410 for each additional well after the first one to pay for a similar review.

Staffing Impact

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Quantifying Results

Increasing the fees to allow the Department to maintain 11.6 FTE of its water right fee funded processing staff will help the Department to provide timely service to the public. This will also contribute to the Department’s performance on Key Performance Measures #9 and 10 (related to
processing new water right applications and transfers of existing water rights), as well as 11 (related to the processing of Water Management and Conservation Plans), and 14 (which measure the quality of customer service and timeliness of processing). This package does not increase fees to maintain the Department’s staffing levels as provided in the 2019-21 Legislatively Adopted Budget within the Water Rights Services Division; however, it does preserve 12 of those positions. The fee increase will allow the Department to continue to serve farmers, water supply providers, entities seeking to restore streamflows, and others on their water supply proposals. The fee package will also assist the Department with staffing resources that will be critical in intended process improvement and modernization projects related to water right transaction processing as identified in the Department’s Policy Option Package 102 and as described in the 2019-2024 Strategic Plan priority to "Modernize our management of Oregon's surface water and groundwater resources to meet instream and out-of-stream uses."

In addition, the fee increase will allow the Department to maintain engineering expertise in the dam safety program, which helps the Department ensure timely review of new dam designs and the inspection of existing dams to protect public safety and water supplies.

**Funding Source**

Total Increase in Revenue: $564,594

Total Fund Costs: $526,959

Other Fund
- Staffing Costs $486,292
- Services & Supplies $40,667
Policy Option Package #105: Maintain Hydroelectric Services at Agencies

Purpose

The current revenue collected from hydroelectric project reauthorization fees are not enough to sustain agency hydroelectric programs at the Oregon Water Resources Department (OWRD), Oregon Department of Environmental Quality (ODEQ), and Oregon Department of Fish and Wildlife (ODFW). The Water Resources Department Hydroelectric Fund (ORS 536.015) receives and disburses fees to support the services provided by OWRD, ODFW, and ODEQ.

OWRD has coordinating responsibility for Oregon’s hydroelectric licensing and reauthorization programs. Program positions include 1.0 FTE program coordinator, 1.0 FTE project analyst, and 0.1 FTE manager. OWRD’s program is responsible for billing and collecting annual project fees, which are used to support hydroelectric programs at OWRD, ODEQ, and ODFW.

The main function of ODEQ’s hydroelectric program is to issue water quality certifications under Section 401 of the federal Clean Water Act for hydroelectric project. ODEQ’s Hydropower Program includes a 0.25 FTE manager, 1.0 FTE statewide program leader, 0.7 FTE regional staff, and 0.1 FTE administrative support.

The main function of ODFW’s hydroelectric program is to ensure that any water right permit, license, or certificate contains fish and wildlife protection and mitigation measures. ODFW’s program consists of 1.0 FTE manager, 1.0 FTE statewide program leader, 5.0 FTE regional hydropower coordinators and several implementation staff.

This package and associated legislation will change the fees associated with projects, making them easier to calculate. Currently, projects greater than 123.5 theoretical horsepower (THP) that have been relicensed pay an annual fee that is linked to inflation, by a Gross Domestic Product - Implicit Price Deflator and is adjusted each year based on the current value of $0.405/THP in 1998 dollars. The fee for relicensed projects in 2020 was $0.605/THP. The inflation factor is often less than the cost increases experienced by agencies. In addition, hydroelectric projects of the same size, that have not been relicensed, pay an annual fee of $0.28/THP, which has not been increased since 1999 and is not linked to inflation. Each of the three agencies have projected fiscal shortfalls in the coming biennia due to increased costs and legal expenses.

This package contributes to IWRS recommended action 13.B (Fund water resources management activities at state agencies).

How Achieved:

This package and associated legislation will equalize the fee rates for both relicensed projects and projects that have not been relicensed. Fees will be standardized for projects based on theoretical horsepower (THP). This will link all fees for projects greater than 123.5 THP to an inflation factor, with the fee starting at $0.687/THP in 2020 dollars. The bill will also standardize fees for small projects less than 15 THP at $15/year and for
projects greater than 15 THP and less than 123.5 THP at $50/year. Initially, the changes will require OWRD to update its forms, rules, and procedures, but over time it should result in billings being less complicated and able to be completed more efficiently.

This bill also allows the Hydroelectric Fee Review Panel under ORS 543.085 to convene in order to evaluate if fee rates for relicensed projects (set by an inflation factor) are adequately supporting programmatic needs. Currently, the Hydroelectric Fee Review Panel is mandated to meet every eight years. This bill will set the minimum meeting period at eight years, thus providing more flexibility for the panel to meet more frequently should fees need to be re-evaluated more often than eight years.

**Staffing Impact**

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**Quantifying Results**

The three agencies, OWRD, ODEQ and ODFW will continue to provide services to current and new hydroelectric project developers by participating in site visits, application and study reviews, consultation on mitigation plans, coordination with the Federal Energy Regulatory Commission and technical assistance for licensing, relicensing, and decommissioning of hydroelectric projects.

**Funding Source**

Total Increase in Revenue: $1,287,004

Transfers

- ODFW ($681,381)
- DEQ ($367,064)
Policy Option Package #106: Essential Agency Fiscal and Contracting Support

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 and procurement 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 address gaps in foundational staffing support.

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 or Other 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. However, by continuing to rely on cost-savings to pay for the position, this pulls resources from other programs in the agency.

Fiscal

The Department has seen an increase in the volume of accounting transactions as well an increased complexity in fiscal tracking and reporting. For example, Lottery Revenue Bond funding for the Water Resources Development Program requires specialized reporting and tracking. In addition, 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.

Administrative Services

The Administrative Services Division is currently faced with large gaps in the foundational support needed to execute critical tasks such as budget development and execution, contracting, and procurement, associated with the tracking and monitoring of investments.

This package contributes to the Integrated Water Resources Strategy recommended action 13.B (Fund water resources management activities at state agencies.)
BUDGET NARRATIVE

How Achieved

This package proposes to add one Fiscal Analyst 3 and secure funding for an existing Procurement and Contracts position that has no underlying funding source. These positions will provide critical administrative foundational support for the agency through budget development and execution, contracting, and procurement associated with the tracking and monitoring of increased investments in our programs as well as increased statewide reporting and tracking required by the Department of Administrative Services. The Fiscal Analyst position will assist the Division Administrator with budget related activities and complex analysis, assist fiscal staff in the updating and training of Department staff on fiscal policies, refine budget management reports which are used by senior management for decision making and focus on streamlining fiscal processes. 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.

The procurement position will continue to execute contracts consistent with state law and policy and assist the agency’s transition to the OregonBuys platform.

Staffing Impact

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Quantifying Results

The Department anticipates that the fiscal analyst position will free up a portion of the Division Administrator's time to focus on higher-level agency budget issues to ensure that our programs are operating in accordance with the budget. The Department anticipates that it will be better able to meet budget development deadlines, provide budget management reports to agency decision makers, track and report on investments in the agency's programs, respond to external and internal fiscal requests and ensure compliance with statewide fiscal policies with the added resource. In addition, the Department would expect to see increased oversight and accountability of fiscal transactions across the agency.

Recently the Department has been discussing the possibility of piloting a shared service budget shop with another agency. Should the fiscal analyst position be funded, it would allow for the additional resources to continue these discussions of combining budget shop resources.

In regards to procurement, other than the workload associated with the Department’s transition to the enterprise-wide OregonBuys procurement and contracting platform, there would be no change to the work performed by the staff working on procurement; however, the agency would have
funding to support the position and would not need to leave other positions open to achieve administrative savings to cover the position. This would allow the Department to fill positions in ASD that serve a critical function but have remained vacant pending a complete revenue analysis.

The work of the Procurement Specialist is measured by the number of contracts executed and managed annually.

**Funding Source**

Total Fund Costs: $409,113
General Fund
  Staffing $409,113
Policy Option Package #107: Protect Groundwater Supplies and Public Health

Purpose

Wells are inspected to ensure they meet well construction, repair, alteration, and abandonment standards as provided in rule, ensuring that wells are not a conduit for contamination, and that wells do not commingle multiple aquifers, which can waste groundwater and impact artesian pressure.

Currently there are five well inspectors responsible for inspecting water wells and monitoring wells in the 98,000 square miles and 36 counties of Oregon. Each year, approximately 3,000 new water wells and 400 new monitoring wells are drilled in Oregon. The well inspectors typically are able to inspect about 30% of the new water wells drilled each year, and about 35% percent of monitoring wells. Construction deficiencies are found in approximately 10-12% of inspected wells each year requiring repair or abandonment of the well.

For each well constructed, the driller submits a well log report that details information including location, owner, and the specifics of the well itself, such as depth, diameter, material encountered, seal interval, and how much water the well is estimated to produce. Well inspectors review the well construction report on wells they inspect; however, the remaining 70% of wells are not inspected, and many of those wells also do not have the well report reviewed for compliance with construction requirements.

The timely review of well reports and the identification and resolution of construction deficiencies could prevent contamination of Oregon’s groundwater aquifers, waste of groundwater, commingling of multiple aquifers, and enhance well constructor education to avoid future deficiencies. The timely review of well reports would increase the likelihood that any construction deficiencies identified on the well report are corrected by the well contractor and not left to the landowner or a community to finance an expensive repair in the future. Landowners often cannot determine whether a well is constructed properly because the infrastructure is underground. The Department believes that by reviewing all of the submitted well reports, and working with the drilling community in a cooperative manner to bring deficient wells into compliance, the groundwater resource, the public, and the drillers will all benefit from improved water and well construction quality.

In addition to the review and follow-up on well report issues, the Department is also proposing to establish a Water Well Abandonment, Repair, and Replacement Revolving Fund that will provide funding assistance to well owners to address legacy well issues that have the potential to impact public health and safety, as well as groundwater quality and quantity. Older wells are more commonly deficient, however, as long as the well continues to work, well owners – particularly domestic well owners – may not have the financial resources to address the deficiency and protect themselves, their families, renters, and Oregon water supplies for the economy, communities and ecosystems. The funding program will help Oregonians that rely on wells for drinking water purposes and experience groundwater level declines. The Department anticipates that this will help users that rely on wells for drinking water to adapt to climate change. Specifically, the new revolving fund will provide financial assistance for the permanent abandonment, repair, or replacement of wells that due to construction deficiencies may lead to groundwater level declines, serve
as a conduit for contamination or otherwise be a detriment of public health and safety; repair or replacement of wells for water for household purposes for lower income populations; or in areas of declining groundwater levels, where other sources of water are not feasible.

This package advances the Department’s Strategic Plan priority to “Modernize our management of Oregon’s surface water and groundwater resources to meet instream and out-of-stream uses” and the objective to “increase protection of public safety and health.” This package is consistent with the Integrated Water Resources Strategy recommended actions 7.A (Develop and Upgrade Water and Wastewater Infrastructure), 11.E (Develop Additional Groundwater Protections), and 12.A (Ensure the Safety of Oregon’s Drinking Water).

How Achieved

The Department proposes to hire two Natural Resource Specialist (NRS) 2 Well Construction Compliance Reviewers to evaluate water well and monitoring well reports for compliance with minimum construction requirements and one NRS 3 Well Construction Specialist to assist well constructors with statute and rule interpretation, to follow-up on required repairs, and to assist in the formal enforcement process when voluntary compliance cannot be achieved. A comprehensive and timely review of well reports will help to identify construction deficiencies immediately after they occur, be more protective of groundwater quality, and protect against aquifer commingling and waste. This timely review will also provide the Department with the opportunity to cooperatively work with well constructors and property owners to repair or decommission wells that do not meet minimum construction standards.

Staff will review incoming well reports for construction compliance at the time they are submitted. Staff will then coordinate with well constructors or landowners to address deficiencies that are found. The timely review of well reports and early identification of problems will provide training opportunities for well constructors who may have a misunderstanding of the well construction rules, as well as offer more protection to the groundwater resource by resolving construction problems before permanent harm is done or neighboring wells are negatively impacted.

The Water Well Abandonment, Repair, and Replacement Revolving Fund, is also proposed to be established. The Department proposes an initial $100,000 General Fund investment. This investment will be maximized by utilizing these funds on a cost-share basis to address as many well construction issues as possible. When considering where funds will be allocated, the Department proposes to focus spending on wells that will impact shared groundwater resources, where there is a pressing and emergency need for a well repair or replacement to provide drinking water, and that will help lower income Oregonians. The Department hopes that this initial investment will allow the Department to establish the program and further refine it to maximize benefits to Oregonians.
## Staffing Impact

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## Quantifying Results

Progress regarding the proposed Water Well Abandonment, Repair, and Replacement Revolving Fund will be evaluated based on the results of the assistance provided to property owners and the protection supplied to Oregon’s groundwater aquifer system.

The review of well construction reports, statute and rule interpretation, follow through on deficiency resolution, and timely enforcement, will protect property owners, well constructors, and the groundwater resource, by ensuring that water wells are constructed to standards, as well as by providing information and education to the drilling community to prevent future occurrences. Progress with the well report review program would be identified by monitoring the number of deficiencies discovered by well inspectors, as well as deficiencies detected by reviewers. In addition, deficiency types and voluntary compliance in resolving deficiencies will be tracked and will help inform the Department’s Well Construction and Compliance Section on needed training for licensed well constructors.

## Funding Source

Total Costs:  $675,413

General Fund Cost:
- Staffing  $575,413
- Well Abandonment Replacement Funds  $100,000
**Policy Option Package #108: Fund Planning, Feasibility Studies & Projects**

**Purpose**

Water is the foundation for our quality of life, economies, and ecosystems. Oregon communities need to plan for their water future in the midst of limited supply and a changing climate and then pursue strategies that meet their instream and out-of-stream water needs. Most of the surface water resources in Oregon are fully allocated during the summer months. Similarly, aquifers are becoming fully appropriated across the state. 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. In order to sustain current and future economic growth, while supporting environmental and public health, Oregonians must consider how they will meet their water needs now and into the future, for both instream and out-of-stream purposes. The Department supports solutions to meeting Oregon's water needs through partnering with basins and communities in planning for their water future as well as investing in efforts to evaluate and implement projects that address identified water needs.

A lack of community capacity, access to data, and limited funding have prevented individuals, organizations, and communities from taking the steps needed to identify, investigate, and implement innovative solutions to their water challenges. A key finding of Phase I of the 100-Year Water Vision was the need for community capacity in order for communities to plan for and secure their water future. The current capacity for communities to undertake this planning varies across the state and different communities need different support to help equip and empower them to prepare for their water future. The Department continues to work with four basins through place-based integrated water resources planning (place-based water planning). These basins are creating actionable plans to address their water needs. Two basins are expected to complete their plans in early to mid-2021, and the two other basins expect to complete their plans in 2023 and will require continued support from the Department for plan development in the 2021-2023 biennium. Other basins want to do place-based water planning or other forms of water planning to understand their water situation and identify ways to meet their instream and out-of-stream water needs. Recommended Action 9.A of the Integrated Water Resources Strategy is to “Continue to undertake place-based integrated water resources planning.” This work is also a priority under the Department's Strategic Plan, to work to secure Oregon's instream and out-of-stream water future by equipping basins to plan for their water future. Place-based planning promotes greater inclusion and participation in water planning, giving individuals within a basin a role in planning for their water future.

Once a basin, community, organization, or individual identifies potential solutions to pursue, frequently the next step is to determine the feasibility of that project. The costs of the numerous 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 address this challenge, the 2008 Oregon Legislature 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. 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. In addition, the Department’s Strategic Plan priority to “work to secure Oregon's instream and out-of-stream water future in the face of increased water scarcity” identifies “invest[ing] in Oregon's built and natural water infrastructure” as one objective.

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 for 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 fund water resources projects. The IWRS Recommended Action 13.E calls for the state to invest in implementation of water resource 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 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). In 2017 and 2019, the Legislature authorized an additional $15 million each biennium. Funding requests each year have ranged from $12 million to over $51 million. The Department has received feedback that project partners are not submitting applications because of a concern that the funding is so competitive. Likewise, applicants with bigger project funding needs are not submitting applications because of the limited funding available. We expect to see increased application numbers and requests moving forward with increased outreach about the funding opportunity and other improvements made as the result of a comprehensive program assessment conducted in 2019.

Investing in water planning and projects can also further Oregon’s efforts to adapt and mitigate the impacts of climate change on water supplies for instream and out-of-stream water needs. This package implements actions identified in the Department’s Executive Order 20-04 report.

How Achieved

If approved, this package would allow the Department to continue providing its current level of support to place-based planning, feasibility studies and water supply projects. Specifically, this package enables the agency to:

1. Continue to support place-based planning in four basins across Oregon, helping develop actionable, integrated plans that are locally led.
2. Implement improvements and other changes resulting from the planning assessment, including the evaluation of place-based planning, to improve the Department’s support of water planning.
3. Co-invest in studies that inform project proponents whether to pursue a water storage, reuse, or conservation project.
4. Co-invest in water supply projects that produce economic, environmental, and social/cultural public benefits.

This package proposes to make permanent a full time planning coordinator position that has been critical to supporting the place-based planning groups, and will continue to be needed as they develop a plan and shift to implementation. The position will also implement any recommendations that result from an evaluation of place-based water planning and an assessment underway to determine how the Department can best support water planning. In addition to place-based planning, planning coordinators also often provide other coordination or support to basins undertaking other types of water-related planning and that demand remains.

There is currently $400,000 General Fund in the Department's base budget for grant awards to 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 $500,000 in Lottery Revenue Bonds to provide grants to investigate the viability of these projects.

In addition, this request would recapitalize the Water Supply Development Account with $20 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.

Both competitive funding opportunities 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 25 percent cost-match.

**Staffing Impact**

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<th>Position</th>
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<th>Type</th>
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**Quantifying Results**

The Department seeks to partner with basins and communities across Oregon to help them secure their water future as Oregon faces the impacts of climate change and other causes of water shortages. In order to secure needed water supplies, communities must plan for the future, investigate which projects are feasible to meet the need, and then pursue implementation of those projects. Planning and the studies, projects, and other solutions resulting from planning will meet instream and out-of-stream water needs as well as further economic growth and healthy ecosystems by providing water to meet the needs of agriculture, fish and wildlife, industries, recreation, and municipalities. The NRS 4 Planning Coordinator will continue to support place-based water planning as well as implement improvements and other changes resulting from the
planning assessment. 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 solutions for a more secure water future in Oregon.

Quantifiable results include:

1. The development and approval of four place-based plans.
2. Completion of an assessment of water planning, including an evaluation of place-based planning with recommendations on how the Department should move forward to support water planning to meet water needs across Oregon.
3. The number of water solutions implemented from placed-based plans.
4. The number of studies of water conservation, reuse, or storage projects funded.
5. The number of water projects funded that produce economic, environmental and social/cultural public benefits.

Funding Source

Total Revenue: $20,895,669
Lottery Revenue Bonds $20,895,669

Total Fund Costs: $21,185,352
General Fund
  Staffing $289,683
Other Fund
  Services & Supplies
    Cost of Issuance $395,669
  Special Payments
    Feasibility Study Grants $500,000
    Water Projects Grants and Loans $20,000,000
Policy Option Package #109: Timely Water Management and Distribution

Purpose

Oregon’s growing population has increased the demand on water resources in the state, including the number of water rights, associated points of diversion, and the number of exempt and permitted wells. High-value crops of cannabis and hemp have increased the demand for irrigation water, spiking illegal uses from surface and groundwater sources across the state, and reducing water supplies for senior rights, including instream rights. The Endangered Species Act is driving changes to water management at basin-scales in the Willamette, Deschutes, Klamath, and Walla Walla Basins, placing significant new workload on staff for field data collection to support new water management practices. Climate change is further exacerbating challenges, with increased drought and floods already being observed in the state.

The Field Services Division, composed primarily of watermasters, assistant watermasters, hydrotechnicians, and well inspectors, is unable to provide timely and thorough complaint response, find and address illegal uses, increase water use measurement, and collect the necessary surface water and groundwater data to that helps inform agency decisions. It is difficult to attract qualified candidates for vacant positions in some geographic areas of the state or in basins with significant complexity. Some watermaster positions require job re-classification due to water management complexity, program size, and an increase in job responsibility. The Field Services Division lacks adequate management structure to support staff management, strategic planning, and project work in complex basins.

The Field Services Division contributes to Integrated Water Resources Strategy recommended actions 1.B (Improve water resources data collection and monitoring), 2.B (Improve water use measurement and reporting), 10.A (Improve Water-Use Efficiency and Water Conservation), 10.F (Provide an Adequate Presence in the Field), and 11.B (Develop Additional Instream Protections). Field staff are necessary to respond to water management needs in a changing climate, equitably allocate water resources, provide services to rural communities, and responsibly manage the resource as identified in the Department’s Strategic Plan.

How Achieved

This package proposes to add five new assistant watermasters, one for each region, to support water regulation and distribution, complaint response, and surface water and groundwater data collection. Additionally, this package re-classifies eight watermasters from NRS-3 to NRS-4 to align position descriptions with job responsibility and basin complexity, and aid in future recruitments. Lastly, the addition of one Deputy Division Administrator will help the Field Services Division continue to provide critical services to the public.
## Staffing Impact

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Quantifying Results

Complaints and illegal uses are tracked in the Field Activity Database (FAD). The FAD also tracks the beginning and end dates of complaints, illegal use issues, and other regulatory activities, allowing for quantification of time needed to address and resolve issues. Collection of surface water and groundwater data are tracked in the Hydrographics database, Water Information Systems by KISTERS (WISKI), and in the Groundwater Information System (GWIS). More thorough and timely training of new field staff will reduce the time needed for new staff to learn their jobs, and will improve metrics that are tracked in WISKI, GWIS, and the well inspection database. A Deputy Division Administrator will provide additional division management capacity, improve response times to issues in high-needs basins, and allow the Division Administrator more time for strategic planning, resource allocation and work-load leveling reorganizations within the division.

Funding Source

Total Fund Costs: $1,378,576

General Fund
  Staffing $1,375,458

Other Fund
  Staffing $3,118
Policy Option Package #110: Foundational Data for Groundwater Studies

Purpose

In some locations throughout the state, groundwater sources 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 supporting future economic development, population growth and natural systems.

The Department typically evaluates groundwater and surface water resources through cooperative, cost-share science programs with the United States 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. The Department will be able to conduct two studies at the same time, once the Department has sufficient funding to fill positions authorized by the legislature in 2019.

Essential components of a groundwater basin study include the collection and analysis of groundwater level data, geologic mapping, aquifer characterization, and development of a groundwater budget. This package continues work to further the state’s understanding of groundwater resources by investing in foundational data inputs for groundwater basin studies and Department decision making. Development of a groundwater budget and collection of baseline groundwater data are critical for the Department to understand whether a basin is overallocated and identify where groundwater studies need to be prioritized. Development of basin groundwater budgets will contribute vital information and provide an important head start to accelerate work needed for future, more comprehensive basin groundwater studies.

This package contributes to Integrated Water Resources Strategy recommended actions 1.A (Conduct additional groundwater investigations), 1.B (Improve water resources data collection and monitoring), 1.C (Coordinate Inter-Agency data collection, processing, and use in decisionmaking), 2.A (Regularly update long-term water demand forecasts), 2.B (Improve water use-measurement and reporting), 5.A (Support continued basin-scale climate change research efforts), and 11.E (Develop additional groundwater protections). This package directly address the Department’s priority to modernize its management of Oregon’s surface water and groundwater resources to meet instream and out-of-stream uses, as described in its 2019-24 Strategic Plan. In addition, increasing the Department’s understanding of groundwater supplies will help the state adapt to a changing climate and better able to consider the equity impacts of further groundwater allocation.
How Achieved

This package develops a groundwater budget for each basin in Oregon and expands baseline water level and water use data collection. This will shorten the timeframe for completion of future basin studies by two or more years, allow for further prioritization of the basins, and prevent additional overallocation. Specifically, the Department will:

1. Enter into a cooperative, cost-match agreement with the U.S. Geological Survey to produce and publish a groundwater budget for all major hydrologic basins in Oregon. The resulting data and report will include modern water budgets for each basin.
2. Contract for a peer-reviewed statewide consumptive water use (Statewide Evapotranspiration project) report summarizing historical irrigation water use for all irrigated fields and open water evaporation estimates for all major reservoirs for the period from 1984 – 2019. This information will be used to update the statewide crop evapotranspiration and net irrigation water requirement estimates for the climate period 1979 – present, which are a key part of each basin’s water budget.
3. Add staff that will prepare basins in Oregon for basin studies by establishing a comprehensive groundwater level monitoring network, and improving groundwater use estimates.

This package also includes a note regarding the $300,000 in Exempt Use Funds that the 2019 legislature directed to be used in the Walla Walla Basin Study. Due to the projected budget shortfall, the Department will not be asking for backfill for the $300,000 at this time.

Staffing Impact

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Quantifying Results

Progress will be measured by: (1) Completion of published report(s) quantifying basin groundwater recharge for each basin in Oregon; (2) Completion of statewide maps and datasets quantifying evapotranspiration for each basin in Oregon; (3) increased collection and processing of baseline groundwater level and use data; (4) reduction in basin study time and costs; and (5) updated basin prioritization of areas requiring further management.

Funding Source

Total Fund Costs: $2,001,470

- General Fund
  - Staffing $1,401,470
  - Contracting
    - Basin Recharge Study $300,000 per biennium for three biennia (assuming USGS cost share)
    - Statewide ET project $300,000 for one biennium
Policy Option Package #111: Complex Water Issues: Deschutes & Other Basins

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, shore up underserved community’s water systems, and the listing of species under the Endangered Species Act.

In recent years, the Department has sought to be more inclusive in water management and planning efforts across the state. By having staff capacity to work with various interests and individuals that are affected by water management decisions, the Department is able to make decisions that are informed by a broader spectrum of interests. 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 areas across the state. As discussions progress, it is necessary for the Department to have a staff person involved that can help keep the agency’s internal team organized and productive, and effectively communicate the State’s positions to parties. This position will serve a critical role to coordinate and support the agency’s 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.

The Deschutes basin in particular has signaled an interest in having the Department work to resolve water challenges and has been working diligently in the basin to form a collaborative structure to support future efforts to implement solutions. Other basins in the state such as the Walla Walla, Umatilla Indian Water Rights Settlement, Klamath Basin, and the Harney Basins may also benefit from additional support.

This package advances the Department’s Strategic Plan priority to “work to secure Oregon’s instream and out-of-stream water future in the face of increased water scarcity,” and more specifically the objective to “equip basins to plan for their water future.” In addition, it is consistent with the Integrated Water Resources Strategy’s Recommended Actions 9.B (Coordinate implementation of existing natural resource plans), 9.C (Partner with federal agencies, tribes, and neighboring states in long-term water resources management), and 13.C (Invest in local or regional water planning efforts). This package will advance actions identified in the Governor’s Climate Executive Order 20-04 report to implement water supply solutions. Climate change will pose challenges for our water supplies into the future; this package supports efforts to implement solutions to current and future water supply challenges.
BUDGET NARRATIVE

How Achieved

The Department proposes to add one position that would serve as a point of coordination for the Department as it works with parties involved in complex water management issues to assist in developing solutions, with work in the Deschutes Basin being a priority. This position would be responsible for helping the agency to provide timely and accurate information to the public and parties to ensure transparency and build trust necessary for building consensus. This position would also brief and advise the Director on progress made, solutions being proposed, and research and resolve policy issues. Ultimately, this position would help stakeholders and the interested public in the Deschutes and other basins 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

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Quantifying Results

Progress would be identified by monitoring: (1) the resolution 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. More specifically, the Department anticipates that this will result in: (a) increased understanding and clarity for the basin on existing OWRD statutes, rules, procedures, data, science, and water management in the context of basin-specific issues and potential solutions; (b) implementation of solutions more timely to address irrigation, fish and wildlife, and community/city water needs; (c) development of new or refinement of existing water management tools; (d) coordination with other state and federal agencies regarding water management issues in the basin and steps to resolve those issues; and (e) potential avoidance or resolution of litigation.

Funding Source

Total Fund Cost: $422,190

General Fund
  - Staffing $222,190
  - Contracting Facilitation $200,000
BUDGET NARRATIVE

Policy Option Package #112: Harney Conservation Reserve Enhancement Program

Purpose

Preliminary results from the Harney Basin Groundwater Study show that groundwater is being used faster than it can be replenished, meaning that the current volume of groundwater pumped each year is unsustainable. Nearly all the rural residents in Harney County rely on groundwater to supply their drinking water. Declining groundwater levels can impact domestic well owners who may not be able to afford to deepen their wells, potentially leading to water insecurity. According to an OSU survey of domestic well owners in the Harney Basin, approximately nine percent of rural residents reported that they do not currently have enough water to meet their drinking water needs. Although this cannot be correlated to groundwater level declines, there are concerns about near-term and long-term water security for rural residents. Declining water levels can also impact groundwater dependent ecosystems in the basin and decrease groundwater contributions to streams, springs, and wetlands. In addition, pumping beyond sustainable rates can increase the costs of pumping groundwater, and jeopardizes the long-term sustainability of agriculture in the region.

Local and statewide stakeholders have identified the need to reduce groundwater use in the basin and are exploring voluntary mechanisms to help water users reduce their groundwater use, including opportunities to partner with federal agencies. This package will support implementation and monitoring of projects that reduce groundwater use in order to help the Harney basin achieve reasonably stable groundwater levels. This includes support for implementation of a Conservation Reserve Enhancement Program (CREP) that will provide incentives for voluntary non-use of groundwater either on a temporary or permanent basis. CREP is part of the USDA Conservation Reserve Program (CRP). CRP is a federally funded voluntary program that contracts with agricultural producers to provide specific conservation benefits. This program has been used in other states to address groundwater declines caused by over pumping. With CREP, high-priority conservation goals are identified by the state, and then federal funds are supplemented with non-federal funds to achieve those goals. USDA will provide up to 80% of the funding with a 20% non-federal cost-share.

This package will help the Department move forward objectives under its Strategic Plan including advancing responsible groundwater and surface water management. This package contributes to Integrated Water Resources Strategy recommended actions 2.B (Improve water use-measurement and reporting), 10.A (Improve water-use efficiency and water conservation), 10.D (Reach environmental outcomes with non-regulatory alternatives, 11.E (Develop Additional Groundwater Protections), and 13.B (Fund water resources management activities at state agencies).

How Achieved

The Department seeks to support local solutions to water management challenges, particularly as areas across the state adapt to limited water supplies and a changing climate. This package proposes a $500,000 general fund investment to match federal funds to enroll lands into the Conservation Reserve Enhancement Program to reduce the use of groundwater in the Harney Basin.
BUDGET NARRATIVE

Additionally, a field hydrologist position will support implementation and monitoring of groundwater management activities to ensure that water savings are achieved. This position has been locally requested to support implementation of a CREP for groundwater irrigated lands in the area as well as other projects needed to reduce groundwater use and ensure that water savings are monitored. This position will assess groundwater rights on parcels interested in participating in the CREP program to ensure eligibility. The position will monitor and estimate groundwater use using various remote sensing and field methods, and collect groundwater levels, in order to assess the effectiveness of a CREP program, as well as other potential future groundwater management activities in the region. This position will also support actions taken by the Watermaster to ensure compliance with voluntary and mandated groundwater reduction programs.

Staffing Impact

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Quantifying Results

Long-term progress will be measured by data gathered to ensure that voluntary and department-led groundwater management programs result in less groundwater pumped from the basin. The Department will collect data to document that groundwater level decline reduction targets are met. In addition, the Department anticipates that involvement in the CREP will ease the economic impact of the reduction in groundwater pumping on this rural community.

Funding Source

Total Fund Costs: $706,607
- General Fund
  - Staffing $206,607
  - Contracting
    - Federal Cost Share $500,000
Policy Option Package #113: Willamette Basin Reallocation Pre-implementation

Purpose

Thirteen federal reservoirs in the Willamette Basin, totaling 1.6 million acre feet of water, are undergoing a federal reallocation of the stored water, adding municipal & industrial and fish & wildlife to the currently authorized use of irrigation. This U.S. Army Corps of Engineers reallocation effort, which began in the 1990s, is nearing completion with an anticipated adoption by Congress of the reallocation and reservoir management recommendations.

Today, water supply management below the Willamette reservoirs is fairly straightforward because the federal reservoirs release unallocated water that largely satisfy downstream demands and contribute to current fish and wildlife biological opinion targets. This will change with the reallocation of the reservoir water and issuance of new water rights. Following reallocation implementation, it will be necessary to quantify and track both live-flow and stored-water releases for new instream rights for fish and wildlife and out-of-stream rights for municipal and agriculture users, and manage who gets access to water during times of shortage. This complexity is compounded by the length of the Willamette River and tributaries (roughly 200 miles from the uppermost reservoir to the confluence with the Columbia River), the significant number of water rights, and that there are 13 reservoirs to manage.

This package advances the Department’s Strategic Plan priority to “work to secure Oregon’s instream and out-of-stream water future in the face of increased water scarcity,” and more specifically the objective to “equip basins to plan for their water future.” In addition, it is consistent with the Integrated Water Resources Strategy’s Recommended Actions 9.B (Coordinate implementation of existing natural resource plans), 9.C (Partner with federal agencies, tribes, and neighboring states in long-term water resources management), 10.B (Improve access to built storage), 11.B (Develop additional instream protections), and 13.C (Invest in local or regional water planning efforts). This package will advance actions identified in the Department’s Climate Executive Order 20-04 report to implement water supply solutions. Climate change will pose challenges for our water supplies into the future; this package supports efforts to implement solutions to current and future water supply challenges.

How Achieved

Currently all water in the 13 Willamette Valley Project reservoirs is designated for irrigation use through two certificates of water right owned by the U.S. Bureau of Reclamation. A reallocation study conducted by the U.S. Army Corps of Engineers and completed late in 2019 proposes to reallocate the stored water to three uses: agricultural irrigation, municipal and industrial, and fish and wildlife. Following adoption of the Corps’ recommendation by Congress, there are several very large tasks that must be completed prior to managing the reservoirs under the new reallocation scheme. These tasks constitute the pre-implementation of the Willamette Basin reallocation of stored water. The Department needs to secure statutory authority to change (transfer) the character of use of stored water and the two water right certificates in Reclamation’s name must be transferred to expand the uses on the certificates to those described above. In addition, the State of Oregon must enter into a contract with the reservoir owner or the state is statutorily precluded from protecting the instream flow releases. Concurrent with this legislative process
and contract development, Department staff will be working with the Oregon Department of Fish and Wildlife (ODFW) to develop and quantify the appropriate target fish flows below the reservoirs; that is, how much water is necessary and at what time of year and over what reach of stream. This work will inform the potentially most difficult task, converting the twenty-four minimum perennial streamflows within the Willamette Basin into instream water rights. At the conclusion of these tasks, full reallocation of the reservoir water will be realized, and it will be the Department Watermaster’s responsibility to shepherd the stored water release downstream to the appropriate users.

The Department and ODFW propose to enter into a multi-year effort that will require several staff positions to coordinate basin activities, facilitate meetings, provide technical analyses, develop instream flow targets, manage the contested case process for minimum perennial flow conversions, and shepherd any necessary law changes. The project will undertake a significant stakeholder engagement and outreach program, so that the public is kept apprised and they have input on the planned changes in reservoir and streamflow management in the basin. The request is for one NRS 5 Willamette Basin Coordinator to undertake the coordination identified above and $100,000 of General Fund dollars for facilitation and public outreach.

Without funding, Oregon agencies will not be able to timely implement the Willamette Basin Reservoir Reallocation to provide stored water supplies for municipal and industrial water users, secure water for agriculture irrigation, and provide for instream flow protections. Additionally, without implementation, the performance standards identified in the National Marine Fisheries Services’ Biological Opinion tied to this reallocation will not be met. This could limit all users (both instream and out of stream) access to stored water, and result in non-compliance with the Biological Opinion increasing the likelihood of litigation.

**Staffing Impact**

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**Quantifying Results**

This policy option package will allow the Department to pursue the pre-implementation tasks of: the conversion of two storage water rights to expanded uses; contracting with the owner of the federal reservoirs; developing target flows below the reservoirs; and mapping out the process for conversion of minimum flows to instream water rights.

This policy option package is foundational to the full implementation of the Willamette Basin Reservoir Reallocation, that will ultimately contribute to Key Performance Measures (KPMs):

1. KPM 1 Flow Restoration: Percent of watersheds that need flow restoration for fish that had a significant quantity of water put instream through OWRD administrative programs.
2. KPM 2 Protection of Instream Water Rights: Ratio of regulatory orders issued to protect senior water rights when the senior water right is an instream water right to all regulatory orders issued to protect senior water rights.

3. KPM 3 Monitor Compliance: Percent of total regulatory actions that found water right holders in compliance with water right and regulations.

4. KPM 4 Streamflow Gaging: Percent change from 2001 in the number of WRD operated or assisted gaging stations.

5. KPM 13 Increase in Water Use Reporting: The percent of water users with an annual water-use reporting requirement that have submitted their reports to the Department.

Funding Source

Total Fund Costs: $321,040

General Fund
  Staffing $221,040
  Contracting
    Facilitation & Support $100,000
Policy Option Package #114: Complying with Internal Audit Requirement

Purpose

The Department of Administrative Services requires each agency to conduct and maintain internal auditing functions. 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 2021, while exploring options for meeting this requirement.

An internal audit function could help the agency identify opportunities for improvement to its agency programs and processes. The Department’s core values are integrity, technical excellence, forward-looking, service, and teamwork. These core values are a lens in which we seek to carry out our work and demonstrate the Department’s desire to foster a culture of continuous improvement. The Department’s 2019-2024 Strategic Plan priorities include to “foster a forward-looking team dedicated to serving Oregonians with integrity and excellence” and to “modernize our management of Oregon’s surface water and groundwater resources to meet instream and out-of-stream uses.” These priorities would benefit from having staff dedicated to evaluating the Department’s practices and how it can better do its work to modernize our processes and conduct our work in a manner that reflects our core values.

How Achieved

The Department is proposing to add one internal auditor position to allow WRD to meet the Internal Auditing Requirement, which will 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 Oregon Watershed Enhancement Board (OWEB) has expressed an interest in sharing this position. The Department proposes to enter into a shared-services agreement with another agency, currently anticipated to be OWEB.

Staffing Impact

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Quantifying Results

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. Progress will be measured by monitoring the completion of internal agency audits. Thereafter, progress would be monitored based on the implementation of actions identified in audits, as well as the completion of additional focused audits over time.
Funding Source

Total Other Fund Revenue:  $112,011

Total Fund Costs:  $224,022
- General Fund
  - Staffing  $112,011
- Other Fund
  - Staffing  $112,011