

2017-19 POLICY OPTION PACKAGES



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OREGON DEPT OF FISH & WILDLIFE

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Administrative – New

115 – OregonBuys e-Procurement System (\$100,000 Other Funds-License)

PROBLEM OR ISSUE: The Oregon Department of Fish and Wildlife (ODFW) utilizes a paper-intensive purchasing process including the exchange of manual purchase orders. Improvements have been made to the accounts payable portion of the purchasing process, however the ability to track purchases from inception through invoice matching isn't available. The current purchasing process is cumbersome for ODFW staff, requiring navigation through multiple spreadsheets, and use of separate systems for internal approvals by procurement and information systems staff, and managers. ODFW also lacks the ability to integrate its purchasing with the Oregon Procurement Information Network (ORPIN), which staff use to manage and report contracts.

To maintain controls, assure the purchase process meets statutory and rule requirements, and improve the present process, ODFW is participating in a statewide effort to develop an enterprise procurement system that will interface with the state's financial system. The specifications for this new system will fully automate the purchasing process saving valuable staff time and resources. This policy option package provides for implementation of the awarded enterprise solution at ODFW.

PROPOSED SOLUTION: The anticipated enterprise-wide electronic procurement system will include functionality for catalog ordering, electronic approvals, custom purchase order issuance, and interfacing with the Office of Business Inclusion and Diversity tracking database. It also provides the functionality to automate workflows, matching and payments, as well as, provide for statewide reporting. The new system may be hosted by the supplier and will be easy to use by field staff, reducing the need for ODFW staff to manually enter information into the financial system. While a majority of the funding for the system will be generated through savings, a portion of the funding for implementation will be used to contract with a project manager and for quality assurance oversight to ensure proper contract administration and successful implementation. Quality assurance services are required by the Oregon Chief Information Officer to ensure the success of larger projects throughout their implementation process.

STAFFING IMPACT: None.

134 – Transparency and Citizen Advocate (\$300,000 General Fund)

PROBLEM OR ISSUE: In addition to managing fish and wildlife populations across Oregon, ODFW engages in many important activities to support Oregonians as directed by statute. The agency recognizes the importance of these activities in the service of all Oregonians and currently re-allocates staff time away from activities directly related to our mission in order to fulfil these needs.

Environmental justice is equal protection from environmental and health hazards, and meaningful public participation in decisions that affect the environment in which people live, work, learn, practice spirituality and play. "Environmental justice communities" include minority and low-income communities, tribal

communities, and other communities traditionally underrepresented in public processes. The Environmental Justice Task Force was created by the Legislature to help protect Oregonians from disproportionate environmental impacts on minority and low-income populations. ODFW is a Citizen Advocate for the Environmental Justice Task Force to provide all citizens knowledge and access to improve decisions that affect environment and the health of all Oregonians.

The Oregon Sustainability Board encourages activities that best sustain, protect and enhance the environment, economy and community for the present and future benefit of Oregonians. The legislation created the OSB and established legislative goals for state government around sustainability. In order to implement the act, Governor Kulongoski issued Executive Order 03-03 along with a letter of suggested agency actions, which directed the OSB to oversee the process for carrying out the act. The Executive Order specifically requests that OSB oversee development of sustainability plans by twenty state agencies. A January 2013 memo from the Office of the Governor directed the Oregon Sustainability Board to oversee agency implementation of sustainability related executive orders. ODFW is a member of the Interagency Sustainability Coordinators Network.

As with all public agencies, ODFW is required by the Freedom of Information Act to provide information to the public upon request. ODFW receives over 100 requests for public records each year. Each request requires many hours of staff time to assess and process. While the agency is reimbursed for costs associated with providing documents, the cost of processing requests far exceeds the reimbursement by requesters.

PROPOSED SOLUTION: In an effort to align ODFW activities with revenue, this policy option package requests funding for, and the establishment of, a position to be the agency's Transparency and Citizen Advocate. This position will serve as a Citizen Advocate for the Environmental Justice Task Force, represent the agency on the Interagency Sustainability Coordinators Network and receive and process Freedom of Information Act public records requests for the agency.

STAFFING IMPACT: Establish one permanent full-time Policy Analyst 3 position in the Director's Office.

Capital Improvement – New

146 – Headquarters Roof Replacement (\$520,000 Other Fund-Ending Fund Balance)

PROBLEM OR ISSUE: The Oregon Department of Fish and Wildlife’s (ODFW) Headquarters roof requires a complete replacement. The roof was installed when the building was originally constructed in 1999. Although greater longevity was expected when ODFW purchased the building in 2012, recent tests of the condition of the current roofing materials have revealed that the layers of the roof were not properly adhered together when it was built. Because of this and the type of roof installed, the roof has reached the end of its useful life. Regular maintenance and some larger remediation projects have been performed, most recently roof patching and sealing in early 2016, to attempt to prolong the roof’s life. In February 2016 ODFW hired a roofing consultant to perform a full assessment of the condition of the roof. Due to the age of the roof and level of deterioration of its materials, the consultant confirmed that the roof is at a failure point. The consultant’s findings stated that continuing to defer the replacement of the roof is not a viable option. Consequences of deferring the work would result in more rotted wood, thereby increasing the need for replacement of the existing roof deck boards. This would make it more expensive for ODFW in the long-term due to the need for a larger volume of materials. Other deferred replacement costs include anticipated leak clean-up costs, lost productivity of the employees affected by the leaks, and staff time to coordinate and manage the clean-up and repair efforts. Due to the severity of leaks over the past year, ODFW also has safety concerns. A sizeable leak in the Department’s Wildlife Division in December 2015 forced the relocation of two individuals and resulted in a damaged facility and the need to devote several thousands of dollars to clean-up and construction costs. The ODFW Headquarters building needs a new roof to ensure that the staff located at this facility has a place to work to continue to be successful in the management of Oregon’s natural resources.

PROPOSED SOLUTION: This policy option package request is to replace the existing roofing system on ODFW’s Headquarters building with a new structure that meets current industry standards and building code requirements.

Capital Construction – New

126 – Coastal Resilience Facility Newport (\$10,000,000 General Fund)

PROBLEM OR ISSUE: ODFW’s Newport facility is the hub for ODFW’s presence on the coast, and the center of the sport and commercial fisheries industries. The existing facilities serve the public for customer service and license sales, function as office space for research and field staff, laboratory space for sample processing and meeting space for internal and public meetings. Approximately 100 staff members are spread across three separate locations in Newport, two of which are owned by ODFW (the third is leased), and all of which are in need of significant repair, one of which is at the end of its realistic lifespan. Two of the buildings are housing staff significantly beyond their original design capacity; the main building was designed to house 26 staff and now houses over 40. Further, the building that ODFW leases to house overflow staff is the single most expensive lease held by the agency. Most of ODFW’s Newport staff are in the tsunami inundation zone in a building that is expected to collapse during an earthquake and any subsequent tsunami. The main office building, located at the Hatfield Marine Science Center, has been professionally certified as vulnerable to subsidence and failure during seismic events and is prohibitively expensive to reinforce. Few State of Oregon facilities are so critical to the rural coastal economy and are in such a vulnerable tsunami inundation location. Across the coast, the state of Oregon is strategically developing plans to improve coastal community resilience. Enhancement of ODFW’s Newport facilities creates an opportunity to demonstrate our commitment to resilience and build a facility that can serve ODFW, the local community and the State. Therefore, replacement of ODFW’s Newport facilities should be a high priority for Oregon.

Coastal tsunami resilience in the South Beach area is a significant vulnerability. This policy option package would shift ODFW from contributing to this vulnerability to instead being a key element of coastal resilience for South Beach and the Newport community at large. By building a new facility outside the tsunami zone, but close to the Hatfield Marine Science Center, ODFW can remain a meaningful partner, maintain productive relationships with Hatfield Marine Science Center researchers, train students, and create a building that can serve as an emergency response facility for the growing South Beach community where it is greatly needed. Currently, there is very limited infrastructure in South Beach outside of the tsunami zone; the Oregon Coast Community College is the only facility large enough to serve the community during a large-scale emergency, such as a tsunami. ODFW proposes consideration of a multi-purpose building that can serve the South Beach community, adjacent to the Oregon Coast Community College and Newport airport with key emergency response infrastructure. With ODFW trained professionals on-site, the South Beach community will have a locus for emergency response which is currently all located north of the Yaquina Bay Bridge, which is expected to be compromised or collapsed in a serious seismic/tsunami event.

Oregon State University (OSU) and the State of Oregon have developed and invested financially in a concept to further turn Newport into a marine studies center for the nation and the world, and ODFW is a vital component of this concept. The center is expected to fuel the coastal economy in Oregon and

beyond with much-needed solutions for today's most troubling marine science problems. The demonstrated leadership of OSU on applied research questions makes Hatfield Marine Science Center an obvious and well-suited place for Oregon to make this investment. The success of the new program, called the Marine Studies Initiative, is predicated on the multi-institutional nature of Hatfield Marine Science Center, and the blend of government and academic partners which provide a unique environment for creating the solutions needed for tomorrow. ODFW is a key component of this synergy.

Currently, the status of our Newport facilities presents a significant barrier to ODFW providing meaningful partnership to Hatfield Marine Science Center, Marine Studies Initiative and other educational and governmental partners. Solving these infrastructure and facility issues first, with an eye on improving coastal resilience in the process, will help ensure Oregon is a full partner in developing a world-class marine science destination at Newport. Once suitably housed in Newport, ODFW will have the solid footing to strengthen our partnerships with OSU, Hatfield Marine Science Center, and other government agencies at HMSC. This will include hosting students, sponsoring and collaborating on research, teaching and other partnership activities. The future of Marine Studies Initiative and ODFW are intertwined; both dependent on vibrant collaboration to solve marine resource issues and invest in the education of future scientists and decision makers.

A new ODFW Newport facility (a "Coastal Resilience Facility") will serve Hatfield Marine Science Center and the new Marine Studies Initiative. It will serve our co-manager partners, students, and stakeholders by providing more efficient and expanded services. It will serve our local governments by providing a tsunami and emergency response center in the South Beach community. Finally, it will serve the state in establishing increased Cascadia earthquake and tsunami resilience in State of Oregon government facilities. The lifespan of the current ODFW Newport facility is quickly coming to an end. The repairs needed for it to remain in service will cost millions of dollars. The momentum and investment in the Hatfield Marine Science Center and Marine Studies Initiative programs will be leveraged by state investment in ODFW facilities, resulting in the shared success of all.

PROPOSED SOLUTION: The multi-use facility proposed in this policy option package will serve the Newport and Hatfield Marine Science Center community in three ways: 1) replace ODFW's crumbling facilities and consolidate staff into a single location to provide the best service possible to our stakeholders, customers, and collaborators; 2) provide an emergency response center for Cascadia earthquake and tsunami preparedness in Newport's South Beach area, including a response center for the Port of Newport, Hatfield Marine Science Center and Oregon Coast Aquarium essential staff in the inundation zone; and 3) provide an anchor for Hatfield Marine Science Center and the Newport community outside of the inundation zone for community gatherings and ocean-related events. This facility would be a close partner with the facilities that are planned for the Marine Studies Initiative. With a world-class marine education center, emergency response center, community meeting venue and trainee center, this facility will complement and sustain the State of Oregon's integration with the Marine Studies Initiative and provide global leadership in innovative marine science, management and student training. Current ODFW Newport facilities are extremely limited for conducting significant public outreach events, such as crabbing, clamming, and angling workshops; the proposed facility would provide outdoor space to host fish and wildlife workshops and to better engage youth in outdoor activities.

STAFFING IMPACT: None.

136 – Deferred Maintenance (\$10,000,000 General Fund)

PROBLEM OR ISSUE: The Oregon Department of Fish and Wildlife capital assets require repair and replacement of critical elements that are essential for maintaining and enhancing the natural resources throughout Oregon. Many of the state’s facilities are in need of large investments to ensure those facilities are able to maintain current operation goals. Over the years many of the agencies offices, storage buildings, maintenance shops, public facilities, and road systems have fallen into varying states of disrepair. The Secretary of State recognized in its audit that in 2005 ODFW reported an estimated \$94 million backlog of maintenance needs at facilities across the agency, including hatcheries, offices and Wildlife Areas. At the time of the audit less than \$1 million had been spent on maintenance annually in the ensuing 10 years due to lack of sufficient funding. Continuing to defer maintenance due to lack of funding will be more expensive for the agency in the long-term and costly for Oregonians in lost benefits and opportunities.

PROPOSED SOLUTION: This policy option package request is the genesis of the agency’s strategy to repair or replace facility infrastructure that is essential for the agency to be successful in the management of Oregon’s natural resources. This will be the first phase of a multi-biennial plan to rehabilitate the agency’s capital assets. Two strategies will be used to resolve the outstanding maintenance issues as identified in the Secretary of State’s January 2016 audit report. For structures that do not require replacement, they will be repaired to meet current standards of construction and maximize their value to the associated facility campus. For all other structures, they will be demolished and replaced with new structures that meet current program needs and building code requirements. When the cost to repair a structure is in the same monetary range as replacement, the asset will be replaced to allow for gains in efficiency and longevity of the asset. In all cases, the strategy will look at increasing facility capacity to allow for future growth of program goals. Some projects that could be addressed with this POP are as follows:

- New Weir and Passage at the Three Rivers Trap (Cedar Creek Hatchery): \$1,500,000
- Replacement Hatchery Building (Alsea Hatchery): \$1,500,000
- Replacement Hatchery Building (Trask Hatchery): \$1,750,000
- Statewide Underground Storage Fuel Tank Removal: \$300,000
- Residence Replacement (Rock Creek Hatchery): \$250,000
- Two Residence Replacements (Sandy Hatchery): \$750,000
- Raceway Repairs (Nehalem Hatchery): \$1,000,000
- Raceway Replacement (Wallowa Hatchery): \$250,000
- Water Treatment System (Wallowa Hatchery): \$400,000
- Variable Frequency Driver Control Pump Modification (Elk River & Salmon River Hatchery): \$300,000
- Raceway Repair (Klamath Hatchery): \$500,000
- Statewide Raceway Handrail Replacement Phase 1: \$1,000,000
- Spring Collection Box Replacement & Waterline Replacement (Oak Springs Hatchery): \$700,000
- Residence Replacement (Elk River Hatchery): \$250,000

Energy Development – Continuation

107 – Energy Development and Transmission (\$70,000 General Fund; \$210,000 Other Funds Obligated)

PROBLEM OR ISSUE: Since Congress passed the 2005 Energy Policy Act, the workload associated with energy projects (wind, liquefied natural gas terminals and pipelines, coal bed and sandstone methane wells, geothermal wells, biodiesel plants, an integrated coal gasification plant, and electric transmission lines) has increased dramatically. Idaho Power Company proposes to construct a 500 kilovolt, electrical transmission line from Boardman, Oregon, to Hemingway Butte, Idaho.

The project is currently going through the state of Oregon’s Energy Facility Siting Council and the federal National Environmental Policy Act processes. The Oregon Department of Energy estimates the two siting processes will take several more years to complete.

Due to the geographical distance transected by the project significant staff resources will be required to coordinate ODFW’s input among multiple fish and wildlife districts. The position was approved in the 2015-17 budget. Since work on this project continues, ODFW is requesting to extend the position into the 2017-19 biennium.

PROPOSED SOLUTION: ODFW worked closely with Oregon Department of Energy and Idaho Power Company to develop agreements that provide funding for an electric transmission line project. In 2015-17, Idaho Power Company provided an estimated \$277,374 to fund one Natural Resource Specialist 3 position within ODFW to work directly on the proposed electric transmission line to span from Boardman, Oregon, to Hemingway Butte, Idaho. The purpose of the position is to work across district boundaries and within headquarters to integrate ODFW review and direction; work with Idaho Power Company on data needs and reviews; provide an on-the-ground connection between the electric transmission project needs and ODFW policy requirements; coordinate with Bureau of Land Management and U.S. Fish and Wildlife Service biologists; actively participate in the state and federal permitting processes; and coordinate with other state and local agencies as appropriate. Idaho Power Company anticipates the permitting processes for the Boardman-to-Hemingway Butte project to be completed by 2020. The agency is requesting to continue this position, including 25 percent General Fund, to assist with regional energy coordination as described below.

In 2015-17, 25 percent of the cost was shifted to General Fund to assist in regional energy coordination. The source of funding from Idaho Power Company limits the type of work that can be completed. By funding this position with 25 percent General Fund, this position will be able to work on energy related tasks and provide assistance within the ODFW energy program. Allocation of General Funds to this position will provide flexibility to address other emerging energy issues.

STAFFING IMPACT: Continue one Limited Duration, full-time Natural Resource Specialist 3 position (1.00 FTE).

Fish Management – Continuation

104 – Klamath Anadromous Fish Reintroduction Plan (\$210,000 Other Funds)

PROBLEM OR ISSUE: Salmon and steelhead have been blocked from their historic habitats in Oregon’s upper Klamath River basin since construction of the Copco Dam in California in 1916. Today there are four dams on the main stem Klamath River, owned by PacifiCorp, that block fish passage into the upper Klamath River basin. Re-introduction of anadromous fish into the upper Klamath basin is a principal goal of the Klamath Basin Restoration Agreement, signed by 26 parties including Oregon, California, three tribes, and numerous non-governmental organizations. This restoration agreement is the outcome of the Klamath Hydroelectric Settlement Agreement which brought Klamath Basin stakeholders together to resolve fish and water issues in the basin, including removal of PacifiCorp’s four mainstream dams. A monumental agreement, the Klamath Hydroelectric Settlement Agreement was amended and signed by the states of California and Oregon, PacifiCorp, and the U.S. Departments of the Interior and Commerce and others on April 6, 2016.

The Klamath Basin Anadromous Reintroduction Implementation Plan will guide the actions necessary to re-introduce and re-establish salmon and steelhead populations in the Oregon reaches of the Klamath River and tributaries where they have been absent since the early 1900s. The re-introduction of these runs will partially address treaty rights of the Klamath Tribes of Oregon and will aid in alleviating constraints on sport and commercial fishing in the Klamath Management Zone.

PROPOSED SOLUTION: This policy option package requests limitation to expend non-federal funds from the National Fish and Wildlife Foundation for the funding of a NRS 3 staff biologist to develop an implementation plan for re-introducing anadromous fish (salmon and steelhead) into the Klamath River Basin of Oregon. This package would continue a Limited Duration, full time position in ODFW, currently funded by a grant from the National Fish and Wildlife Foundation, to develop the plan in collaboration with the Klamath Tribes of Oregon and to coordinate with the other fish managers in the Klamath Basin. This position will also guide and execute the public involvement processes necessary to successfully develop an acceptable plan to all resource users.

STAFFING IMPACT: Continue a Limited Duration, full-time (1517127) Natural Resource Specialist 3 position (1.0 FTE).

Hatchery Production – New

140 – Increase Fish Production - Clackamas Hatchery (\$92,000 Other Fund - License)

PROBLEM OR ISSUE: Trout anglers have long accounted for the single largest category of angler use in Oregon. In 2008, licensed Oregon anglers spent an estimated 7.3 million angler-days fishing and about 25 percent those days were for trout. Portland is the largest population center in Oregon and home to the highest number of licensed anglers of any metropolitan area in the state. ODFW has been focusing on population centers to target efforts to increase angling opportunities and boost license sales.

Providing fishing opportunities near the Portland metro area is an increasing challenge. Several bodies of water are in the vicinity of Portland and are ideal for recreational angling due to proximity and ease of access. In particular, a series of dams on the Clackamas River creates several reservoirs that provide excellent angling opportunity. ODFW currently releases trout in these reservoirs regularly throughout the summer, however, the agency is unable to purchase or produce enough catchable trout to meet the demand. Currently, ODFW either purchases the trout for stocking in these reservoirs or raises the trout at a hatchery 165 miles away. The expense of the purchased trout or of transporting trout raised by ODFW limits the number of fish that ODFW can release and the frequency that fish are released to support this popular fishery.

ODFW has an existing fish hatchery located near the Clackamas River. This hatchery has not historically raised trout due to limited availability of water and space. A new water supply system will allow ODFW to increase fish production at the Clackamas Fish Hatchery, but our ability to do so is currently limited by available funds.

PROPOSED SOLUTION: In order to meet the demand for recreational angling opportunities, this policy option package requests funding to produce trout at Clackamas Fish Hatchery. ODFW proposes produce an additional 50,000 triploid rainbow trout annually (100,000 per biennium) for release in Estacada Lake, Faraday Lake, North Fork Reservoir, and other small waterbodies in the area. The trout produced will be “legal” size, ranging in length between 10 and 16 inches. The funds will be used to purchase fish feed and pay for fuel to transport the fish for release by ODFW staff.

STAFFING IMPACT: None.

Marine Resource Management - New

123 – Ocean Acidification Policy Analysis (\$220,000 General Fund)

PROBLEM OR ISSUE: Over the past 5 years, our understanding of the extent and causes of ocean acidification has grown expansively. Oregon's rural coastal communities depend heavily on the incredibly productive marine ecosystem for recreational and commercial fisheries, as well as oyster culture, that have provided the backbone for coastal economies for decades. For oysters, ocean acidification has a direct impact on their ability to grow their shell. At the young larval stage, oysters growing under acidified conditions cannot grow their shell and die from the adverse conditions, a phenomenon first observed at Oregon's Whiskey Creek Shellfish Hatchery in Netarts Bay. While larval failure has not been observed first hand for most of Oregon's wild shellfish species (Dungeness crab, razor clams, bay clams, mussels, urchins and many others), there is growing evidence that these species will also suffer directly from Oregon's increasingly acidified ocean conditions. Even more concerning are the broad negative impacts that will start to undermine Oregon's sport and commercial fishery species, as species that form the foundation of Oregon's nearshore and ocean ecosystem are negatively impacted by acidified ocean conditions. While shell-growth is a major concern for shellfish, ocean acidification has been associated with fish behavior (like homing behavior), productivity of many species including those at the base of the food chain, and other biological traits. Ocean acidification is correlated with other factors involved in changing ocean conditions that affect changes in species' range, and which may impact the stability of fisheries. For example, the occurrence and intensity of unusual weather phenomena like El Niño, are expected to increase and compound negative impacts from ocean acidification and change species ranges. Further, sea-level rise, availability of freshwater and changing water temperature are expected to cause habitat loss, and changes in ocean circulation patterns may impact food web, primary productivity and other marine processes. These anticipated effects are accompanied by uncertainties about how much change to expect and how fish and wildlife will respond to those changes. In order to develop adaptive strategies to these challenges, ODFW must understand the impacts of ocean acidification and climate change at geographic scales that are relevant to effectively managing fish and wildlife populations, and other marine resources, in Oregon.

Efforts are being initiated throughout the Pacific Northwest at the state, regional and international levels to build adaptive resource management strategies and coordinate research investments. This will require development of new policy, coordination of monitoring and research activities, and information exchange between policy-makers and stakeholders. Existing staffing levels within ODFW are insufficient to meet expected demands for information, planning, and policy coordination at state, regional and national levels.

PROPOSED SOLUTION: This policy option package will establish one permanent full-time position in the Marine Resources Program (1 FTE) to coordinate ocean acidification and climate change science and management approaches. Ocean acidification and climate change science and monitoring are rapidly developing and demands on staff are expected to increase dramatically in the near future. The position established by this package will allow ODFW to 1) evaluate the relationships between ocean acidification and Oregon's fish and wildlife populations, 2) coordinate and implement ocean acidification monitoring and

research, and 3) provide leadership for state and regional ocean acidification and climate initiatives with co-managers.

STAFFING IMPACT: Establish one permanent full time Natural Resource Specialist 4 position (1.0 FTE). Located in Newport.

124 – Marine Harmful Algal Bloom Monitoring (\$345,000 General Fund)

PROBLEM OR ISSUE: Harmful algal blooms pose a threat to public health in both inland freshwater and coastal marine systems. Harmful algal blooms appear to be increasing in severity. Harmful algal blooms are caused by explosive growth of single-cell algae or blue-green algae, the particular species of which produce chemicals that are toxic to humans (and other species of concern including dogs, seals, and birds). The primary threat of harmful algal blooms in marine systems is the human consumption of seafood (such as crabs or clams) that has become contaminated by ingesting the harmful algae. When they have consumed toxic algae, they can accumulate domoic acid and paralytic shellfish poison which are major threats to human health. While these toxins have no apparent effect on the seafood and have no taste or odor, they can cause a range of symptoms in humans including paralysis, coma and death. There is no visible difference between toxic and safe seafoods. The only way to detect the threat of domoic acid and paralytic shellfish poison is by monitoring for harmful algal blooms and testing the seafood for the toxins.

In 2015, the West Coast (from Mexico to British Columbia) experienced the largest harmful algal bloom event ever documented which closed and delayed important marine fisheries, including Oregon's most valuable marine fishery, Dungeness crab. While the economic impact of the coast-wide event was unfortunate, a limited bio-toxin monitoring program was in place to test seafood for levels of domoic acid and paralytic shellfish poison. The monitoring program in Oregon was critical to prevent major public health consequences. While public health impacts were prevented in this case, there is an on-going risk that harmful algal bloom species will bloom in the future and contaminate seafood before detection is possible. This policy option package establishes positions within ODFW to allow the agency to improve the monitoring program by proactively detecting harmful algal bloom species before seafood becomes contaminated. The goal will be to develop a more rapid response to human health threats and maximize the harvest period when public health and safety concerns are met, for recreation and for commercial purposes. This outcome can be realized by improving the real-time monitoring of harmful algal blooms and minimizing the number of days each impacted fishery is closed or delayed. The cost to coastal communities equates to days of fishing for commercial fishermen and lost fishing opportunity for recreational fishers, both of which drive vulnerable coastal economies, and impact all Oregonians. Further, climate change scientists predict that harmful algal blooms will increase in frequency and intensity in the future, so Oregon faces an increasing demand to address this public health threat.

This policy option package is complementary to proposals from Oregon Health Authority and Oregon Department of Environmental Quality to monitor inland waters for harmful algal blooms. Combined, these proposals will greatly improve Oregon's efforts to protect the public from future harmful algal bloom related contamination of water and seafood.

PROPOSED SOLUTION: ODFW proposes to create a small field sampling team to monitor species associated with harmful algal bloom coast-wide. To achieve this the agency must build the technical capacity to conduct rapid-response laboratory analysis “nodes” at two locations on the Oregon coast to decrease the time needed to analyze samples coast-wide. The rapid-response “nodes” will substantially decrease the time between harmful algal bloom detection to management action. More specifically, the time to process samples will decrease from 72 - 96 hours, which includes transport of samples to centralized laboratories in Portland, to 24 - 48 hour once analysis can be conducted at the proposed “nodes” within coastal communities.

STAFFING IMPACT: Establish one permanent full time Natural Resource Specialist 2 position (1.0 FTE) and two permanent twelve-month seasonal Environmental Biology Aid positions (1.0 FTE). Located in Newport.

125 – Nearshore Fishery Research for Coastal Economies (\$1,675,000 General Fund)

PROBLEM OR ISSUE: The nearshore area of Oregon’s coast includes the ocean waters and sea floor from the coastline out to 3 miles offshore. The nearshore area is the most used and least understood of Oregon’s ocean areas. Thus, fishing activities in the nearshore are well-understood, while the biological aspects of the fishery resources are not. This inconsistency of understanding has caused significant concerns over the past decade about the future viability of nearshore finfish fisheries. Population estimates are needed that are independent of recreational and commercial fishing activities to ground-truth sustainable harvest levels and justify ongoing fisheries. Currently, harvest guidelines for nearshore finfish species are set through the regional Pacific Fishery Management Council and federal regulations and are based on stock assessments which rely heavily (or solely) on data gathered from commercial and recreational fishing activities (i.e. fishery-dependent data). In fisheries management, “stock” refers to a harvested or managed unit of a fishery. A stock assessment relates the biological data about a fish population (e.g. fish age, natural life span, growth rates, etc.) to the human dimensions’ data (e.g. type of fishery, fishing gear used, number of boats in the fleet, harvest per boat, etc.) to estimate fish population demographics (i.e. fish population size and productivity). Fishing patterns change frequently due to reasons that are unrelated to the health of fish stocks (such as changes in regulations or market demand) which inaccurately changes the indicators from stock assessments (i.e. the size and productivity of nearshore finfish stocks). The current data is insufficient to demonstrate the health of nearshore stocks because it is reliant on fishery-dependent data. ODFW does not have the capacity to generate the necessary information that is independent of fishing effort (i.e. fishery-independent). Therefore, conservative assessment methods and harvest guidelines are used which result in high uncertainty and may unnecessarily constrain commercial fishermen and sport anglers or may allow harvest at unsustainable levels.

ODFW does not currently employ marine stock assessment specialists. Stock assessment is a highly specialized and technical field. The agency must rely on federal stock assessment experts for research and management needs. A state stock assessor would allow the agency to conduct stock assessments and collaborate with federal stock assessors to better manage nearshore stocks.

There is also an ongoing demand from stakeholders and decision-makers to understand the contributions of fisheries to Oregon’s coastal economies and to analyze economic trade-offs associated with various management alternatives. Additional staff is needed to integrate biological and harvest information with

rigorous human dimensions (i.e. socio-economic) research and analysis in order to adequately understand the bio-economics of Oregon's marine fisheries and strategies, which will help maximize the economic benefit and resource sustainability of management decisions.

PROPOSED SOLUTION: This policy option package establishes a new fishery-independent research team to perform at-sea surveys that will provide data for nearshore finfish stock assessments for recreationally and commercially important species. The data will allow ODFW to make management decisions for nearshore fish stocks with certainty, reliability and credibility. More reliable management decisions will result in more fish available for harvest when populations are healthy, and more responsive conservation measures when stocks are in decline. In addition, this package establishes a marine economist and a state stock assessor to work with the fishing industry, federal stock assessors, and the agency's nearshore research team to evaluate and recommend the best management strategies to maximize sustainability of resources and coastal economies. The ability to perform stock assessments and the availability of more reliable data upon which to base those assessments will increase public support for ODFW's management decisions.

STAFFING IMPACT:

Nearshore survey team: Establish one permanent full-time Supervisory Fish and Wildlife Biologist position, one permanent full-time Natural Resources Specialist 2 position, one permanent full-time Natural Resources Specialist 1 position, and two permanent full time Environmental Biological Aid positions. Located in Newport.

Oregon state stock assessor: Establish one permanent full-time Natural Resources Specialist 4. Located in Newport.

Coastal community economist: Establish one permanent full-time Economist 3. Location TBD.

141 – Marine Mammal Program Expansion (\$630,000 General Fund)

PROBLEM OR ISSUE: Protection and management of endangered salmon and steelhead (i.e. salmonids) are a priority for Oregon's fish and wildlife management concerns and integral to sustaining the sport and commercial fishing industries. However, over the past two decades, sea lions have learned to follow the seasonal migration of salmonids up the Columbia River to Bonneville Dam, and the followers are growing in number. Salmonids concentrate in numbers just below a dam or waterfall, where they rest to gain energy to swim over the barrier to their spawning grounds. Certain sea lion individuals ("bad actors"), have demonstrated a repeated behavior of killing salmonids in the area below the dam. Additionally, in the last few years, sea lions have learned to migrate up the Willamette River to Willamette Falls and are establishing a pattern of predation there, similar to what has been observed on the Columbia River.

The monitoring and control of this increasing problem of predation on endangered salmon by sea lions continues to be an under-funded program in the state. ODFW's small Marine Mammal Program (2 state-funded FTE) was established prior to sea lion predation management concerns on the Columbia or Willamette Rivers. Since the original implementation of the Marine Mammal Program, no additional state funds have been provided – including no additional funding to address predation by seals and sea lions

(i.e. pinnipeds) in the Columbia River. While federal funds have been received to develop and support sea lion management (from Federal Columbia River Power System Salmon Recovery Biological Opinion funds), the current federal Biological Opinion funding level will not support an increased predator removal effort at Bonneville Dam, nor will it allow the expansion of this work to include predator management at Willamette Falls.

Additionally, ODFW's Marine Mammal Program is responsible for research and monitoring of Oregon's seals and sea lions coast-wide, as well as for the newer responsibility of managing sea lion predation. The work conducted by the Marine Mammal Program is labor and time intensive. Since 1996 the workload and the focus on predation management has increased and the available funding from the federal government has not kept pace with demands. As a consequence of prioritizing predation management activities in the Columbia River, ODFW's ability to adequately meet the research and monitoring responsibilities on the coast has been reduced or, in some cases, eliminated.

In 2008, ODFW was granted authority by National Marine Fisheries Service to manage and reduce sea lion predation on salmonids at Bonneville Dam on the Columbia River. This authority was granted even though pinnipeds are protected by the federal Marine Mammal Protection Act, due to the scientific integrity of ODFW's pinniped population studies, as well as the integrity of the proposed pinniped removal program. Since then ODFW has been conducting a large-scale research and management project to limit the losses of threatened and endangered Columbia River salmonids. ODFW has permanently removed more than 123 predatory California sea lions found foraging on threatened and endangered salmonids below Bonneville Dam. These predator removals are important and have reduced the losses of endangered salmonids to sea lions, with significant benefits to endangered salmonid populations and other non-endangered salmon fisheries. The management of pinniped predation would be more successful still, including a significant increase in the number of predator removals, with the addition of more staff and resources for this continually underfunded Program.

In the Willamette River, the predatory sea lion population has greatly expanded its geographic range since 2014, and has established a recurring predator population just below Willamette Falls. ODFW staff has initiated a new effort to monitor sea lion predation on salmonids in this new location. ODFW employs temporary observers to count and haze the pinnipeds at Willamette Falls, using borrowed staff and funding; the funding is not stable and this new work is taking resources away from other agency priorities. Recent data indicates that sea lion predation on Endangered Species Act-listed winter steelhead and spring chinook at Willamette Falls is high enough to warrant a new predator management and removal effort, which would require a new federal authorization process. ODFW's ability to gain federal authorization to reduce sea lion predation at Willamette Falls hinges on ODFW's continued ability to collect scientifically-defensible predation data over a number of years. This effort will be similar the efforts at Bonneville Dam. ODFW will be unable to obtain federal authorization for pinniped removal at Willamette Falls nor sustain federally-sanctioned management at Bonneville without new dedicated funding. While National Marine Fisheries Service has contributed financially to ODFW's monitoring efforts at Willamette Falls, the funds are insufficient to establish this site as a second predatory sea lion removal project.

In summary, sea lion predation on salmon and steelhead on the Columbia and Willamette Rivers is a critical problem that threatens to undermine the extensive state and federal salmonid recovery programs in the region. The current ODFW Marine Mammal Program staffing level is insufficient to fulfill the program's ability to address sea lion predation. The existing state-funded staffing level (2 FTE) has remained constant, while the scope of work has expanded to include program requirements in the lower Columbia River, at Bonneville Dam, and, most recently, Willamette Falls. The increased scope has been managed so far by piecing together various unstable federal funding sources with no increase in state funds; this funding model is not sustainable. ODFW's ability to gain future federal authorization to reduce sea lion predation at Willamette Falls depends on our ability to collect scientifically-defensible predation data at Willamette Falls and continue federally-sanctioned management at Bonneville. The Program was originally designed to research and monitor of Oregon's seals and sea lions throughout the state, not to manage sea lions in the lower Columbia River. All additional program elements have been achieved at the cost of many other significant areas of work. ODFW's Marine Mammal Program cannot continue to carry out the work in the Columbia River and expand into the Willamette River, as well as conduct research and monitoring along the Oregon coast without new dedicated funding.

PROPOSED SOLUTION: The growing demands from the public and Oregon's leaders to control pinniped predation of endangered salmonids, combined with the increasing distribution, abundance and effectiveness of pinniped predators, warrants an increase in the Marine Mammal Program at this time. This policy option package requests additional funding and positions for the Marine Mammal Program. This package will provide sufficient resources for ODFW's efforts to evaluate and manage sea lion predation on endangered salmonids in the lower Columbia River and to expand the program to include the lower Willamette River. This package will allow ODFW to: 1) evaluate and reduce sea lion predation on salmonids on the Columbia and Willamette Rivers; 2) conduct coast-wide marine mammal population assessments, evaluations of the interactions of pinnipeds with coastal fisheries, marine reserves and energy development, and address important policy and legal questions; 3) research and monitor sea lion distribution, abundance, trends, foraging habits, and predation on salmonids in the Columbia and Willamette Rivers; 4) increase the effort to remove predatory California sea lions taking salmonids near Bonneville Dam; 5) collect statistically valid and legally defensible data on the losses of threatened and endangered salmonids to sea lion predation at Willamette Falls; and 6) request, receive, and implement predatory sea lion research and management authorizations at Willamette Falls, if deemed necessary.

Under federal law, accurate information and data of sufficient quantity and quality are required for documenting significant predation issues, for successfully requesting and receiving federal management authority, and for implementing management options to reduce impacts to important fish populations. The work accomplished through this package will include the capture and marking of pinnipeds to document movements and foraging patterns; aerial and boat surveys to determine pinniped distribution and abundance; fecal sample collection to identify species and levels of fish consumption; predation monitoring, and removal of known predatory individual pinnipeds as permitted under federal law. Completing this work will require existing Marine Mammal Program staff and the new staff and resources proposed in this request.

STAFFING IMPACT: Establish 5 permanent positions (4.0 FTE): one Project Leader (Natural Resource Specialist 3); one Assistant Project Leader (Natural Resource Specialist 2); one full time Experimental Biology Aide; and two part-time (12 months, 0.5 FTE) Experimental Biology Aide project staff.

Screens & Engineering - New

139 – Fish Screens Fund Conversion (Budget Neutral)

PROBLEM OR ISSUE: The Oregon Department of Fish and Wildlife (ODFW) Fish Screening and Passage Program works with the public to install fish screens and passage projects. This is an effective program as it benefits both the water user and fish resources in Oregon. Financial and technical assistance is available to assist water users protect fish and simultaneously reduce the water user's risk of responsibility for the loss of fish at their diversions and other barriers. ODFW staff are uniquely experienced in the installation and maintenance of fish screens and passage projects and typically provide the design and construction services for projects cost-shared through ODFW.

In recent years this program has been predominantly funded through the Pacific Coast Salmon Recovery Fund. Pacific Coast Salmon Recovery Fund was established by Congress to reverse the declines of Pacific salmon and steelhead, resulting in funds that are only eligible for use on projects that benefit fish that migrate to and from the Pacific Ocean (i.e. anadromous fish). A large portion of Oregon is not inhabited by anadromous fish and thus ineligible for Pacific Coast Salmon Recovery Fund assistance. In order to provide some assistance to water users outside the anadromous areas of Oregon, an allocation of General Fund was provided to the Fish Screening and Passage Program. While General Fund should be available for projects statewide, the allocation of General Fund for the Screens and Passage Program is classified as Service and Supplies. ODFW is not able to effectively implement the Fish Screening and Passage Program statewide and remain consistent with the intent of the General Fund allocation and the requirements of Pacific Coast Salmon Recovery Funds. The agency needs to align Fish Screening and Passage Program funding sources and categorization of those funds with the work that is accomplished on the ground.

PROPOSED SOLUTION: This policy option package proposes to convert a portion of ODFW's existing General Fund Service and Supplies allocation to General Fund Personal Service. No additional General Fund is requested, only a change in the use of General Fund for ODFW staff time to work on screens and passage projects. Other Funds (Pacific Coast Salmon Recovery Fund and License Surcharge) and Federal Funds (Bonneville Power Administration) will be converted from Personal Service to Service and Supplies to balance out this impact.

Water Conservation – Continuation

108 – Integrated Water Resources Strategy Implementation (\$233,072 General Funds)

PROBLEM OR ISSUE: The Integrated Water Resources Strategy was developed at the direction of the legislature through House Bill 3369 and was adopted by the Water Resources Commission on August 2, 2012. The strategy is designed to help Oregon meet its future water needs for water quantity, water quality, and ecosystem functions by coordinating efforts between agencies at the state level, providing the tools and coordination needed by local governments and working constructively with federal agencies. The Integrated Water Resources Strategy identifies several objectives including:

- Understanding Oregon’s water resources today;
- Understanding out-of-stream and in-stream needs;
- Understanding the coming pressures that affect our needs and supplies;
- Meeting Oregon’s out-of-stream and in-stream needs;

Each objective includes several Recommended Actions. The second objective of the Integrated Water Resources Strategy (Understanding Out-of-Stream and In-stream Needs) includes Actions 3A and 3B which direct ODFW to conduct base-flow needs studies to identify flows necessary to maintain fish habitat. Base-flows are the in-stream flows needed to sustain basic life-stage functions and are important for maintaining habitat conditions, scenic and aesthetic values, and protecting water quality. During the development of the Integrated Water Resource Strategy ODFW committed to conducting flow studies on at least 300 high priority streams that did not already have in-stream water rights established. After completing the in-stream flow studies ODFW will apply for in-stream water rights as authorized through ORS 537.336 to identify the flows needed for conservation, maintenance and enhancement of aquatic and fish life, and fish and wildlife habitat. There are also several hundred streams where in-stream flow studies were conducted in the 1960s and 1970s that have not yet had in-stream water right applications submitted. Additionally, a number of streams need to have supplemental in-stream water right applications submitted to bring them up to levels originally requested by ODFW. These actions fit within the ODFW and Oregon Fish and Wildlife Commission policy “to apply for in-stream water rights on waterways of the state to conserve, maintain and enhance aquatic and fish life, wildlife, and wildlife habitat to provide optimum recreational and aesthetic benefits for present and future generations of the citizens of this state. The long-term goal of this policy shall be to obtain an in-stream water right on every waterway exhibiting fish and wildlife values.” (OAR 635-400-0005).

PROPOSED SOLUTION: The purpose of this policy option package is to provide funding, positions and limitation for ODFW to continue to implement Actions 3A and 3B of the Integrated Water Resources Strategy. In the 2013-15 and 2015-17 biennia, funding was provided to initiate the implementation of the Integrated Water Resources Strategy with the establishment of a Limited Duration full time position (Natural Resource Specialist 2) and two Limited Duration part time positions (Experimental Biological Aides). This package will continue those positions to assist the existing ODFW In-stream Flow Specialist in conducting in-stream base-flow studies on high priority streams. To accomplish Actions 3A and 3B in the Integrated Water Resources

Strategy these positions will work as a team to conduct between 30 and 40 in-stream flow studies on a yearly basis and submit the appropriate in-stream water right applications.

STAFFING IMPACT: Continue one Limited Duration, full-time Natural Resource Specialist 2 position (1.00 FTE) and two Limited Duration part time (eight-month) Experimental Biologist Aids (0.667 FTE).

Wildlife Conservation – New

121 – Aquatic Invasive Species Prevention Program (\$480,000 Other Funds-OSMB)

PROBLEM OR ISSUE: Aquatic invasive species, particularly quagga and zebra mussels, pose a serious threat to Oregon’s ecosystems and to its industrial, agricultural and municipal water supplies and delivery systems. Invasive quagga and zebra mussels have spread westward after introduction into the Great Lakes in the 1980s. More recently, they have appeared in water bodies in Utah, Nevada, Arizona, Texas, North Dakota, South Dakota, and California. In January 2007, populations of quagga mussels were discovered for the first time in Lake Mead in Nevada and Lake Mohave in California, a large leap in their range.

Economic and ecological damage from the introduction of zebra and quagga mussels can be profound. Both species are prodigious water filterers and remove massive amounts of phytoplankton from the water. The removal of these basic food sources can result in the collapse of existing food webs and have serious impacts on fish and wildlife. Additionally, these invasive species produce massive amounts of waste and organic pollutants that rapidly degrade water quality. Zebra and quagga mussels are major bio-fouling organisms and clog outtake and intake pipes, disrupted pumping facilities, dam operations, water treatment plants, and impacted recreation-based industries by fouling docks, buoys, boats and beaches. In eastern North America, the economic impacts of zebra and quagga infestations may exceed \$10 billion. Control of these aquatic invaders has also been expensive and difficult. They are rapid colonizers and have the potential to quickly adapt to extreme environmental conditions. Currently, there are no effective means to control zebra or quagga mussels without serious impacts on other resident aquatic species. Therefore, the first line of defense is to prevent them from entering the state.

The introduction of aquatic invasive species to western states occurred primarily by transport on recreational and commercial watercraft. In 2010, ODFW began implementation of the Oregon Aquatic Invasive Species Prevention Program with user fees (Aquatic Invasive Species Prevention Permit) authorized by the Oregon Legislature in 2009. Since that time, the program has inspected 43,023 watercrafts, intercepted 75 watercrafts fouled with quagga or zebra mussels and 853 watercrafts with other type of aquatic invasive species such as Eurasian water milfoil. Both zebra and quagga mussels can survive for up to 21 days out of water. Zebra and quagga mussels have not been detected in any water bodies in Oregon or in the Pacific Northwest. The Oregon Aquatic Invasive Species Prevention Program works closely with Oregon Marine Board, various County Sheriff Departments and Oregon State Police to inspect, isolate, and decontaminate any vessels/vehicles contaminated with quagga or zebra mussels or other aquatic invasive species. These positions also use inspections to educate the public about aquatic invasive species in general and the serious nature of invasive species entering Oregon and their ecological and economic consequences.

PROPOSED SOLUTION: Under the Aquatic Invasive Species Prevention Program, ODFW staff inspects vessels along highways and interstates entering Oregon from neighboring states. This package will allow staff to continue to inspect watercraft entering Oregon for quagga and zebra mussels and other aquatic

invasive species. This package requests additional months for twelve seasonal positions and two new seasonal positions to allow for longer operational seasons at the five existing watercraft inspection stations at various entry points into Oregon. Additional staff time will allow the agency to increase the number of days per week and hours of operation each day. The resulting increase of the number of watercraft inspections and interception of fouled watercraft provides direct benefits for program objectives.

STAFFING IMPACT: Increase months for 4 seasonal Fish and Wildlife Technician positions from 16 months to 18 months each (0.33 FTE) and for 8 seasonal Fish and Wildlife Technician positions from 10 months to 16 months each (2.0 FTE) at existing check-station locations (Ontario, Central Point, Klamath Falls, Lakeview and Gold Beach). Establish two seasonal Fish and Wildlife Technician positions for 16 months each (1.33 FTE). New positions will be either added to existing check-stations or used to create a new check station in Basque (Jordan Valley).

142 – NRCS Conservation Strategy Liaisons (\$760,000 Federal Fund-NRCS; \$190,000 General Fund)

PROBLEM OR ISSUE: Federal listing of species under the Endangered Species Act can have significant impacts to Oregon’s working lands causing economic hardship for farmers, ranchers and forest landowners. Oregon’s Conservation Strategy (Strategy) lays out a proactive approach to conserve declining species and habitats to reduce the possibility of future federal listing. While the Strategy prioritizes species and habitats in greatest need of conservation attention, there is minimal funding for the Department of Fish and Wildlife (ODFW) to implement the actions outlined. The U.S. Department of Agriculture – Natural Resources Conservation Service (NRCS) works with farmers, ranchers, foresters, and other private landowners throughout Oregon to implement conservation practices outlined in the Farm Bill. Farm Bill Programs such as the Environmental Quality Incentive Program and Agricultural Lands Easement Program are investing millions of dollars in conservation practices each year throughout Oregon. One of the major challenges has been the NRCS’ lack of capacity and biological expertise to develop and deliver effective projects. Prioritization of these conservation investments and additional biological expertise, would take significant steps to implementing the Strategy and reduce the possibility of future federal listings of species as endangered.

PROPOSED SOLUTION: Since 2011, ODFW and NRCS have successfully implemented a cooperative partnership to alleviate threats to sage-grouse on private land and prevented the species from warranting federal listing. This partnership included two ODFW field biologist positions that provide the expertise to ensure NRCS projects deliver the greatest benefit for sage-grouse and other wildlife. After five years of demonstrated success, ODFW and NRCS are proposing to expand this partnership throughout Oregon to reduce the possibility of future listings of other declining species on our working private lands.

This package establishes six ODFW field biologist positions to be housed in NRCS offices throughout Oregon to provide additional implementation capacity and biological expertise. These positions will work with private agricultural producers to:

1. Market NRCS conservation programs that benefit priority species and habitats.

2. Develop conservation plans and practices for their properties.
3. Apply for and implement the Farm and Ranchland Protection Program, Wetlands Reserve Program, Grassland Reserve Program, Environmental Quality Incentives Program and Wildlife Habitat Incentives Programs funds.

In addition to the benefits to Oregon's landowners and working lands, this program will help prioritize how conservation program funding is spent and ensure that project funds are used to deliver the greatest benefit to fish, wildlife and their habitats.

STAFFING IMPACT: Establish six Limited Duration, full-time Natural Resource Specialist 2 positions (6 FTE). Exact locations are yet to be determined, but four are expected to be located in eastern Oregon and two in western.

143 – Fisher Inventory and Conservation (\$250,000 General Funds; \$750,000 Federal Funds-USFWS-PR)

PROBLEM OR ISSUE: The fisher is a small carnivorous mammal native to the Pacific Northwest, including Oregon. It is a member of the weasel family and related to mink, otter and marten. About the size of large house cats, the fisher has generally dark fur, long bushy tail, short-rounded ears, short legs, and a low-to-the-ground appearance. Fishers live in low- to mid-elevation forests requiring cavities in trees for rearing their young, resting, and hiding from predators. Fishers prey on species like snowshoe hares and mountain beavers; it is also one of the few animals that eat porcupine. The fisher's range was reduced dramatically in the 1800s and early 1900s through unregulated trapping, predator and pest control, and changes in forested habitats by logging, fire, urbanization, and farming.

The fisher is listed in Oregon as a Sensitive Species-Critical Category, meaning the species is threatened with extirpation from a specific geographic area due to small population size, habitat loss, degradation, or other immediate threats. This is not a regulatory mechanism, but used to encourage voluntary actions to improve the species status and prevent species decline to the point of qualifying for listing. In addition, the fisher is also identified as a "strategy species" (i.e. low and declining or otherwise at-risk) in the Oregon Conservation Strategy (Conservation Strategy). The Conservation Strategy is the state's overarching blueprint for conserving fish, wildlife, and their habitat. The Conservation Strategy builds on all of Oregon's regulations, conservation plans, and voluntary efforts, by providing an implementation framework for a cohesive, statewide, non-regulatory approach to habitat and conservation. Further, Oregon's collaborative approach is linked to a "big-picture" national approach. The Conservation Strategy defines key conservation issues that threaten species (including fisher) and their habitats and offers a menu of recommended actions to address those problems. Specific to fishers, the Conservation Strategy recommends maintaining habitats and structures (e.g., snags, downed logs) used by fisher, improving connectivity, and using the results of feasibility studies to guide specific conservation actions and management decisions for reintroductions.

An evaluation of fisher population numbers, distribution, and habitat use is needed in Oregon. The U.S. Fish and Wildlife Service provided funding to complete a feasibility assessment for reintroducing fishers in western Oregon in 2015. The assessment concluded that fishers are a good candidate for reintroduction into large landscapes of contiguous forests such as the west slope of the northern Cascades of Oregon. The feasibility assessment also recommended developing an implementation plan, surveying areas lacking recent data to

determine the presence of fisher populations, and collaborating with stakeholders and cooperators to garner logistical, financial, and political support for fisher reintroductions.

PROPOSED SOLUTION: This policy option package requests resources for ODFW to conduct fisher surveying, monitoring, research and conservation in Oregon. Multiple partners are involved in fisher research and conservation including the USFWS, United States Forest Service, Bureau of Land Management, National Park Service, Oregon Department of Forestry, Oregon State University, Oregon Forest and Industries Council, and private landowners. Many of these same partners are involved with the conservation practices and research efforts directed by the Oregon fisher Candidate Conservation Agreement with Assurances and potential fisher reintroductions. ODFW will coordinate all of these efforts including signing up non-federal landowners to the Candidate Conservation Agreement with Assurances and conducting field work throughout the Cascade and Klamath Mountains. Such actions will further fisher conservation by detecting and protecting denning females, providing assurances for landowners, and increasing collaboration among government and non-government entities.

ODFW believes that working cooperatively and collaboratively with Federal and State agencies and private forest landowners is the key for conservation of fishers in western Oregon. Combining the knowledge, expertise, and limited resources (i.e., staffing and funding) among multiple parties will be most effective in meeting fisher conservation needs. Success will require collaboration among governmental entities and landowners (public and private). Concerns over potential land-use restrictions that may occur if the species were listed under the federal Endangered Species Act will necessitate developing regulatory assurance mechanisms prior to any reintroductions to alleviate concerns and facilitate reception and conservation of fishers. Additionally, ODFW will work with USFWS to implement permit holder actions required under a Candidate Conservation Agreement with Assurances for fisher in western Oregon to provide science based management guidance with private landowner partners. This proposed solution will give greater assurance to forestland owners and managers in Oregon's fisher territory, and will serve to increase participation, enhance long-term conservation benefits to fisher, and allow these landscapes to be maintained as working-land forests.

STAFFING IMPACT: Establish one Limited Duration Natural Resource 2 position and two Limited Duration Natural Resource Specialist 1 positions to be located in southwest Oregon.

144 – California Condor Conservation and Management (\$1,320,000 General Funds)

DESCRIPTION OF PROBLEM OR ISSUE: The California condor is federally-listed as Critically Endangered under the Endangered Species Act. In the 1980's, roughly 20 condors were left in existence and all were located in captive breeding facilities. As a result of an intensive recovery effort, the population has increased to over 400 birds. Condors have been reintroduced back into the wild in Arizona and California with apparent success. The U.S. Fish and Wildlife Service anticipates potential future releases in northern California, which would most likely result into natural dispersal of condors into Oregon. In the long-term, greater population numbers and a larger range will be necessary to eventually remove the California condor from being federally listed under the Endangered Species Act. Due to the Endangered Species Act listing status, cultural significance, and unique nature of the species, the presence of California condors in Oregon will elicit great public interest and

scrutiny regarding the success of the species. Concerns will arise from private landowners, developers, outdoor recreationalists, and others regarding potential impacts to private property rights and public land use restrictions.

High mortality rates are the primary obstacle to the recovery of the California condor. Lead poisoning has been identified as the leading cause of death of condors throughout the reintroduction program. Studies have shown that wild condors are primarily exposed to lead by ingesting lead shot or fragments of lead bullets when feeding on carcasses. Condors are carrion feeders, and lead shot or bullets may be found in game carcasses, hunter gut piles, and nuisance wildlife that have been dispatched. According to the U.S. Fish and Wildlife Service, condors will remain listed as an Endangered Species until the lead issue has been addressed.

The Oregon Department of Fish and Wildlife (ODFW) anticipates a significant amount of work associated with the expansion of the California condor into Oregon. ODFW does not currently have the staff or resources necessary to meet the regulatory and social challenges of California condor conservation and management in Oregon. These regulatory and social challenges include necessary permitting, research and monitoring efforts, coordination with partners, private landowner support, non-lead education, and public outreach.

PROPOSED SOLUTION: ODFW has a long history of working with hunters, private landowners, conservation partners, and the general public to implement wildlife management efforts. Committing time and resources to provide outreach and work closely with constituency groups remains a priority for ODFW. In order to address the reestablishment of California condor into Oregon through expansion of the northern California releases, ODFW proposes to develop a Condor Program. This package requests two permanent positions to coordinate California condor conservation and management activities. Creation of an ODFW Condor Program, consisting of a California Condor Coordinator and Lead Outreach Coordinator, would allow the agency to monitor the species, work with private land owners and the public, coordinate with other agencies, and develop a non-lead ammunition education program. These efforts would help to ensure the state meets federal requirements for addressing threats, provides support to private landowners and public interest groups, and creates a safer environment for California condors.

The California Condor Coordinator (Natural Resource Specialist 3) will be responsible for: coordinating with state and federal agencies and tribes on condor research efforts and public outreach; developing a condor management plan for Oregon; completing the required U.S. Fish and Wildlife Service permitting process; assisting the U.S. Fish and Wildlife Service with monitoring the condor population, tracking movements, and handling mortality events; providing education and outreach to the general public on condor recovery efforts; and working with private landowners and outdoor recreationists regarding concerns about private property rights and public land use restrictions. The Lead Outreach Coordinator (Program Analyst 2) will provide education and outreach on the effects of lead on wildlife; coordinate the Voluntary Non-lead Ammunition Program; develop a lead ammunition exchange program patterned after the successful program in Arizona; work closely with hunters, predator/varmint control, and those that dispatch sick or injured animals in the field; and work closely with sporting goods stores that supply hunting ammunition on marketing of non-lead alternatives for big game and predator/varmint hunters.

STAFFING IMPACT: Establish one permanent Natural Resource Specialist 3 position and one permanent Program Analyst 2 position.

145 – Oregon Conservation Strategy Implementation (\$1,000,000 General Funds)

PROBLEM OR ISSUE: The Oregon Conservation Strategy (Conservation Strategy) was part of a national effort guided by Congress and the U.S. Fish and Wildlife Service to encourage states to develop comprehensive wildlife planning for at-risk species to keep them from being listed under the federal Endangered Species Act. The Conservation Strategy was approved by the Oregon Fish and Wildlife Commission in August 2005 and by the USFWS in March 2006. Oregon’s approach was to establish a long-term vision not only for conservation actions to be implemented by the Oregon Department of Fish and Wildlife (ODFW), but also as a conservation blueprint for all Oregonians. The overarching goal of the Conservation Strategy is to “maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, prevent declines of at-risk species, and reverse declines in these resources where possible.” The Conservation Strategy emphasizes the proactive conservation and management of 11 strategy habitats across 8 state ecoregions. It addresses species conservation through a fine filter approach and identifies 286 strategy species based on their population status or that represent the diversity and health of wildlife in Oregon. ODFW recently developed a list of 15 high priority species upon which it will focus enhanced survey and inventory efforts.

Current ODFW staffing and funding levels do not allow for adequate monitoring of at-risk species. Only high-profile at-risk species, such as bald eagles and peregrine falcons are consistently monitored by ODFW due to federal requirements associated with their recent delisting from the Endangered Species Act. Consequently, ODFW has been unable to be proactive in providing biological data used to evaluate species, conservation status and the potential impacts to species populations from land management actions, while assisting other state agencies and private landowners to ensure long-term species and habitat conservation. In addition, ODFW is unable to meet the challenges of emerging issues such as climate change and energy development which impact wildlife by reducing or altering crucial habitats. Population declines of at-risk species could result in listing under the federal ESA, which could have significant economic and social impacts to communities throughout Oregon.

PROPOSED SOLUTION: This package proposes to establish three positions and provide funding for survey and inventory to monitor at-risk species identified in the Oregon Conservation Strategy. The positions will be housed across the state (one in the northeast, southeast and southwest) with the primary responsibility of survey and inventory of at-risk species. Additional duties would include providing technical advice, developing habitat restoration projects, and developing and providing educational outreach opportunities. This would bring the total number of ODFW Conservation Program biologists to five in the state (current positions are in place in Bend and in Clackamas).

Funding will allow ODFW to develop and conduct surveys or contract with others to conduct surveys. Species information gathered during these surveys will help land managers and land owners avoid or minimize impacts to at-risk species when considering land use allocations or potential economic development opportunities.

STAFFING IMPACT: Establish three permanent full-time Natural Resource Specialist 3 positions (3 FTE). Positions will be located (one each) in the northeast, southeast and southwest.

Wildlife Management - Continuation

102 – Coquille Valley Wildlife Area (\$230,000 Other Funds Obligated)

PROBLEM OR ISSUE: ODFW exchanged state owned, second-growth timber land near Eel Lake for important wetland habitat in the Coquille Valley. This land has allowed ODFW to return a property to private timber production, plus provided the opportunity to restore, protect, and enhance wetland habitat in a high priority area for salmonids and birds. Much of the land obtained through this exchange consists of diked, converted wetland in which stream channels have been altered and moved into human-made ditches. The properties are behind tide gates, including one that is near the end of its useful life. Restoration of this habitat will benefit Coho salmon, Chinook salmon, steelhead, waterfowl, shorebirds and neotropical song birds, and provide access to hunters, anglers, and wildlife viewers. This package requests limitation to conduct habitat restoration work and develop public access to these lands.

PROPOSED SOLUTION: Wetland restoration has been shown to increase smolt survival for Coho salmon and Chinook salmon. This package proposes to restore habitat on the property obtained through land exchange. Habitat restoration work would include reconnecting historic stream channels, removing interior property ditches and berms, planting wetland shrubs and trees, controlling invasive weeds, placing large wood, and engineering, designing, and conducting geotechnical work (evaluation of the potential groundwater flow from the project).

ODFW will manage the restored lands to provide maximum recreational benefits to hunters, anglers, and wildlife viewers. Existing staff will develop and implement a management plan that guides management actions and balances the needs of these various groups. ODFW will promote public use of the area, negotiate and develop access agreements, and develop access sites and parking areas.

STAFFING IMPACT: None.

103 – Coquille Valley Tidegate Replacement (\$950,000 Other Funds Obligated)

PROBLEM OR ISSUE: ODFW was recently involved in a land exchange to obtain land in the Coquille River Valley in Coos County near the city of Coquille. This land will be managed with emphasis placed on restoration of fish and wildlife habitat. The existing tidegates, operated by the Beaver Slough Drainage District, are at the end of functional life and do not currently provide adequate fish passage or daily tidal influence. If the existing tidegates fail, extensive areas of the valley will be flooded, resulting in substantial impacts to neighboring pasture lands and the local community, including possible loss of agricultural production and potential for increased mosquito production. Addition of muted tidal regulators and associated controlled tidal influence is an important component for the restoration of hundreds of acres of off-channel wetland habitat, which is a key limiting factor in production of salmon in the Coquille River basin.

PROPOSED SOLUTION: The Beaver Slough Drainage District proposes to replace the failing tidegates with seven muted tidal regulators and associated culverts and dike improvements. Four of those seven muted

tidal regulators will be dedicated to a specific area that encompasses the ODFW property. Replacement of the tidegates will improve habitat for native fish and wildlife, while also providing more effective water management in the Coquille Valley. ODFW proposes to assist the Beaver Slough Drainage District by providing funding for the replacement of the tidegates. ODFW will expend money obtained through timber sales on Eel Lake property, which was recently exchanged to obtain the Coquille Valley Wildlife Area. These funds will contribute to the replacement of failing tidegates and infrastructure with muted tidal regulators, resulting in controlled tidal influence on the Coquille Valley Wildlife Area. Controlled tidal influence is an important component for the restoration of hundreds of acres of off-channel, wetland habitat in the Coquille Valley Wildlife Area. This type of habitat is a key limiting factor in production of salmon in the Coquille Basin.

STAFFING IMPACT: None.

109 – Pre and Post Wildfire Resilience (\$500,000 General Funds)

PROBLEM OR ISSUE: In March 2010, the U.S. Fish and Wildlife Service determined that protection of the greater sage-grouse under the federal Endangered Species Act was warranted. However, listing the greater sage-grouse was precluded at that time by the need to address other species listings that had greater risks of extinction. The sage-grouse was a candidate species for listing and in a court settlement the U.S. Fish and Wildlife Service agreed to make a determination about whether sage-grouse warrant a listing status as “threatened” or “endangered” by September 2015. Citing unprecedented conservation efforts, U.S. Fish and Wildlife Service has determined that protection for the greater sage-grouse under the Endangered Species Act is not currently warranted and withdrew the species from the candidate species list. Although sage-grouse were not listed most government agencies and private entities within the range have agreed to address the threats identified in the listing decision so that a future listing is not needed.

The greatest current threats to most sage-grouse populations in Oregon are large-scale ecological trends that are difficult to manage through regulatory means, such as wildfire. Sage-grouse populations are dependent on sagebrush-steppe habitats and have experienced long-term declines coinciding with declining health of sagebrush habitats. The State of Oregon initiated the Sage-Grouse Conservation (SageCon) Partnership, an Oregon-based collaborative effort jointly convened by the State of Oregon through the Governor’s Natural Resource Office, the U.S. Bureau of Land Management, and the Natural Resource Conservation Service. Through this process, the state recognized the importance of dedicating new funding, as described through *The Oregon Greater Sage-Grouse Action Plan (Action Plan)*, to increase habitat resilience through pre- and post-wildfire actions including but not limited to re-seeding, planting, and invasive species eradication work.

PROPOSED SOLUTION: This policy option package provides resources for existing staff continue to work with federal and state land managers, and private landowners to ensure that high priority Greater sage-grouse habitats are identified and treated during pre-suppression (reducing fuel loads), suppression, and post wildfire rehabilitation activities. These pre- and post- wildfire actions will promote and restore habitat resiliency. ODFW will continue to seek opportunities to leverage available funds with outside

funding sources such as grants through non-governmental organizations, land managers, hunting and other organizations and develop cooperative partnerships which will maximize the habitat resiliency actions and result in higher quality habitats.

STAFFING IMPACT: None.

110 – Sage-Grouse Mitigation Program Coordinator (\$425,000 General Funds)

PROBLEM OR ISSUE: In March 2010, the U.S. Fish and Wildlife Service determined that protection of the Greater sage-grouse under the federal Endangered Species Act was warranted. However, listing the greater sage-grouse was precluded at that time by the need to address other species listings that had greater risks of extinction. The sage-grouse was a candidate species for listing and in a court settlement the U.S. Fish and Wildlife Service agreed to make a determination about whether sage-grouse warrant a listing status as “threatened” or “endangered” by September 2015. Citing unprecedented conservation efforts, USFWS has determined that protection for the Greater sage-grouse under the Endangered Species Act is not currently warranted and withdrew the species from the candidate species list. Although sage-grouse were not listed most government agencies and private entities within the range have agreed to address the threats identified in the listing decision so that a future listing is not needed.

The State of Oregon initiated the Sage-Grouse Conservation (SageCon) Partnership, an Oregon-based collaborative effort jointly convened by the State of Oregon through the Governor’s Natural Resource Office, the U.S. Bureau of Land Management, and the Natural Resource Conservation Service. SageCon developed The Oregon Sage-Grouse Action Plan (Action Plan) working with a diverse set of partners to build a strategy for balancing conservation and economic development in sagebrush country. In July 2015, Oregon Fish and Wildlife Commission adopted updated Sage-Grouse Mitigation Policy Administrative Rules to allow for more flexibility in creating a net conservation benefit resulting from development actions including allowing mitigation banking and creating a pathway to initiate an in-lieu fee program, consistent with the Action Plan. The sage-grouse is very sensitive to the direct and indirect effects of human development, including roads, fences, agricultural conversion, increased predation around human-impacted areas, and energy and infrastructure development, so steering those activities away from the most important and sensitive areas is critical. However, the greatest current threats to most sage-grouse populations in Oregon are large-scale ecological trends that are difficult to manage through regulatory means, such as wildfire, invasive species, and encroachment by native conifers. Sage-grouse are dependent on sagebrush and are declining along with the overall health of sagebrush habitats.

ODFW is currently developing a systematic, science-based mitigation program as outlined in the Action Plan which will help address the above mentioned challenges. It will create incentives for future development to avoid the most important areas of sage-grouse habitat, while providing funding for on-the-ground conservation efforts to manage the greatest current threats. Paired with other policies and local, state, and federal investments in conservation, a mitigation program can support rural economies and ensure that human impacts are compensated for in a way that provides a net benefit for sage-grouse habitat and rangeland health in general.

PROPOSED SOLUTION: To continue developing and implement a market-based mitigation program, this policy option package proposes to continue a Limited Duration Natural Resource Specialist 5 position to work with federal and state land managers, private landowners, project developers, and the Governor's office through SageCon to ensure that mitigation is effective and strategic and fully offsets human development impacts that occur in sage-grouse habitats.

The Mitigation Program Coordinator is responsible for:

- Operation of the debiting and crediting system, including facilitating and overseeing all credit generation and transaction activities;
- Ensuring consistent application of program processes and rules;
- Requesting and reviewing proposals for crediting projects based on spatial and management priorities identified by the State Technical Team and Local Implementation Teams;
- Verifying, issuing, and registering credits;
- Assessing the accuracy of credit and debit calculations;
- Tracking program outcomes and reports results of the mitigation program to the governance board.

STAFFING IMPACT: Continue one permanent full-time Natural Resource Specialist 5 position (1.0 FTE).

111 – Sage-Grouse Initiative (\$165,210 General Fund; \$165,210 Other Funds Obligated)

PROBLEM OR ISSUE: In March 2010, the U.S. Fish and Wildlife Service determined that protection of the Greater sage-grouse under the federal Endangered Species Act was warranted. However, listing the greater sage-grouse was precluded at that time by the need to address other species listings that had greater risks of extinction. The sage-grouse was a candidate species for listing and in a court settlement the U.S. Fish and Wildlife Service agreed to make a determination about whether sage-grouse warrant a listing status as "threatened" or "endangered" by September 2015. Citing unprecedented conservation efforts, U.S. Fish and Wildlife Service has determined that protection for the Greater sage-grouse under the Endangered Species Act is not currently warranted and withdrew the species from the candidate species list. Although sage-grouse were not listed most government agencies and private entities within the range have agreed to address the threats identified in the listing decision so that a future listing is not needed.

The five primary threats to the sage-grouse across its range are: (1) habitat loss and fragmentation (including wildfire); (2) invasive plants; (3) energy development; (4) urbanization, and (5) agricultural conversion and improper grazing. In Oregon, the invasion of juniper trees and non-native grasses (e.g. cheatgrass and medusahead) into the sagebrush steppe has degraded large areas of remaining sage-grouse habitat. A new study in Oregon found no active breeding grounds (leks) where junipers covered more than four percent of the land area.

The Sage-Grouse Initiative is a collaborative, targeted effort initiated by the Natural Resource Conservation Service to implement conservation practices which alleviate threats to sage-grouse, while improving the sustainability of working ranches. The Sage-Grouse Initiative encompasses all states that have populations of sage-grouse.

In Oregon, ODFW and the Natural Resource Conservation Service cooperatively developed a strategic approach to implement projects and practices to achieve the greatest mutual benefit for landowners and for

sage-grouse. This approach built upon partnerships developed by five local sage-grouse implementation teams convened by ODFW to implement the sage-grouse conservation strategy. These teams consist of private and public interests and are charged with identifying habitat improvement projects and practices on private lands that will benefit the landowner and sage-grouse. One of the major challenges of the Sage-Grouse Initiative effort has been the Natural Resources Conservation Service's lack of capacity, and in some cases biological expertise, to develop and deliver effective projects.

The Sage-Grouse Initiative was initiated during the 2011-13 biennium with Limited Duration positions located in eastern Oregon, which were continued in 2013-15 and 2015-17. To date, these positions have laid the ground work for project implementation. Since inception of Sage-Grouse Initiative in Oregon, more than 196,000 acres have been treated (juniper removal) and more than 100,000 acres of additional juniper treatment have been identified on private lands within three miles of sage-grouse breeding grounds (leks). In addition, eleven miles of fencing have been marked with durable vinyl markers, which reduces collision rates of sage-grouse and improves survival. Recent research has found that fence markers can reduce grouse collisions by up to 83 percent. Moving forward Sage-Grouse Initiative will increase treatment efforts on the 450,000 acres of private lands where annual grasses have become the dominant or sub-dominant vegetation type.

The primary goal of the Sage-Grouse Initiative is to implement appropriate conservation actions at scales sufficient to influence a positive population response in areas that contain large concentrations of sage-grouse and where threats can be effectively addressed through Natural Resource Conservation Service conservation programs. Due to Congressional constraints, Natural Resource Conservation Service is precluded from hiring new staff to implement the Sage-Grouse Initiative. State agency partners and the Intermountain West Joint Venture have been asked to assist with program implementation.

PROPOSED SOLUTION: This package proposes to continue two Limited Duration positions to implement the Sage-Grouse Initiative. Continuation of these positions is critical to implement planning efforts and building upon the working relationships developed between ODFW and private landowners. Private landowners frequently have expressed a willingness to conduct habitat improvement projects that directly benefit wildlife. However, private landowners can feel overwhelmed by planning processes. Sagebrush-steppe restoration projects often are complex and require a significant amount of resources to improve habitat conditions for sage-grouse.

To continue to successfully implement the Sage-Grouse Initiative, staffing from state partners is needed to:

1. Market NRCS conservation programs that benefit sage-grouse to private landowners and others.
2. Work with agricultural producers to develop conservation plans that address the conservation needs of sage-grouse.
3. Assist landowners with applying for and implementing the Farm and Ranchland Protection Program, Wetlands Reserve Program, Grassland Reserve Program, Environmental Quality Incentives Program and Wildlife Habitat Incentives Programs funds to further the conservation of sage-grouse habitat.

STAFFING IMPACT: Continue two Limited Duration full-time (15 months each) Natural Resource Specialist 2 positions (1.25 FTE).

112 – Voluntary Access & Habitat Incentive Program (\$750,000 Federal Funds)

PROBLEM OR ISSUE: The Access and Habitat program was created by the Oregon Legislative Assembly to administrate grants that improve wildlife habitat, increase public hunting access to private lands and foster landowner/hunter relationships in Oregon. Current program funding is primarily derived from a \$4 surcharge on hunting/combo licenses, auction and raffle of special deer and elk tags and other license revenue (D.E.A.R and Green Forage). The Access and Habitat Program is very popular and receives more interest from landowners for habitat and access projects than funding can support. In order to provide more benefits for Oregonians Access and Habitat Program submitted a grant application to the US Department of Agriculture's Voluntary Public Access and Habitat Incentive Program authorized by the Food Security Act of 1985 requesting funds to expand the Access and Habitat Program.

The 2014 Farm Bill authorized \$40 million dollars through the Voluntary Public Access and Habitat Incentive Program to be allocated to state and tribal private lands access programs. In early 2015 the Oregon Department of Fish and Wildlife (ODFW) applied for and was awarded a second Voluntary Public Access and Habitat Incentive Program grant of 1.56 million. The additional funding provided by this grant is expected to enroll and reenroll as many as 40 to 50 new landowners, create 50,000 acres of additional recreational access, and improve 3,000 acres of habitat on private lands.

PROPOSED SOLUTION: This policy option package requests limitation to expend the funds awarded to ODFW by the Voluntary Public Access and Habitat Incentive Program. These grant funds will be administered through ODFW's existing Access and Habitat Program to increase public hunting access on private lands and improve habitat above and beyond the existing available Access and Habitat revenues alone. Project proposals will be prepared by private landowners, corporations, organizations, or government agencies and will be initially reviewed by the local Regional Advisory Council, which will provide local insight and make recommendations to the Access and Habitat Board. The Access and Habitat Board reviews and forwards project recommendations to the Oregon Fish and Wildlife Commission for final approval.

STAFFING IMPACT: None.

119 – Willamette Wildlife Mitigation Program (1,105,000 Federal Funds; \$125,000 Other Fund-WWMP Stewardship Account)

PROBLEM OR ISSUE: The Willamette Wildlife Mitigation Program was established to mitigate for habitat losses due to inundation of habitat by flood control and hydropower reservoirs in the Willamette River Sub-basin as required by the Northwest Power Act of 1980. In 2010, the Settlement Agreement that requires the Bonneville Power Administration to provide mitigation was ratified to increase acquisition funding from \$2.5 million to \$8 million annually, from 2014 — 2025 and support program funding to ODFW of approximately \$26 million over the course of the Agreement. To support the funding increase and establishment of the Willamette Wildlife Mitigation Program, ODFW briefed the Legislative Emergency Board in November 2010 about the Settlement Agreement and to establish several new positions in the 2013-15 biennium. These positions were made permanent in the 2015-17 biennium. ODFW does not currently have adequate limitation to fully utilize the funding provided by Bonneville

Power Administration under the Settlement Agreement. Program operation funds will cover ODFW staffing costs, will be used to fund to contractors to implement the restoration work, and will be used to pay for the expanded program outlined in the Settlement Agreement. Funding includes an overhead assessment to cover indirect expenses.

Under the Agreement, ODFW will work with landowners, local governments, Native American tribes, and other interested parties to identify at least 16,880 acres of habitat for protection and restoration over the course of the Agreement. ODFW's primary role is to review, assess, and recommend potential properties to the Bonneville Power Administration for acquisition, as well as monitor Willamette Wildlife Mitigation Program acquisitions for compliance and ecological condition. Acquisition funds are a separate funding source managed by the Bonneville Power Administration and will be paid directly to willing sellers of property interests. Habitat restoration will be accomplished by providing "seed money" through a separate operation and maintenance fund to sponsors who perform habitat restoration. The Bonneville Power Administration will obtain a conservation easement on each property, and ODFW will ensure that these lands are managed and maintained for habitat conservation to ensure the resource impacts from the Willamette hydroelectric power system are mitigated and the state's interests are protected.

Although the intent of the Willamette Wildlife Mitigation Program is to mitigate for environmental damage, the associated Federal Funds provide substantial benefit to local economies. The program currently provides operation and maintenance monies to several project proponents. All of these small entities are private, and employ from two to 10 people. Other small subcontractors with needed technical skills may be employed on an as-needed basis throughout the course of the Agreement. The program purchases habitat construction supplies and equipment from local dealers.

PROPOSED SOLUTION: This package requests additional limitation for the Willamette Wildlife Mitigation Program to support expanded program operations, maintenance, restoration, and management of these habitats. Fully funding the Willamette Wildlife Mitigation Program will ensure continuation of current conservation and acquisition efforts. Funding allows ODFW to meet the expanded acreage objectives by 2025 as stipulated in the Settlement Agreement. In many cases, the project proponents (i.e. local governments, land trusts, soil and water conservation districts, etc.) use the monies provided through their stewardship funds from the Willamette Wildlife Mitigation Program to match outside funding sources that generally require a 50/50 match.

Funding will support on-the-ground implementation of the Willamette Wildlife Mitigation Program monitoring plan, as well as assistance with restoration and management of newly-acquired conservation properties in the program. Efforts will include habitat management assistance; on-the-ground habitat restoration; compliance monitoring and reporting; cultural resources protection; and capital equipment.

STAFFING IMPACT: None.

Wildlife Management - New

116 – Overtime Fund for Winter Range Enforcement (\$1,000,000 Other Fund-License)

PROBLEM OR ISSUE: Illegal harvest of wildlife, or poaching, has a significant impact on fish and wildlife resources in Oregon. Recent studies on some big game populations, such as elk and deer, have shown that poaching can be greater than legal hunter harvest. Poaching directly effects elk and deer populations and reduces hunting opportunity. Illegal harvest of male deer and elk (bucks and bulls) reduces sex ratios resulting in fewer tags available to the public for controlled hunts and potentially shorter general hunting seasons. Illegal harvest of female deer and elk (does and cows) results in the birth of fewer fawns and calves, which contributes to population decline. Additionally, big game can be more sensitive to poaching at certain times of year and therefore, their removal can have a greater impact on the overall population. Elk and deer can be illegally targeted outside of hunting seasons or at night when the animals are concentrated in herds, therefore, more vulnerable. Large, trophy-sized elk are often illegally wasted for the purpose of obtaining the animal's large set of antlers, which can be sold for thousands of dollars on the black market. When females are targeted by poachers, which is more common for deer, fewer fawns are born or young fawns have difficulty surviving due to the death of the mother. Illegal harvest may be one cause of the long-term decline in Oregon's mule deer populations. Declining big game populations could be mitigated by increasing enforcement efforts in order to reduce illegal harvest.

Oregon State Police (OSP) Fish and Wildlife Division ensures compliance with the laws and regulations that protect and enhance the long-term health and equitable utilization of Oregon's fish and wildlife resources and the habitats upon which they depend. OSP Fish and Wildlife Division enforcement complements ODFW fish and wildlife management with a force of 96 troopers and 17 sergeants across the state. OSP Fish and Wildlife Division schedules their work based on priorities identified through coordination and cooperation with ODFW. Working with ODFW local biologists, OSP troopers develop tactical plans to address priority issues and gain voluntary compliance from the public. While this can sometimes be achieved through allocation of available resources, it may require an increase in trooper effort and time in order to saturate an area at a particularly sensitive location or time period, such as elk and deer winter range.

PROPOSED SOLUTION: This policy option package requests limitation to expend license revenue in order to increase and enhance enforcement of wildlife laws and regulations by OSP Fish and Wildlife Division through targeted enforcement efforts. Given the limited number of OSP Fish and Wildlife Division troopers, overtime is sometimes necessary to effectively patrol and enforce wildlife laws and rules related to high priority species, locations or issues. Further, in order to increase troopers available for high priority enforcement efforts, it is often necessary for troopers from other areas of the state to assist with the increased effort. Therefore, ODFW will provide funding to OSP Fish and Wildlife Division to pay troopers overtime and travel per diem for high priority enforcement efforts as cooperatively identified by ODFW and OSP Fish and Wildlife Division.

STAFFING IMPACT: None.

129 – Oregon Deer Management and Monitoring (\$300,000 Other Fund-License; \$450,000 Federal Funds)

PROBLEM OR ISSUE:

Mule Deer Initiative Expansion

Mule deer are one of the premier big game species in Oregon and provide significant recreation for both consumptive and non-consumptive users of Oregon's wildlife. Since the 1960's mule deer populations have declined throughout their range and Oregon populations are no exception.

In 2009, ODFW developed the Oregon Mule Deer Initiative to address the problems that are affecting mule deer populations and their decline with an emphasis on habitat improvement. The Mule Deer Initiative was initially implemented in five Wildlife Management Units (Heppner, Maury, Murderers Creek, Steens Mountain, and Warner). Since 2010, ODFW has partnered with numerous cooperators who have implemented habitat enhancement projects on 385,000 acres to benefit mule deer. In all of the Mule Deer Initiative units ODFW has seen an increase in buck ratios and some increase in fawn ratios and neighboring units indicate similar trends.

Mule Deer and Black-tailed Deer Population Monitoring and Evaluation

Knowing critical population parameters and being able to monitor changes in those parameters (or at least in the resulting population) is paramount to deer management. ODFW needs to expand its capabilities to utilize new technologies in order to effectively manage mule deer and black-tailed deer across the state. Radio-telemetry and fecal DNA are two emerging methods that ODFW has been exploring to enhance deer management capabilities. These enhanced methods will improve the accuracy and precision of information to manage deer populations. These methods are being employed to fully assess the results of Mule Deer Initiative actions, such as habitat improvements. Further, research on black-tailed deer population dynamics is required to better manage this important state resource. ODFW has seen a decline in black-tailed deer populations and hunter harvest trends since 1994. In response, statewide black-tailed deer management plan was developed in 2006.

Radio-telemetry allows ODFW wildlife researchers and managers to obtain data on several critical population parameters including habitat use patterns, survival rates, causes of mortality, and herd health. ODFW began collaring black-tailed deer in 2010. Early information indicates the average home range size varied by Wildlife Management Unit. Preliminary data also shows predation and legal harvest to be the main causes of mortality, for animals for which the cause could be determined.

The other new method of wildlife population assessment is the extraction of DNA from fecal samples. This method allows individual deer to be detected and counted without having to directly interact with the animals. This reduces the staff time needed and reduces stress to the wildlife. In 2015, more than 20,000 deer fecal samples were collected. Based on these samples the density of deer in each Wildlife Management Unit can be estimated. The density estimates are then analyzed with radio-collar data

validate deer population numbers. This survey method, once validated, is expected to replace the more labor-intensive surveys that ODFW currently employs for deer management.

PROPOSED SOLUTION:

Mule Deer Initiative Expansion

To build upon the success biologists and the public have noted in the existing Mule Deer Initiative units, this package requests limitation to expand the Mule Deer Initiative into six additional Wildlife Management Units (Beulah, Malheur River, Fort Rock, Keating, Ochoco, and Silvies). In addition to habitat enhancement and restoration, Mule Deer Initiative activities could include increasing enforcement, predator management, and regulation changes to benefit mule deer populations. In order to continue the work intended by the Mule Deer Initiative, the program needs to be expanded.

Mule Deer and Black-tailed Deer Population Monitoring and Evaluation

This policy option package requests limitation to enable ODFW to continue and expand the radio collaring projects and fecal DNA projects for mule deer and black-tailed deer. Black-tailed deer population evaluation through analysis of fecal DNA will be expanded to two southwest Oregon Wildlife Management Units. Additionally, black-tailed deer fawn radio-collaring will be added as part of the expansion of the radio-collaring project. Mule deer radio-collaring will be expanded to include portions of southeast Oregon.

STAFFING IMPACT: None.

130 – Wolf Plan Implementation (\$1,100,000 General Funds)

PROBLEM OR ISSUE: Wherever wolves occur, their management requires a unique blend of social and biological considerations. Oregon is no different and management of wolves is entirely dependent on successful implementation of the actions contained within the Oregon Wolf Conservation and Management Plan (Wolf Plan). The Wolf Plan was adopted in 2005 following an extensive, multi-year public process, and it contains many provisions for managing this controversial species. However, the Wolf Plan was developed at a time when there were no resident wolves within the state. Wolves are now well established in Oregon. The rapid population growth (e.g. 36 percent increase in 2015) and expanding distribution of Oregon's wolf population has created a situation in which the agency's programs are not able to meet the growing demands for wolf capture, survey and monitoring, and damage abatement activities.

Currently, implementation of the Wolf Plan is primarily conducted using two wolf-specific positions that are mostly federally funded. The wolf population and the associated management requirements (as outlined in the Wolf Plan) have grown beyond the capacity of these two wolf-specific positions and has placed a severe burden on the agency's existing field staff (i.e. district wildlife biologists) who are typically funded through hunting and fishing license and tag revenue. In some months, as much as 50 percent of

a district's field staff time is used for the urgent requirements of wolf damage mitigation, leaving other wildlife management tasks undone. As Oregon's wolf population continues to increase, a more comprehensive, statewide effort will be needed for the agency to continue to monitor wolves on a much larger landscape, conduct counts and collect other population data, capture/radio-collar wolves, and address an increasing number of wolf-livestock conflicts.

PROPOSED SOLUTION: This policy option package requests funding and positions to allow ODFW to directly manage Oregon's increasing wolf population by fully implementing the Wolf Plan. The positions requested will be located in areas of Oregon with current and growing wolf populations. Specifically, four positions will be stationed in northeastern Oregon, and four positions will be stationed in central, southeast, and south-central Oregon. This approach will improve the implementation of the Wolf Plan by providing dedicated staff to manage wolves on the local level and allow existing field staff to focus on many other important wildlife species and issues. Specifically, these positions will improve implementation of the Wolf Plan by conducting the following tasks:

1. Perform additional wolf surveys, locate new wolves and improve monitoring output. Effective wolf survey and monitoring requires a large amount of staff time and specialized equipment. Effective survey and monitoring of wolves is limited by the ever-widening distribution and increasing number of wolves, and the difficulty of locating and monitoring new wolves and pack areas. Providing additional wolf-specific personnel and equipment will improve monitoring and data collection by increasing the agency's wolf-specific field presence in all parts of the state while maintaining other important wildlife management duties currently conducted by existing field staff.
2. Maintain and monitor adequate numbers of GPS radio-collared individual wolves proportional to the growing population. Radio-collaring wolves (especially wolves in new areas) requires significant dedicated staff time. Wolves must first be located and the pattern of their movements established (accomplished by the wolf surveys described above) before capture can be attempted. Trapping is a time-intensive activity. Generally, staff time to pattern and trap wolves is the biggest limiting factor for successful collaring of wolves. Once collared, staff time and specialized computer equipment is required to monitor and analyze the GPS data downloaded from the collars. The data from the collars is necessary for determining areas used by wolves and for communicating that to livestock producers. It is anticipated that additional wolf-specific personnel will result in substantially more wolves captured and radio-collared in Oregon.
3. Respond to reports of wolf-livestock conflict in an ever-widening distribution of wolves. These positions will directly implement the provisions of the Wolf Plan related to minimizing livestock depredation by wolves and will improve livestock producer assistance through implementation of non-lethal and preventative measures. Livestock are present in every known wolf use area in Oregon.

STAFFING IMPACT: Establish four (4) permanent Natural Resource Specialist 1 positions. Exact locations are yet to be confirmed, but initial discussion indicates positions will be in Grande Ronde, Umatilla, Deschutes and Klamath watersheds.