Oregon Department of Fish and Wildlife - 2015-17 Policy Option Packages

last revised: July 17, 2014

POP #	Title: Description	New or Continuation?	FTE (excluding base positions)	Limited Duration POS	Limited Duration Converted to Permanent POS	Federal Fund	Other Fund	Lottery Fund	General Fund	Total Funds	FF/OF Notes
101	Revenue Shortfall - General Fund Request: Seeks general tax dollars for law enforcement ($5.18M General Fund) and specific ODFW programs ($6.25M General Fund) that benefit all Oregonians. Shifting the cost of programs that benefit all Oregonians to General Fund (GF) ensures that everyone – not just hunters and anglers – share the cost of managing Oregon's fish and wildlife. Also continues packages approved in the 2013-15 budget to support the Integrated Water Resources Strategy ($202k GF) and a study of cormorant predation on salmon and steelhead within key coastal estuaries ($50k GF).	Continuation (and Backfill)	1.66	3		$103,208	($11,642,139)		$11,681,565	$142,634	USFWS-Pittman Robertson
102	Revenue Shortfall - Fee Adjustment: Provides revenues to continue funding for field staff, hatcheries, Oregon Hatchery Research Center, and wildlife areas. This package is linked to a legislative concept to adjust recreational hunting and angling fees and commercial fishing fees. *Due to the revenue shortfall, associated positions are eliminated in base and restored through this package.	Continuation	24.00*	24*			$8,217,621			$8,217,621	
103	SB 830 Col River Fish Management & Reform: Implement rules adopted by the Oregon Fish and Wildlife Commission intended to enhance off-channel fisheries, evaluate alternative fishing gears for use in the mainstem Columbia River, and mitigate impacts to the commercial fishery during the transition period.	Continuation	12.00	24		($329,365)	$1,857,398		$2,000,000	$3,528,033	OF Dedicated (Columbia River Endorsement)
104	Klamath Anadromous Fish Reintroduction Plan: Provides staff to lead development of an implementation plan for re-introducing salmon and steelhead into the Klamath River Basin.	New	1.00	1		$200,000				$200,000	FF (USFWS)
105	Sage-Grouse Initiative: Continues staffing to assist landowners with habitat and other projects to benefit sage-grouse.	Continuation	1.00	2			$90,000		$90,000	$180,000	OF-Obligated (Pheasants Forever/Intermountain West Joint Venture)
106	Mitchell Act Fish Marking & Hatchery Reform: Continue implementation of hatchery reform actions, monitoring and management actions in the Sandy River, and consolidate operations of three hatcheries (Eagle Creek, Sandy, Clackamas complex).	Continuation	6.50	10		$2,171,000				$2,171,000	FF (NOAA Mitchell Act)

Attachment 7

POP #	Title: Description	New or Continuation?	FTE (excluding base positions)	Limited Duration POS	Limited Duration Converted to Permanent POS	Federal Fund	Other Fund	Lottery Fund	General Fund	Total Funds	FF/OF Notes
107	Marion Forks Hatchery Complex: Continue operation of Marion Folks/Minto Ponds complex to improve collection and transportation of adult Chinook salmon and steelhead upstream of the Detroit and Big Cliff dams as well as acclimation, fish spawning, juvenile rearing, incubation, long-term holding, out-planting and fish recycling on a year-round basis	Continuation	3.00	3		$600,000				$600,000	FF (US Army Corps of Engineers)
108	Idaho Power Company Fall Chinook Production: Continue hatchery production of fall Chinook salmon as mitigation for dams on the Snake River.	Continuation					$360,000			$360,000	OF Obligated (Idaho Power Company)
109	PR Funding for Wildlife Research & Management: "bump" in federal revenues to continue Mule-Deer Initiative, improve mule deer surveys and population assessments, conduct big game and waterfowl aerial surveys, conduct black-tailed deer research, and address maintenance needs of wildlife areas.	Continuation				$9,000,000				$9,000,000	FF (USFWS)
110	Coquille Valley Wildlife Area: Funds wetland restoration work and development of public access sites.	Continuation					$369,000			$369,000	OF Obligated (Timber Revenue from Land Exchange)
111	Coquille Valley Tidegate Replacement: Provides ODFW share of funding for replacement of tidegates in the Beaver Slough Drainage District since controlled tidal influence is an important component for restoration of off channel, wetland habitat.	Continuation					$1,025,000			$1,025,000	OF Obligated (Timber Revenue from Land Exchange)
112	Coastal & Lower Col Status & Trend Monitoring: Continues Pacific salmon and steelhead research and monitoring to support fish conservation and recovery plans; assess fish status, limiting factors and threats; inform Endangered Species Act listing decisions by the state and federal governments, prioritize habitat restoration, gauge the effectiveness of management actions, support other natural resource agencies. This package is largely funded through reductions in the Western Oregon Stream Restoration Program and habitat staff.	Continuation (and Backfill)				($1,670,000)	$500,000	$250,000		($920,000)	OF Obligated (Pacific Coastal Salmon Recovery Funds)
113	Fish Research, Monitoring, & Evaluation-PCSRF: Continues recovery plan implementation and research, monitoring, and evaluation efforts for Pacific salmon and steelhead and their habitats.	Continuation	13.50	21	1		$2,400,000			$2,400,000	OF Obligated (Pacific Coast Salmon Restoration Fund)
114	Fish Research, Monitoring, & Evaluation-Various: Continues a range of research, monitoring, and evaluation needs for fish species throughout Oregon (e.g., coastal Chinook salmon, Lower Columbia Tule Chinook, Willamette salmon and steelhead, Oregon chub, Clackamas bull trout, Clackamas fisheries, Northeast-Central Oregon salmon and steelhead, redband trout).	Continuation	68.10	44	71	$12,475,000	$250,000			$12,725,000	FF (Pacific Salmon Commission, NOAA, BPA, USFS, BOR, US Army Corps of Engineers); OF Obligated (PGE)

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115	Deschutes Basin Fish Monitoring & Recovery: Staffing to continue fish monitoring in the Middle and Upper Deschutes River and pass through federal funding to local partners to continue development of a Habitat Conservation Plan for the Upper Deschutes River.	Continuation	2.00	3		$1,500,000	$235,000			$1,735,000	FF (USFWS); OF Obligated (Upper Deschutes Watershed Council; Central Oregon Irrigation District)
116	Coastal Multi-Species Plan Implementation: Provides funding for actions identified in the Coastal Multi-Species Plan for Chinook, steelhead, and cutthroat trout.	New	2.50	7				$770,000		$770,000	
117	OHRC Research Proposal: Provides funding to support priority research needs developed collaboratively with the OHRC Board, ODFW, and Oregon State University.	New							$2,000,000	$2,000,000	
118	Voluntary Access & Habitat Incentive Program: Continues program working with voluntary landowners to provide hunting access and improve wildlife habitat.	Continuation	1.00	2		$750,000				$750,000	USDA Natural Resource Conservation Service
119	Fish Screening: Continues staff providing maintenance on existing fish screens and provides limitation to complete fish screen project on Honey Creek in Lake County.	Continuation	0.42		1	$49,000	$258,000			$307,000	FF (USFWS $49,000); OF Dedicated Screen Surcharge ($58,000); OF Obligated Ruby Pipeline Mitigation Funds and Lakeview Soil & Water Conservation District ($200,000)
120	Culverts Fish Passage: Under an agreement with ODOT, funds six fish passage barriers of statewide significant.	New	1.00	1			$1,973,267			$1,973,267	OF Obligated (Oregon Department of Transportation)
121	North Canal Dam Fish Passage: Provides state's share of the cost to install a fish ladder at North Canal Dam on the Deschutes River.	New							$1,000,000	$1,000,000	
122	Oregon Conservation Strategy Implementation: Provides staffing to conduct survey and inventory work to monitor at-risk species identified in the Oregon Conservation Strategy.	New	3.00	3				$1,000,000		$1,000,000	
123	Willamette Wildlife Mitigation Program: Continues staffing to review and assess potential properties for acquisition by Bonneville Power Administration and monitor acquisitions for compliance and ecological condition.	Continuation	2.33	4		$1,560,000				$1,560,000	FF (BPA)
124	Coordination of Energy Dev & Transmission: Continue staffing to provide input on impacts to fish and wildlife on renewable energy projects.	Continuation	2.00	1	1		$808,000		$225,000	$1,033,000	OF Dedicated (Hydroelectric Fund); OF Obligated (Specific hydro projects); OF Obligated (Idaho Power Company)
125	Portland Harbor Injury Assessment: Continue ODFW's work to complete an injury assessment of Portland Harbor, discuss settlement agreements, and evaluation potential restoration sites.	Continuation					$100,000			$100,000	OF Obligated (Portland Harbor settlement funds)

POP #	Title: Description	New or Continuation?	FTE (excluding base positions)	Limited Duration POS	Limited Duration Converted to Permanent POS	Federal Fund	Other Fund	Lottery Fund	General Fund	Total Funds	FF/OF Notes
126	Blue Mountain Fish Habitat Improvement: Continues staff to complete federally funded riparian and stream channel restoration to benefit ESA listed salmonids in the Grande Ronde Basin.	Continuation	1.00	1		$100,000				$100,000	FF (BPA)
127	Willamette Falls Fish Ladder Repairs: Provide funding to repair to portions of the Willamette Falls Fishway that provide passage for multiple species of resident and migratory fish.	New				$1,000,000				$1,000,000	
128	Lower Deschutes River Ranch Acquisition: Provides limitation for acquisition of lands that will be incorporated into the current Lower Deschutes Wildlife Area. The property contains five key habitats that will benefit five targeted species identified in the Oregon Conservation Strategy. The property will be managed for fish and wildlife habitat and public access to hunt, fish, and view wildlife.	New				$1,250,000				$1,250,000	FF (USFWS)
129	Hunter Ed, Recruitment, Retention - PR Funds: Continues efforts to increase availability of hunter ed courses, reduce barriers to hunting participation, and actively recruit and retain Oregon hunters.	Continuation				$3,100,000				$3,100,000	FF (USFWS)
			146.01	154		$31,858,843	$6,801,147	$2,020,000	$16,996,565	$57,676,555	

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **101 – Revenue Shortfall – General Fund Request**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
The 2013-15 biennium is the final biennium under the six year fee adjustment that was effective January 2010. Moving into the next six year horizon, there is a projected shortfall in recreational license funded programs. For the 2015-17 biennium, the projected gap between expenses and revenue for recreational license funded programs is $32 million. This projection is based on several assumptions, including increased costs due to inflation, no additional revenue from license sales or other sources, and fully funding the Oregon State Police (OSP) Fish and Wildlife Division budget request. Similar shortfalls exist for Commercial Fish Funded programs over a six year horizon.

To build its 2015-17 budget, the department and its External Budget Advisory Committee (EBAC) took a hard look at programs that are currently funded by hunting, angling, and commercial fishing fees that would be more appropriately funded by other revenue sources. As a result of that review, this package seeks general tax dollars for law enforcement and specific ODFW programs that benefit all Oregonians. Shifting the cost of programs that benefit all Oregonians to General Fund (GF) ensures that everyone – not just hunters and anglers – share the cost of managing Oregon's fish and wildlife. In the past, stakeholders have urged the department to seek General Fund revenue for these activities to reduce the impact on recreational license dollars.

Consistent with this review, the department is proposing to shift portions of its costs from license revenues to General Fund for Field, Habitat and Conservation, Water Quality and Quantity, Avian and Pinniped Management, and Oregon State Police Fish and Wildlife Division staff.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
In March 2014, the department began meeting with its External Budget Advisory Committee (EBAC) to develop its six year budget strategies and refine the 2015-17 budget proposal. EBAC includes conservation groups, local government, sports groups, commercial fishing representatives, and other interested parties. With their input, the department has focused on strategies to reduce costs and increase revenues. To reduce costs, the department's budget relies on implementing efficiencies and program reductions. To increase revenue, department will seek funding from alternate sources, one time revenue, and general tax dollars

in order to reduce the demand on license dollars. In addition, the department is proposing to adjust recreational, occupational, and commercial licenses, tags and permits (see related POP 102).

In 2015-17, the department proposes to shift approximately $6.25 million of its current programs to General Fund and $5.18 million of OSP Fish and Wildlife Division costs to General Fund. Even with these shifts, the General Fund budget for ODFW would be less than 10% of its overall revenues in 2015-17. The proposed shift for OSP Fish and Wildlife would return the division to prior General Fund levels. With the proposed shift to General Fund, ODFW license and other revenues would return to 50% of the OSP Fish and Wildlife Division budget, rather than 60% as in recent biennia.

The work performed by these programs provides broad, public benefits for all Oregonians that use and enjoy Oregon's fish and wildlife resources as described below.

Field Staff Support – The package requests partial General Fund support for each of the department's nine watershed managers to engage in Regional Solution teams. These positions are currently funded exclusively with fishing and hunting dollars. The package also requests General Fund support for portions of 74 fish and wildlife field positions (53 wildlife; 21 fish) to reflect the amount of staff resources directed at projects and tasks with broad public benefits and activities necessary to meet statutory obligations. These staff review and provide comments on numerous activities such as removal fill permits, water right applications (e.g., fish passage/screening, water storage, water use permits), and land use impacts on fish and wildlife populations and habitat (e.g. energy siting, mining, destination resorts). These staff work with watershed councils, soil and water conservation districts, tribes, landowners, and other partners to provide data, technical assistance, and support for restoration projects.

District fish and wildlife biologists are currently funded exclusively with fishing and hunting dollars. However, in some areas, for as much as 80% of their time is related to activities not directly tied to hunting and fishing. The department is proposing to shift 25% of the costs of these positions to General Fund. Two fish assistant district biologists are proposed to shift to 100% General Fund.

Habitat and Conservation Staff – This policy option package requests General Fund for portions of four Habitat Program positions located in Salem within the Wildlife Division's Habitat Resources Program. Proposed funding for these positions (Energy Program Coordinator, Forest Program Coordinator, Land Use/Waterway Alterations Program Coordinator, and Habitat Resources Program Manager) is 25% General Funds, matched with 75% Federal Funds (U.S. Fish and Wildlife Service – Pitman Robertson Funds). These positions were established in the late 1980s and early 1990s using 100% General Funds. Funding for these positions changed in 2003-05 due to reductions in General Funds. Given the license revenue shortfall, the department is proposing to cut the license funding from these positions, and is seeking General Funds to match the federal funds for continuing these positions.

ODFW is charged with managing Oregon's fish and wildlife. Habitat is the foundation for all of fish and wildlife management. Declines in habitat quantity and quality have led to species listings under the state and federal Endangered Species Acts. ODFW does not own

or control most of the habitat where these animals live. Therefore, through guidance from these four positions in the Habitat Program, ODFW works collaboratively with landowners and regulatory agencies to provide input on land management activities in a manner that is conducive to supporting healthy populations of fish and wildlife. These four positions lead ODFW's efforts to provide technical assistance to partner regulatory agencies on their permitted activities that affect Oregon's fish, wildlife, and habitats. They assist with critical habitat elements of the *Oregon Plan for Salmon and Watersheds* and species recovery plans by recommending measures that help ensure sustainable development while minimizing, mitigating, or eliminating negative impacts to fish and wildlife habitat. These positions work closely with other state, federal, tribal, and local agencies, individuals, and interest groups to develop and implement fish, wildlife, and habitat protection and restoration activities. They provide technical assistance, guidance, cooperation, direction, coordination, and planning with regulatory agencies, tribal, federal, state, county, and municipal land managers, watershed councils, and private landowners on activities affecting forest, grassland, upland prairie, wetland, and riparian habitats. Activities of these four positions occur within the following areas: energy facility siting; forest management; grazing and related grassland management; land use; fill and removal activities; mining land development; transportation management; implementation of federal and state Natural Resource Damage Assessment statutes; habitat restoration and enhancement project opportunities; tax incentive habitat programs; and education and outreach services to sport and civic groups, schools, private entities, and the public on a wide variety of subjects relating to fish, wildlife, and their habitats. Because the nature of this work provides broad, public benefits for all Oregonians, ODFW recommends that the non-federal match portion of these positions be General Funds.

This package also requests General Fund for Conservation Policy Coordinator. This position is located in the Director's Office. For many of the past biennia, this position has been funded primarily by Other Fund (License) dollars. This position is responsible for leading policy input and program direction on the Oregon Conservation Strategy and new statewide or regional initiatives such as climate change, sustainability, and energy policy. The Oregon Conservation Strategy is a blueprint for conservation of Oregon's native species and habitats of concern. It provides recommendations and ideas on actions that private landowners and government agencies can take to benefit Oregon's native species. ODFW has been on the forefront of investing in conservation, and uses the Oregon Conservation Strategy as the primary tool to guide investments in habitat and species restoration. The Oregon Conservation Strategy benefits all Oregonians, not just those who participate in hunting and fishing. For that reason, this position's role in communicating the conservation success stories connected to the Oregon Conservation Strategy and the ODFW mission is critical to maintaining support for habitat conservation, species protection, and healthy watersheds. Because the nature of this work provides broad, public benefits for all Oregonians, ODFW recommends that the funding source for this position be General Fund.

Water Quality and Quantity Program – This policy option package requests General Fund for portions of the positions in the Water Quality and Quantity Program. The package also requests to continue three limited duration positions approved in the 2013-15 budget to carry out actions identified in the state of Oregon's Integrated Water Resource Strategy. All these positions are located in Salem within the Fish Division's Water Quality and Quantity Program. These positions maintain ODFW's ability to respond to water quality and quantity actions affecting Oregon's fish and wildlife resources and to continue participating in Oregon's implementation of the Integrated Water Resources Strategy.

These positions provide ODFW with the ability to comply with statutory obligations for participating in other state agency processes (e.g., Department of Environmental Quality, Pesticide Analytical Response Center, Water Resources Department), interact and collaborate with other Integrated Water Resources Strategy agencies, provide integration and conflict resolution to water development issues and conflicts, and provide science-based approaches to identifying fish and wildlife water needs.

The positions also aid in implementing the Integrated Water Resources Strategy. In particular, staff are working to conduct studies on streams without established in-stream base flows. The Integrated Water Resources Strategy estimates that there are approximately 300 high priority streams in Oregon that need in-stream flow studies. Additionally, several hundred additional streams still need in-stream water right applications submitted for studies conducted in the 1960s and early 1970s. There are also an undetermined number of streams that may need to have supplemental flow information developed. Using a team approach, ODFW estimates that it can study between 30 and 40 streams annually, and submit the associated in-stream water right applications to the Water Resources Department. Because the nature of this work provides broad, public benefits for all Oregonians, ODFW recommends that the funding source for these positions be wholly or in part General Funds.

Avian and Pinniped Management – This policy option package requests General Fund for all or portions of eight positions focused on avian and pinneped management. These positions allow ODFW to better understand and address marine mammal and bird predation on salmonids. The existing positions are currently funded by Other Funds (License), Lottery Funds, and Commercial Fish Funds. Predation by seal and sea lion (pinniped) and bird (avian) predators on juvenile salmon and steelhead (salmonids) in the Lower Columbia River and Oregon Coastal river systems has been a concern for anglers and fishery managers since the 1990s. Many Oregonians have expressed particular concerns about the potential impact of these predators on the recovery of threatened and endangered salmonids. For decades the state of Oregon has spent countless resources protecting and restoring salmon and steelhead populations and marine and anadromous fish species of ecological and economic importance. Despite these activities of numerous agencies and organizations, many of Oregon's fish populations are threatened and endangered (e.g., Columbia River salmon and steelhead), or are of growing conservation concern (e.g., white sturgeon, Columbia River smelt, and Pacific lamprey). This is a complicated management situation due to population declines of salmonids from multiple causes. In addition, several federal laws govern the actions of multiple agencies. These laws include the federal Marine Mammal Protection Act and Migratory Bird Treaty Act. Both Acts have coincided with substantial increases in the number of fish-eating pinnipeds, Caspian terns, and double-crested cormorants along the Oregon Coast and the lower Columbia River. The population increases in these fish-eating predators has resulted in widespread negative impacts to fish species of conservation concern, and conflicts with sport and commercial fisheries. This policy option package addresses the concentration of vulnerable juvenile salmonids in estuaries, concentrations of fish predators (pinnipeds, Caspian terns, and double-crested cormorants) in the lower Columbia River, and possible redistribution of double crested cormorants along the Oregon Coast from historic colonies.

To manage resource conflicts among fish-eating pinnipeds, birds, and fish resources, and to support future federal policy reforms of marine mammals and fish-eating birds, accurate knowledge of their abundance, distribution, food habits, foraging behavior, and impacts on fish resources is essential. Knowledge of the complex federal policy and often controversial legal issues surrounding these marine mammals and fish-eating birds is also essential to formulate and implement a successful program to manage pinniped and

avian impacts on fish resources. ODFW staff frequently use this knowledge and experience to provide information to state and federal legislators, including written and verbal testimony before congressional committees considering changes to laws that could provide ODFW with additional management options in the future. Because the nature of this work provides broad, public benefits for all Oregonians, ODFW recommends that the funding source for this position be General Funds.

This package also continues work and limited duration positions approved in the 2013-15 budget to collect scientific information on double-crested cormorants within key coastal estuaries. This study will inform management decisions on how to minimize predation on young salmon and steelhead. Since cormorants are a protected species under the federal Migratory Bird Treaty Act, ODFW must comply with federal requirements in documenting the scope of predation by cormorants on salmon and steelhead. This package provides the necessary match component to a federal grant that will allow the continuation of existing efforts to collect scientific information on diet and population status of cormorants. These data are necessary to ensure the granting of a federal depredation permit that will allow new management options to control cormorants, and thus their impacts on salmon and steelhead abundance. ODFW will estimate population numbers and diet composition of double-crested cormorants along the Oregon coast, particularly as related to their predation impacts on salmonids. Cormorant surveys have already been established in some estuaries.

Oregon State Police Fish and Wildlife Division – This policy option package also requests General fund support for Oregon State Police (OSP) Fish and Wildlife Division. In addition to ensuring compliance with the laws and regulations related to fish and wildlife, OSP is also responsible to enforce traffic, public safety, criminal, boat, livestock and environmental protection laws. They investigate natural resource violations in such areas as non-game species, fill and removal, water quality and quantity, water pollution and forest practices. They also respond to emergency situations unrelated to ODFW. This shift would move a portion of OSP off of license dollars and onto General fund ($5.1 million) and a portion of OSP off of Commercial Fish Fund onto General Fund ($80,000). Because the nature of this work provides broad, public benefits for all Oregonians, ODFW recommends that the funding source for these positions include General Funds.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." This package specifically supports this mission. The positions requested in this policy option package will allow ODFW to protect aquatic and upland habitats for Oregon's fish and wildlife based on sound science. They will allow ODFW to fulfill its responsibility to protect and conserve threatened, endangered, and sensitive fish species such as salmon and steelhead and other species of concern. They will promote agency principles through providing solution-based recommendations for land and water use in the face of increasing and competing demands. The positions allow ODFW to work as a team internally and with external partners to conduct studies and provide consistent advice across the State, which builds and maintains trust with the public and other agencies. Successful management and sustainable use of fishery resources for commercial, tribal, and recreational angling that relies on these fish requires a thorough understanding of factors that affect fish populations, including predation by large and growing populations of Caspian terns, double-crested cormorants, and pinnipeds. This policy option package directly supports ODFW priorities to promote participation in angling and to implement strategies to increase angling opportunities. In addition, the Water Program positions relate

directly to the five-year objectives of the Integrated Water Resources Strategy [1) further define in-stream needs/demands; 2) the water-energy nexus; 3) climate change, place-based efforts; 4) water management and development; and 5) healthy ecosystems]. Ensuring that fish and wildlife have healthy habitats helps keep Oregon a great place for people to live, work, and play.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
ODFW's main focus when evaluating fish and wildlife populations and habitat protection and restoration activities is to protect the ability of Oregon's habitat to produce wildlife and conserve at-risk species. Fish and wildlife populations supported by functioning habitat contribute to additional hunting and angling opportunities for Oregonians. By taking actions to monitor and manage populations of salmonid predators, ODFW will be addressing angler concerns and increasing angling opportunities, and therefore, retain anglers that would otherwise quit fishing, and potentially increase the percent of Oregon citizens buying angling licenses. This can be measured by an increase in the percent of the license buying population with licenses or tags (KPMs 1 and 2). Monitoring fish and wildlife populations and recommending or taking appropriate actions helps keep common species common, and minimizes the likelihood that species will be considered at-risk and warrant listing as sensitive, threatened or endangered (KPMs 4 and 5), and by working with others to balance in-stream and out of stream needs and uses (KPM 6). Coordinating with agencies, stakeholders, landowners and others on project reviews, permitting and plan reviews, efforts to control negative avian and pinniped interactions with fishery resources, and providing accurate, timely, expert information to stakeholders and the public is critical to developing effective relationships based on trust and confidence (KPM7). Mitigating for impacts to habitats contributes to efforts to reduce the number of at-risk terrestrial and freshwater species (Oregon Benchmark 86 and 88). Recommending appropriate mitigation can slow the overall rate of decline in the percent of land in a natural habitat condition (Oregon Benchmark 89).

STATUTORY REFERENCE:
Oregon Revised Statutes (ORS) Chapters 496, 497, 498, and 501-513 establish ODFW and the appointed Fish & Wildlife Commission that determines policy, and defines the duties of the agency to regulate and administer Oregon's fish and wildlife laws. The duties are mandated by law and governed by the Wildlife Policy described in ORS 496.012, ORS 536.220(2) Integrated State Water Resources Strategy, the U.S. Migratory Bird Treaty Act (1918), and the U.S. Marine Mammal Protection Act (1972).

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered maintaining the use of Other Funds (License) as a match for Federal Funds in several of these positions. This alternative was rejected because of the broad, public benefits these services provide to all Oregonians. Maintaining use of Other Funds (License) on these services adversely affects ODFW's statutory obligation to manage fish and wildlife to "provide the optimum recreational and aesthetic benefits for present and future generations." Historically, most wildlife management activities have been funded wholly or in part by revenue from the sales of hunting and fishing licenses and related federal excise taxes. Continued reliance on this "user pay" funding model is unsustainable because of declining participation in hunting and fishing due, in part, to the loss of fish and wildlife habitats, which reduces population sizes, reduces hunter and angler opportunity, and increases the cost of fishing and hunting licenses to maintain programs. ODFW also considered having existing staff take on the additional workload. This alternative was rejected, because it would result in the reduction in efforts to implement other agency programs by limiting staff

resources and further spreading the use of limited funding. Shifting the cost of programs that benefit the public as a whole to General Funds will provide stable, appropriate funding for fish and wildlife management.

IMPACT OF NOT FUNDING:
The existing and new positions identified in this policy option package would be eliminated, and the work would not be accomplished. Failure to approve this package would result in reduced stakeholder support for critical conservation programs and reduced wildlife viewing related spending in Oregon businesses and communities. ODFW would be unable to conduct the fish and wildlife population, habitat protection, and restoration work detailed in this package, which is essential for implementing its mission. ODFW staff would no longer be able to participate in the implementation of the Integrated Water Resources Strategy. ODFW would risk losing local control over pinniped and avian predator management, and Oregon would not be able to control pinniped and avian predators of salmon. This would increase conflicts among these predators and anglers, and potentially slowing or reversing the recovery of some ESA-listed salmon and steelhead stocks. Other state agencies implementing their regulatory programs would need to coordinate with a significantly diminished number of local ODFW District staff whose main focus would not be implementation of the other state agencies' programs. Progress on implementing ODFW's responsibilities would be much slower. ODFW would struggle to provide useful, informed, and consistent recommendations to other agencies and the public on a wide variety of issues. These losses would adversely impact ODFW's ability to meet its statutory responsibility to manage fish and wildlife to "prevent serious depletion of any indigenous species and to provide the optimum recreational and aesthetic benefits for present and future generations" (ORS 496.012). Without a state fund commitment, ODFW also risks losing significant federal funding, leveraged by the state's investment in these projects.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Computer hardware and software, office supplies, field equipment.

STAFFING IMPACT
Field Staff Support – No staffing impact beyond permanent, base positions.

Habitat and Conservation – No staffing impact beyond permanent, base positions.

Water Quantity and Quality – In addition to permanent, base positions, 3 positions/ 1.67 FTE:
Continue one (1517205) Limited Duration full-time Natural Resource Specialist 2 position (1.00 FTE).
Continue two (1517206 and 1517207) eight-month Limited Duration Experimental Biologist Aid positions (.67 FTE).

Avian and Pinniped Management – No staffing impact beyond permanent, base positions.

OSP Fish and Wildlife Division – No direct staffing impact to ODFW; however, General Fund requested in this package support permanent, base positions at OSP Fish and Wildlife Division.

QUANTIFYING RESULTS

Overall effectiveness of this policy option package will be determined by protection and improvement of Oregon's fish and wildlife populations and habitat conditions. This can be quantified in a number of ways including monitoring the number of fish and wildlife species considered at-risk, number of species on sensitive, threatened, and endangered species lists, the number of in-stream flow studies conducted per year (goal is 30 per year), pinniped predation on several fish species of concern from year to year, and demonstrating the presence and quantifying the amount of salmonids in the diet of sampled cormorants, and estimating cormorant population numbers from year to year.

REVENUE SOURCE

Field Staff
$4,559,494 General Fund
$103,208 Federal Funds
($4,559,494) Other Funds

Habitat and Conservation
$556,258 General Fund
($556,258) Other Funds

Water Quantity and Quality
$602,811 General Fund (base program)
$201,872 General Fund (Integrated Water Resources Strategy)
($602,811) Other Funds

Avian and Pinniped Management
$581,130 General Fund (base program)
$50,000 General Fund (Cormorant study)
($581,130) Other Funds

OSP Fish and Wildlife Division
$5,180,000 General Fund
($5,180,000) Other Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **102 – Revenue Shortfall Fee Adjustment**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

The 2013-15 biennium is the final biennium under the six year fee adjustment that was effective January 2010. Moving into the next six year horizon, there is a projected shortfall in the commercial fish funded programs. However, the more immediate and significant gap is projected in recreational license funded programs. For the 2015-17 biennium, the projected gap between expenses and revenue for recreational license funded programs is $32 million. This projection is based on several assumptions, including increased costs due to inflation, no additional revenue from license sales or other sources, and fully funding the Oregon State Police (OSP) Fish and Wildlife Division budget request.

A major factor affecting the short and long term outlook for the department is hunting and fishing participation trends. While there has been leveling out in recent years, hunting and fishing participation in Oregon is at the lowest levels in the last 30 years. This decline in participation has been observed across the United States. Several national and state surveys have been conducted to determine the reason for the drop in participation. "Not enough time" and "Family or Work" commitments are frequently cited as the reason for not fishing or hunting. Several other factors likely contribute to this response, including longer travel time to hunt or fish and other commitments, especially for families with children. Other concerns include limited public access, not knowing where or how to fish or hunt, no one to go with, perceived lack of fish or game, and total cost to fish or hunt.

Sales from hunting and fishing licenses and tags represent about one third of the revenues for the department in a typical budget cycle and fund core fish and wildlife management such as field biologists, hatchery production, and enforcement. These revenues are also the working capital of the agency, providing revenues to cover expenses under federal and other grants and contracts until the department is reimbursed. These revenues also serve as match for federal grants and contracts, enabling the department to leverage up to $3 in federal funds for every $1 in state funds.

Another factor affecting the budget outlook is increasing operating and personnel costs. OSP Fish and Wildlife Division, in particular, will experience higher inflation of personnel costs in 2015-17 due to changes in their labor contract. For 2015-17, the base contract between OSP and ODFW will inflate by 17.2% due to these changes.

Several factors have affected the amount of carryover revenue moving into the next six year planning horizon. The 2010 fee schedule was built on the assumption that the department would draw down existing license budget reserves over the six year period. While this helped reduce the size of the fee increase at that time, it was understood that this would reduce budget reserves going into the next six year budget cycle and would need to be restored as part of the next fee increase. These reserves are even lower than originally planned for a number of reasons:

- Revenues from the 2010 fee increase did not meet projections.
- Lower than projected interest on funds due to the economic downturn.
- Reduced federal funding from the Sport Fish Restoration and Boating Trust Fund due to reduced federal excise tax collections on purchases of fishing and hunting related equipment.
- Programs are projected to spend more license dollars this biennium than previously projected due to increasing personnel costs.
- Legislative action shifting costs for OSP Fish and Wildlife Enforcement and other programs from General Fund to license funds.
- Unanticipated Department of Administrative (DAS) charges including higher than projected statewide risk assessments, data charges and other fees assessed to state agencies.

These budget reserves must be replenished in the 2015-17 budget in order to provide sufficient operating capital to float the costs associated with federal grants or contracts.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
In March 2014, the department began meeting with its External Budget Advisory Committee (EBAC) to develop its six year budget strategies and refine the 2015-17 budget proposal. EBAC includes conservation groups, local government, sports groups, commercial fishing representatives, and other interested parties. With their input, the department has focused on strategies to reduce costs and increase revenues. To reduce costs, the department's budget relies on implementing efficiencies and program reductions. To increase revenue, the department will seek funding from alternate sources, one time revenue, and general tax dollars in order to reduce the demand on license dollars. In addition, the department is proposing to adjust recreational, occupational, and commercial licenses, tags and permits.

The proposed fee adjustments were developed through an extensive public involvement process including surveys of 60,000 license buyers, staff surveys, and a series of eight focus groups capped by a full-day discussion with representatives of a wide variety of interests. The fee proposal was refined based on EBAC input and public comments received at town hall meetings across the state, comments submitted to the department, and public testimony before the Oregon Fish and Wildlife Commission.

The proposed increase in recreational license fees would be phased in over three biennia. This is a different strategy than has been used in the past, in which fees were increased significantly once every six years. Department analysis shows that license sales declined after each of these increases, presumably due to buyer resistance to the significant increase in fees. Customers were surveyed in 2013 about their preference regarding future fee increases. Nearly 60-percent of resident hunters and anglers supported more frequent but smaller fee increases. The proposal reflects that feedback. As part of developing the license revenue model used to form the proposed fee changes, the department reviewed license buyer response to fee adjustments in 2004 and 2010. Declines in participation following those fee adjustments were estimated and then applied to identify pricing adjustments that could best minimize drop out and preserve license sale revenues.

Raising the cost of hunting license $2.50 and fishing licenses $5, along with other increases, is projected to generate $8.2 million in 2015-17. Fees for controlled hunt tag applications and youth licenses, including the Juvenile Sports Pac, will not be increased. The department proposal also includes new licenses, combinations and packages that are expected to increase license sales and generate additional federal revenue. These proposals are based on hundreds of ideas generated by the public and staff through surveys, focus groups and other discussions. The proposed fee schedule will be incorporated into a legislative concept submitted by the Governor on behalf of the department. The other strategies related to the budget shortfall, including program reductions and fund shifts are detailed in the department's budget proposal.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
The mission of ODFW is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." The proposed fee adjustment, combined with other strategies to reduce costs and raise revenue, ensure that the department can fund its core fish and wildlife programs that implement the agency's mission and statutory obligations.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
This package maintains funding for core fish and wildlife management activities. This package will influence a number of key performance measures (KPM) for the department including KPM 1 (percent of the license buying population with hunting licenses and tags) and KPM 2 (percent of the license buying population with angling licenses and tags). Because this funding is critical to maintaining core fish and wildlife programs, this package also influences the department's ability to meet all other KPM's.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
The department considered numerous alternatives based on an extensive public involvement process (e.g., surveys of 60,000 license buyers, focus groups, EBAC meetings, town hall comments, written comments). The proposed fee schedule reflects

adjustments based on public input, an attempt to align pricing with the range of prices observed in other western states, and pricing adjustments that could best minimize drop out and preserve license sale revenues. The department also considered program reductions sufficient to offset the projected budget gap. This approach was rejected because of the significant negative impact on the department's ability to meet its statutory responsibilities related to fish and wildlife management.

IMPACT OF NOT FUNDING:
If this package and the related legislative concept are not approved, hatchery production, hatchery research, fish and wildlife enforcement, and field staff would be reduced.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Services and supplies for related programs.

STAFFING IMPACT
24 positions/ 24 FTE*

*This package includes operations of hatcheries and the hatchery research center which would be proposed for reduction if the package is not approved. OSP Fish and Wildlife Division would also be reduced by $2,058,728 if the package is not approved.

QUANTIFYING RESULTS
Participation, purchasing, and revenues will be monitored for comparison with projections in the department's revenue model. The impacts of programs funded with this package are also monitored (e.g., hatchery production, enforcement, fish and wildlife monitoring and inventories).

REVENUE SOURCE

8,217,621 Other Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **103 – SB 830 Col River Fish Management & Reform**

Policy Option Package Element Addendum: 8, 9

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE: Senate Bill 830, passed in summer 2013, created and appropriated monies to Enhancement Fund and Transition Funds to help implement Columbia River Fish Management and Reform rules adopted by the Oregon Fish and Wildlife Commission. This policy option package will continue to provide monies to both funds for the purposes described below.

Enhancement Fund: The purpose of the Enhancement Fund is to enhance fisheries, optimize economic benefits of fisheries, and advance native fish conservation. Toward this end, Senate Bill 830 appropriated $1.5 million General Fund to the Enhancement Fund and provided the Fish and Wildlife Commission (Commission) the authority to establish, by rule, an annual and daily recreational fishing endorsement (Columbia River endorsement) for Columbia River Basin salmon, steelhead and sturgeon. The Columbia River endorsement, established by the Commission in a rule adopted in October 2013, is expected to generate an additional $2 million Other Fund per biennium for the Enhancement Fund ($9.75 per annual license and $1.00 per day per daily license). During the 2013-15 biennium, ODFW used the fund to help: 1) enhance off-channel commercial fisheries in the lower Columbia River (e.g., relocate and increase production of hatchery fish for release in off-channel areas; evaluate potential for expanding, in time and area, current off-channel area commercial fisheries; and complete feasibility studies necessary to establish new off-channel areas); 2) enhance monitoring of recreational and commercial fisheries; 3) monitor wild fish populations and the proportion of hatchery fish on spawning grounds; and 4) enhance enforcement by the Oregon State Police Fish and Wildlife Division.

Transition Fund: The purpose of the Transition Fund is to provide financial assistance to individual commercial fishermen affected by the new Columbia River fish management and reform rules – including monies to help offset the cost to those individuals of alternative gear required for mainstem fisheries. Senate Bill 830 appropriated $0.5 million General Fund to the Transition Fund. During the 2013-15 biennium, ODFW used the fund to provide grants to assist counties that implement county programs providing compensation to impacted commercial fishers.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

Enhancement Fund:
In the 2015-2017 biennium, enhancements to commercial fisheries will focus on the following tasks listed below:

Task 1: Continue to acclimate relocated spring Chinook and coho salmon; rear new Select Area Bright fall Chinook for release at existing off-channel sites in fall 2015 and in 2016; increase production of spring Chinook and coho salmon; and Select Area Bright fall Chinook for release at existing off-channel sites in 2017 and beyond.
Task 2: Set commercial fishing seasons and areas in existing off-channel sites to optimize harvest opportunity; enhance sampling of fisheries as salmon return and harvest increases.
Task 3: Set commercial fishing seasons and areas in the mainstem Columbia River using alternative gear; enhance mainstem fisheries sampling as new fisheries are implemented.
Task 4: Evaluate one new off-channel site to determine if it can produce meaningful numbers of fish for commercial harvest.
Task 5: Enhance monitoring of recreational fisheries as mainstem opportunity increases; enhance assessments of white sturgeon population status in the Columbia River to determine if and when managers may consider reopening retention fisheries.
Task 6: Enhance law enforcement related to expanded recreational fisheries.

Transition Fund:
ODFW will continue to work with participating counties to implement a Columbia River fisheries transition program using $0.5 million General Fund appropriated by Senate Bill 830. This program provides grants to help participating counties implement county programs that compensate individual commercial fishers who document economic harm resulting from implementing Columbia River Fish Management and Reform rules or provide financial assistance to individual commercial fishers to help offset the cost to those individuals of alternative gear required to commercially fish under the new rules.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW has a statutory obligation (506.109) to manage food fish and "to provide the optimum economic, commercial, recreational and aesthetic benefits for present and future generations." Toward this end, and consistent with Commission rules implementing Columbia River fishery management changes for 2013 and beyond, the intent of this package is to mitigate lost commercial fishing opportunity in the mainstem Columbia River by enhancing off-channel fisheries to secure additional economic benefit for the commercial fishery.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The success of measures to enhance off-channel fisheries and provide additional mainstem commercial fishing opportunity using alternative gear, each intended to secure additional economic benefit for the commercial fishery in the lower Columbia River, will be quantified in several ways:

- The number of relocated spring Chinook and coho salmon successfully acclimated, and the number of Select Area Bright fall Chinook successfully reared for release at existing off-channel areas;
- Enhanced commercial fishing opportunity in existing off-channel areas as reflected in additional fishing time and area, increased number of fishers, and increased harvest;
- Completion of feasibility studies and implementation plans for establishing new off-channel sites. These plans will describe necessary actions and associated costs;

- Enhanced commercial fishing opportunity in the mainstem Columbia River, as reflected in mark-selective harvest of hatchery salmon using alternative gear such as seines and tangle-nets.
- Enhanced monitoring will improve the data that are used to manage fisheries. Improved monitoring of incidental mortality of fish species of concern will contribute to KPM 4 (percent of fish species of concern [listed as threatened, endangered, or sensitive] being monitored). Presence of agency staff in sampling fisheries provides increased contact and communication with the public regarding fisheries and fish and wildlife issues. This effort can be expected to contribute to customer service, contributing to KPM 7.
- Enhanced law enforcement monitoring and compliance with rules and regulations.

STATUTORY REFERENCE:
Relevant statutes are 506.109, 506.119, 506.124, 506.129.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
Maintain current fisheries management strategies. This alternative was rejected because it was inconsistent with fisheries management strategies adopted by the Commission.

IMPACT OF NOT FUNDING:
If this package is not approved, the agency would not be able to implement the fisheries management strategies and objectives adopted by the Commission.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

24 positions/12.00 FTE

Task 1: The agency will fund some permanent positions to accomplish portions of this task in lieu of continuing some limited duration positions from the 2013-15 approved budget.
Fund shift two (2700440, 2700681) permanent full-time Fish and Wildlife Technician positions from Federal Funds to Other Funds.
Fund shift 11 months on one (2700066) seasonal full-time from Federal Funds to Other Funds and add one month of Other Funds to make a permanent full-time Fish and Wildlife Technician position (0.04 FTE).

Task 2: Continue one (1517140) Limited Duration full-time Natural Resource Specialist 2 position (1.0 FTE).

Continue eight (1517169 - 1517176) Limited Duration full-time Experimental Biology Aide positions, reduce the months from 18 to 12 (4.0 FTE).

Task 3: Continue two (1517166, 1517167) Limited Duration full-time (12 months) Experimental Biology Aide positions (1.0 FTE).
Continue three (1517164, 1517165, 1517168) Limited Duration full-time (12 months) Experimental Biology Aide positions, but reduce the months from 18 to 12 (1.5 FTE).

Task 4: Continue one (1517141) Limited Duration full-time (eight months) Fish & Wildlife Technician position (0.33 FTE).
Continue three (1517142, 1517179, 1517180) Limited Duration full-time (12 months) Experimental Biology Aide positions, but reduce the months from 18 to 12 (1.5 FTE).

Task 5: Continue five (1517177, 1517181 - 1517184) Limited Duration full-time (12 months) Experimental Biology Aide positions (2.5 FTE).
Continue one (1517178) Limited Duration full-time (four months) Experimental Biology Aid position, but reduce the months from 12 to 4 (0.17FTE).

Task 6: No staffing impacts for the agency but funds will support positions at Oregon State Police Fish and Wildlife Division.

NOTE: There are 8 positions (2.19 FTE) in the Current Service Level budget that are also funded with Columbia River Endorsement Fees. The total funding is budgeted at $338,490.

QUANTIFYING RESULTS

One of the quantifiable results of this package will be the number of fish harvested in off-channel, commercial gillnet fisheries and mainstem commercial fisheries using alternative gear. Success is monitored through the collection of fish receiving tickets into the agency. These tickets provide the commercial landing data reported by the receiving seafood processors.

REVENUE SOURCE

Enhancement Fund
$1,500,000 General Fund
$1,857,398 Other Funds
($ 329,365) Federal Funds

Task 1. $768,118 Total Funds
$640,000 General Fund

$797,215 Other Funds Dedicated (Columbia Endorsement)
($329,365) Federal Funds

Task 2. $616,007 Total Funds
$566,007 General Fund
$50,000 Other Funds Dedicated (Columbia Endorsement)

Task 3. $343,993 Total Funds
$293,993 General Fund
$50,000 Other Fund Dedicated (Columbia Endorsement)

Task 4. $234,091 Other Fund Dedicated (Columbia Endorsement)

Task 5. $356,092 Other Fund Dedicated (Columbia Endorsement)

Task 6. $370,000 Other Fund Dedicated (Columbia Endorsement)

Transition Fund
$500,000 General Fund

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **104 – Klamath Anadromous Fish Reintroduction Plan**

Policy Option Package Element Addendum: 21

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package requests limitation to expend federal funds from the U.S. Fish and Wildlife Service (USFWS) for developing an implementation plan for re-introducing anadromous fish (salmon and steelhead) into the Klamath River Basin of Oregon. Salmon and steelhead have been blocked from their historic habitats in the upper Klamath River Basin since construction of the Copco Dam in California in 1916. Today there are four dams that block fish passage into the upper Klamath River Basin. Re-introduction of anadromous fish is one of the goals of the Klamath Basin Restoration Agreement, which was signed by 26 parties including Oregon, California, three tribes, and numerous non-governmental organizations. This restoration agreement is the outcome of a broader settlement agreement to resolve fish and water issues in the Klamath Basin, including removal of four mainstream dams under the Klamath Hydroelectric Settlement Agreement, also signed by the 26 parties.

Upon completion, the 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.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This package would establish a Limited Duration (LD), full time position in ODFW to create and establish 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

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." This proposal supports the agency mission by facilitating a successful re-introduction of salmon and steelhead into their historic habitats of the Klamath River basin.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
This package address Key Performance Measure (KPM) 2 angling license purchases and KPM 4 listed fish species. ODFW anticipates that the re-introduction and re-establishment of populations of salmon and steelhead into the Klamath Basin will provide additional fishing opportunities. The expansion of the Southern Oregon Coastal coho into the upper Klamath River will be a step towards removing this stock from its listing under the Endangered Species Act. Establishment of naturally-producing Chinook will help alleviate constraints on commercial fisheries in the Klamath Management Zone.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not developing a plan for the re-introduction of salmon and steelhead into the Klamath Basin of Oregon. However, this alternative was rejected since it would likely result in inefficiencies and failed attempts at successful re-introduction and subsequent re-establishment of these populations. More importantly, the opportunity for public engagement and participation would be compromised. ODFW also considered deferring to federal agencies or the tribes to develop the plan. This alternative was rejected since ODFW has the technical expertise and statutory authority for managing fish and wildlife for the State.

IMPACT OF NOT FUNDING:
Because the Klamath Basin Restoration Agreement calls for the re-introduction of anadromous fish (salmon and steelhead) into Oregon, failure to not fund the planning will relegate the planning and implementation activities to either the tribes or federal government agencies. Under that scenario, Oregon will loose its ability to determine the strategies for re-introduction, and will likely loose the ability to manage issues that may arise between fishery managers and other interests in the local community of Klamath County.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Office supplies and computer.

STAFFING IMPACT

1 Position/ 1 FTE
Establish a Limited Duration, full time (1517127) Natural Resource Specialist 3 position (1.0 FTE).

QUANTIFYING RESULTS

The first quantifiable result will be the completion of an implementation plan that identifies strategies and actions to insure the successful re-establishment of salmon and steelhead into the Klamath Basin of Oregon. The second quantifiable result will be the acceptance of the plan and actions by parties to the settlement agreements and the general populace of Klamath County, Oregon. Implementation of the re-introduction plan will be quantified by the re-establishment of self-sustaining populations of anadromous fish (salmon and steelhead) in the Klamath River Basin of Oregon. Ultimately, increases in fish and angling opportunities in the sport, tribal, and commercial fisheries will be quantifiable successes.

REVENUE SOURCE

$200,000 Federal Funds (USFWS)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **105 – Sage-Grouse Initiative**

Policy Option Package Element Addendum: 35

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
In March 2010, the U.S. Fish and Wildlife Service (USFWS) 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 is now a candidate species for listing and in a court settlement the USFWS has agreed to make a determination about whether sage-grouse warrant a listing status as "threatened" or "endangered" by September 2015.

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 4 percent of the land area.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
The Sage-Grouse Initiative is a collaborative, targeted effort initiated by the Natural Resource Conservation Service (NRCS) 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 NRCS 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 NRCS' lack of capacity, and in some cases biological expertise, to develop and deliver effective projects. This package proposes to continue two field biologist positions that provide the expertise to ensure the projects deliver the greatest benefit for sage-grouse and other wildlife.

The Sage-Grouse Initiative was first initiated during the 2011-13 biennium with Limited Duration (LD) positions located in Lakeview and Baker City. To date, these positions have laid the ground work for project implementation. Since inception of Sage-Grouse Initiative in Oregon, more than 136,000 acres have been treated (juniper removal) and more than 150,000 acres of additional juniper treatment have been identified on private lands within three miles of sage-grouse breeding grounds (leks). In addition, six miles of fencing have been marked with durable vinyl markers – to reduce collision rates — to benefit sage-grouse. Recent research has found that fence markers can reduce grouse collisions by up to 83%. . 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.

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 NRCS conservation programs. Due to Congressional constraints, NRCS 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.

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.

<u>HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:</u>

ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." ODFW will collaborate with NRCS and the Intermountain West Joint Venture to enhance sagebrush habitats to benefit sage-grouse, mule deer and other associated wildlife species. ODFW has a long history of working with private landowners to implement the Wildlife Policy. Committing time and resources to work with private landowners remains a priority for ODFW. ODFW has intensified the time and resources dedicated to sage-grouse management over the past 20 years. This effort has led to

development of the Greater Sage-Grouse Conservation Assessment and Strategy that serves as a blueprint for management of sage-grouse in a way that would ensure long-term population viability. The ultimate goal of ODFW is to avoid having sage-grouse warrant listing as threatened or endangered under federal Endangered Species Act. Avoiding a listing will greatly benefit many Oregonians, in particular the ranching community and the sector of the Oregon economy dependent on a healthy native sagebrush environment.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The ODFW Sage-Grouse Initiative positions will work to enhance sagebrush habitats through technical assistance to agencies and project proponents. These efforts are integrated with the Oregon Conservation Strategy. An increase in the sage-grouse population may help forestall federal listing of the species in Oregon, which would contribute to efforts to increase the number of terrestrial species that are not at risk (Oregon Benchmark 88).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS 496.012 (Wildlife Policy).

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
The workload associated with these tasks will continue to occupy two positions for 12 more months each. ODFW considered having existing staff work on habitat restoration projects and then rejected this alternative because ODFW would need to reprioritize staff away from other obligations to adequately implement the Sage-Grouse Initiative. The success of planning efforts with private landowners is often determined by development of working relationships with local ODFW staff. Failure to extend these two Limited Duration positions will result in a disruption of the working relationships they are building with landowners. Since the Federal Funding has time limits for expenditures, it is critical to maintain continuity between the landowners and ODFW staff. Pulling permanent staff from other duties will result in a time lag as these individuals would have to familiarize themselves with the local projects, the federal application process and implementation schedules. Delays could inhibit the willingness of landowners to participate and result in significant loss of improvement opportunities for habitat.

IMPACT OF NOT FUNDING:
If the sage-grouse is listed under the federal ESA, private landowners will be subjected to new federal regulations that could impact their land management operations and negatively affect sectors of the Oregon economy that dependent upon healthy sagebrush habitat, such as ranching. The funding available through NRCS is targeted at addressing the threats identified within the federal listing review. When coupled with other federal programs, these improvements could provide private landowners safeguards and assurances from more restrictive federal regulations.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

2 Positions / 1.00 FTE
Continue two (1315057/1517192 and 1315058/1517193), Limited Duration (12 months), Natural Resource Specialist 2 positions (1.0 FTE).

QUANTIFYING RESULTS

Recent research in Oregon indicated conifer encroachment has a negative impact on breeding sage-grouse. Therefore, continuation of this program will focus on treating the remaining 150,000 acres identified within three miles of all active leks. Removing juniper within three miles of active leks should result in increased use by breeding grouse and a subsequent population increase. An increase in the sage-grouse population may help avert a federal listing of the species in Oregon, which would contribute to efforts to increase the number of terrestrial species that are not at risk (Oregon Benchmark 88).

REVENUE SOURCE

$90,000 General Funds
$90,000 Other Funds Obligated (Pheasants Forever/Intermountain West Joint Venture)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **106 – Mitchell Act Fish Marking & Hatchery Reform**

Policy Option Package Element Addendum: 5

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This Policy Option Package to use federal funding for ODFW hatcheries (Mitchell Act) was approved in 2013-15. This request is to continue the program in 2015-17.

The National Oceanic and Atmospheric Administration (NOAA) Mitchell Act fisheries program was passed in 1938 to conserve the fishery resources of the Columbia River and has provided funds to operate and maintain Oregon hatcheries since the 1950s. Currently ODFW produces 14 million salmon and steelhead smolts from five hatcheries for commercial and sport harvest using Mitchell Act funds. This request is a consolidated package to address monitoring, hatchery reform actions, and efficiencies across the Mitchell Act hatchery system operated by ODFW.

Specifically, this Policy Option Package requests limitation to:

1. Implement hatchery reform actions for the Mitchell Act funded facilities;
2. Continue monitoring and management actions in the Sandy River to achieve Endangered Species Act (ESA) compliance of Sandy hatchery programs; and
3. Consolidate the operations of three hatcheries (Eagle Creek, Sandy, and Clackamas complex).

Mitchell Act Fish Marking & Hatchery Reform:
To permit the Mitchell Act fisheries program, NOAA has drafted an Environmental Impact Statement which is out for public review. One of the primary issues addressed in this impact statement is the interaction of hatchery and wild fish, including competition and the potential consequences of hatchery fish spawning with wild fish. To address these issues, among others, NOAA authorized Fish Hatchery Reform actions in 2010. These actions included marking 100 percent of fish (adipose fin clip) in all designated harvest programs, monitoring and evaluation, and reform objectives. The reform actions also included a mandate to reduce programs if all hatchery fish in the harvest program were not fin clipped. This mandate of marking 100 percent of all hatchery fish was accompanied with additional funding.

Sandy Hatchery Monitoring, Evaluation, and Reform:

This package also requests the continuation of Limited Duration (LD) positions established in 2011-13 and reauthorized in 2013-15 to maintain the monitoring and management actions in the Sandy River needed to achieve ESA compliance for Sandy Hatchery programs. ESA compliance is required to maintain the production of hatchery fish to support recreational and commercial salmon fisheries. Within the Sandy Basin, all native, anadromous populations of salmonids (except sea-run cutthroat trout) are currently listed under the federal ESA, including spring and fall Chinook salmon, coho salmon, chum salmon and winter steelhead. Sandy Hatchery (ODFW operated) currently releases spring Chinook salmon, coho salmon, and summer and winter steelhead to support commercial and recreational fisheries in the ocean, Columbia River, and Sandy River. The activities of ODFW hatchery employees are essential to assuring these hatchery programs are consistent with ESA authorization. Activities include trapping and sorting hatchery spring Chinook to exclude these fish from wild fish spawning areas; operating an acclimation pond to reduce straying of hatchery fish to wild fish spawning areas in the upper basin, and supporting spawning ground surveys to estimate the population size and composition of spring Chinook. These actions are required by ESA authorizations and are associated with hatchery reform measures designed to reduce potential impacts of the hatchery programs on wild fish populations in the Sandy basin.

Consolidation of Mitchell Act Hatcheries:
This package requests the continuation of LD positions into the 2015-17 biennium that were established in 2013-15 to consolidate the operations of three existing hatcheries, pending legislative authorization and final approval by the U.S. Fish and Wildlife Service (USFWS). ODFW produces nearly 2.5 million salmon and steelhead smolts to release in the Sandy and Clackamas River basins annually. However, the Sandy and Clackamas hatcheries struggle with low summer water flows and high temperatures which have resulted in ODFW transferring eyed eggs to other hatcheries for rearing. ODFW staff transfer fish in the fall and spring to acclimate to their natal stream prior to release. There are concerns that this rearing strategy, which removes fish from the waters of their natal stream during part of the production cycle, increases the likelihood of adults straying to streams other than their release stream. The straying of adult hatchery fish is a conservation concern due to the potential for these fish to spawn with wild, ESA-listed populations. Returns of adult hatchery coho, spring Chinook and winter steelhead are removed from the stream and spawned by ODFW staff at Sandy and Clackamas hatcheries to prevent these hatchery fish from spawning with wild fish. However, ODFW staff cannot remove hatchery fish if they stray to other streams.

The USFWS operates the Eagle Creek Hatchery to produce steelhead and coho smolts for release into Eagle Creek, a tributary to the Clackamas River. This federal facility has high quality water with cool summer flows. The USFWS struggles to fund and operate Eagle Creek Hatchery. It recently lost funding for their winter steelhead program and transferred production to ODFW in 2012. The USFWS also reduced coho production in 2010. ODFW hatcheries waste time and money transferring Clackamas- bound production hundreds of mile away for rearing, only to return the fish for release, which may increase stray rates. Meanwhile, the Eagle Creek Hatchery is cutting production and operating the facility at half capacity within the Clackamas basin. This Policy Option Package seeks to address these biological and logistical problems by consolidating fish production the Eagle Creek, Sandy and Clackamas hatcheries into one complex to be operated by ODFW.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

Mitchell Act Fish Marking & Hatchery Reform:

This package proposes hatchery reform actions for the facilities funded by the Mitchell Act. The primary objective is to mass mark all hatchery fish, including fall Chinook, by removing the adipose fin, a fatty appendage located between the dorsal fin and the tail. The removal of the adipose fin allows the angler, fish culturist, and researcher to visually identify the fish as hatchery produced without killing the fish. Anglers can release wild fish back into the water, but are able to identify and retain hatchery fish in Oregon's selective harvest fisheries. ODFW relies on the mark to identify and remove hatchery fish on the spawning grounds to protect wild fish, collect appropriate broodstock, and conduct research. Fish can also be marked by embedding a small coded wire tag in the snout of individual juveniles and later use data from recovery of these tags to evaluate mixed stock fisheries, smolt-to-adult return rates, and the rate of fish straying to other tributaries. Other reform actions include the construction of temporary weirs to block hatchery fish from entering primary spawning areas of wild steelhead and salmon. These actions are consistent with the draft NOAA Mitchell Act Columbia River Environmental Impact Statement and Lower Columbia River Recovery Plan.

Sandy Hatchery Monitoring, Evaluation, and Reform:

The package continues LD positions into the 2015-17 biennium that were established in 2011-13 and continued in 2013-15. The package reduces the months in these positions (-1.17 FTE) to align personnel needs with recent adjustments to funding levels and project activities. These positions are needed to continue the survey and management actions in the Sandy River Basin to maintain ESA compliance at Sandy Hatchery. This work is essential to control and monitor stray rates of spring Chinook to assure the hatchery programs are consistent with ESA authorization. The project also implements and evaluates hatchery reform measures intended to reduce the potential impacts of the hatchery program on wild fish by trapping and sorting hatchery spring Chinook before they enter upper basin spawning areas. These positions also operate an off-site acclimation pond intended to reduce stray rates of returning hatchery fish to wild fish spawning areas in the upper basin. These activities are necessary to facilitate the continued operation of Sandy Hatchery so that continued fish releases can support recreational and commercial fisheries, and to assure returning hatchery fish are managed in a manner that protects wild fish populations.

Consolidation of Mitchell Act Hatcheries:

The proposed solution is for ODFW to assume the operations and management of Eagle Creek Hatchery and produce fish at its full capacity. The result is that more fish would be kept in basin on natal waters, reducing the cost of transportation and the likelihood that fish would not stray. This solution would also link Eagle Creek, Sandy, and Clackamas hatcheries together for operations into a complex. All three hatcheries would be operated under one manager and one sub-ordinate manager. Each hatchery is within 25 miles of Eagle Creek. Combining the three facilities under one manager would allow sharing of staff for peak work activities, reduce transportation, provide better fish culture techniques and be more cost efficient.

In 2012, the USFWS and ODFW entered into an Interagency Personnel Agreement that funds an ODFW hatchery supervisor to assess Eagle Creek Hatchery and manage operations. The intent of this agreement is to evaluate the condition and operations of the hatchery and develop strategies to consolidate the hatchery programs within the Clackamas and Sandy river basins. After a careful assessment, ODFW will begin conversations with the USFWS with the goal of annexing Eagle Creek Hatchery into the ODFW hatchery system. The USFWS has committed to transferring its Mitchell Act funding to ODFW to operate the facility. This package would allow ODFW to create three new positions and relocate one Sandy Hatchery staff to Eagle Creek to operate and maintain Eagle Creek Hatchery with a total of four employees.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
The mission of ODFW is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." This Policy Option Package specifically supports enhancement of angling opportunities and conservation of salmonids listed under the Endangered Species Act.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Overall, hatchery production contributes to commercial fish landings and supports rural economies along the Oregon Coast and the Lower Columbia River, diversifying Oregon's economy and providing jobs in rural communities. This package will contribute to ODFW's efforts to increase the percentage of the angling community buying angling license or tags by stocking 2.5 million salmon and steelhead and by marking hatchery fish for a selective harvest fishery.

Hatchery reforms and selective harvest of marked fish protect wild ESA listed fish by allowing a selective harvest fishery and reducing the number of strays. Over time, these efforts will hopefully reduce the number of freshwater fish listed as a species of concern.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
Mitchell Act Fish Marking & Hatchery Reform:
Forgoing mass marking of 14 million steelhead and salmon was considered a cost saving measure. However, not marking fish is inconsistent with the Lower Columbia River Recovery Plan and the draft Environmental Impact Statement provided by NOAA.

Sandy Hatchery Monitoring, Evaluation, and Reform:
Assigning these activities to existing staff is not possible due to current workload constraints and the impact to other programs and customer service if staff were redirected. Not completing these activities could create a situation where legal requirements related to the ESA and recovery of listed species pursuant to the Lower Columbia River Recovery Plan is not achieved, and the continued operation of Sandy Hatchery could be threatened.

Consolidation of Mitchell Act Hatcheries:
The Confederated Tribes of the Warm Springs have inquired about operating Eagle Creek Hatchery. Although this alternative has not been rejected, the Tribes' emphasis would be placed on the Columbia River and Deschutes fisheries instead of the Clackamas and Sandy rivers. If this package is denied, the efficiencies of utilizing staff from the other hatcheries would be lost.

IMPACT OF NOT FUNDING:
Mitchell Act Fish Marking & Hatchery Reform:
If these actions are not taken, the Oregon portion of Mitchell Act fish production will be reduced accordingly. The result would be fewer harvestable fish, unrestricted hatchery fish on natural spawning grounds, and less ability for adaptive management. Conservation efforts, cooperative fisheries management agreements, and creation of fishing opportunities for Oregon anglers will suffer. The funding will be reallocated to Washington, Idaho, and Columbia River Treaty Tribes to enhance their fisheries. This enhancement is essential for adequate representation of the interests of citizens of the state of Oregon in salmon harvest, recovery, management decisions, and policy development on the Lower Columbia River.

Sandy Hatchery Monitoring, Evaluation, and Reform:
Without continued funding and the LD positions requested, ODFW would lack the staff resources needed to implement actions required to maintain ESA compliance at Sandy Hatchery or to implement and evaluate reform measures intended to reduce the potential effects of the hatchery spring Chinook program on wild populations. The likely result would be stray rates of hatchery spring chinook that exceed the limits specified in the Lower Columbia River Recovery Plan, ESA Hatchery Genetic Management Plan, and other ESA requirements. Not achieving these required standards would place the continued production of fish at Sandy Hatchery at risk, and failure to maintain these releases would directly impact recreational and commercial fisheries in the Sandy and Columbia rivers and the ocean.

Consolidation of Mitchell Act Hatcheries:
If this package is not funded, status quo hatchery production will be maintained, including the inefficiencies outlined above and no reforms to address stray rates or better conserve ESA listed fish.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

STAFFING IMPACT

10 Positions / 6.5 FTE

Mitchell Act Fish Marking & Hatchery Reform:

- No new positions requested.

Sandy Hatchery Monitoring, Evaluation, and Reform:

- Continue two (1517157, and 1517158) LD (9 months) full-time Experimental Biological Aide positions (0.75 FTE).
- Continue three (1517159, 1517160 and 1517161) LD (8 months) full-time Experimental Biological Aide positions (1.00 FTE).
- Continue one (1517133) LD, (18 months) full-time Natural Resource Specialist 1 position (0.75 FTE).

Consolidation of Mitchell Act Hatcheries:

- Continue three (1517162, 1517163, and 1517139) LD, full-time Fish and Wildlife Technician positions (3.00 FTE).
- Continue one (1517137) LD, full-time Fish and Wildlife Technician Senior position (1.00 FTE).

QUANTIFYING RESULTS

Mitchell Act Fish Marking & Hatchery Reform:

The success of this package can be quantified by measuring ODFW's fish production. ODFW's goal is to produce and mark 14 million Chinook, coho and steelhead.

Sandy Hatchery Monitoring, Evaluation, and Reform:

Desired, quantifiable results include: 1) the number of returning hatchery spring Chinook collected in temporary traps and prevented from migrating to upstream wild fish spawning areas; 2) the number of wild spring Chinook passed through these traps; 3) the percentage of hatchery fish on spawning grounds [target is less than 10 percent; 4) the number of spring Chinook smolts acclimated in a distinct water source prior to release; and 5) the total number of spring Chinook spawning in the Sandy River. These results will be quantified and reported to NOAA in annual reports.

Consolidation of Mitchell Act Hatcheries:

ODFW will quantify the success of this package by tracking fish production and Chinook stray rates. ODFW's goal is to produce and mark 2.5 million Chinook, coho, and steelhead for release in the Sandy and Clackamas basins and reduce stray rates of Chinook to 10 percent or less, consistent with the Lower Columbia River Recovery Plan.

REVENUE SOURCE

$2,171,000 Federal Fund (NOAA Mitchell Act)

- $1,150,000 Mitchell Act Fish Marking and Hatchery Reform
- $480,000 Sandy Hatchery Monitoring, Evaluation and Reform
- $540,000 Consolidation of Mitchell Act Hatcheries

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **107 – Marion Forks Hatchery Complex**

Policy Option Package Element Addendum: 6

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This Policy Option Package seeks continued spending limitation for operation of the Marion Forks/Minto Ponds complex. The package was approved in 2013-15. This facility was originally established to mitigate for 35 miles of spawning habitat that was blocked by the construction of Detroit and Big Cliff dams on the North Santiam River. Staff at Minto Ponds work to mitigate the effects of these dams by trapping and hauling spring Chinook salmon and steelhead (listed under the Endangered Species Act) past the dams, and by using captured fish to provide eggs for the Marion Forks Hatchery to compensate for lost production. Without the trapping facility at Minto Ponds, the North Santiam stocks of Chinook and steelhead would be in jeopardy of extinction.

Originally, Minto Ponds required direct handling of fish by ODFW staff, which increased stress on the fish, resulting in reductions in their overall health. The old facility also required the entire ODFW staff of Marion Forks Hatchery to operate, and it was therefore only operated for a limited time each year. Due to these inefficiencies, the rebuild of Minto Pond by the United States Army Corp of Engineers (USACE) was identified as one of the Reasonable and Prudent Alternatives (RPAs) in the Upper Willamette Biological Opinion. The approximately $30 million rebuild of the old facility is in the final construction although collection operations by ODFW began April 1, 2013.

The state-of-the-art facility allows efficient collection and transportation of adult Chinook salmon and steelhead upstream of the dams; acclimation, fish spawning, juvenile rearing, incubation, long-term holding, out-planting and fish recycling on a year-round basis. This facility uses direct water-to-water transfer to eliminate fish handling by staff, which will improve fish health upon release. Minto Ponds will be open to the public during certain times of the year and includes a kayak portage trail. This package enables ODFW to continue to provide the needed staffing to assist with the added resource enhancement activities at the two facilities (Marion Forks Hatchery and the Minto Pond facility) within this complex. The work of ODFW staff will contribute to important recreational and commercial fishing opportunities in the basin while protecting and contributing to the recovery of populations of wild salmon and steelhead populations as per the Willamette River Biological Opinion and Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead. Resource enhancement activities within this complex assist ODFW in meeting legal obligations for the recovery of salmon species listed pursuant to the state and the Endangered Species Act (ESA).

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This Policy Option Package provides ODFW with essential staffing to take advantage of the new capacity at Minto Pond to achieve agency conservation goals and contribute to important recreational and commercial fishing opportunities. Dedicated staffing will allow Minto Ponds to provide year-round services, including out-planting adult salmon and steelhead above the dams on the North Santiam, without requiring staff that are essential to the operation of the Marion Forks Hatchery. The requested Fish and Wildlife Supervisor and Manager Positions will provide leadership for hatchery employees and volunteers, and will be responsible for overall management of the Marion Forks/Minto Ponds complex. ODFW generally uses working managers, and so these positions will carry out aquaculture duties in addition to acting in a supervisory capacity. The two requested Fish and Wildlife Technician positions will implement daily fish culture tasks. These positions will be primarily responsible for trapping salmon brood stock, incubating fertilized eggs, rearing young fish, and maintaining fish health. A modern hatchery complex like Marion Forks/Minto Ponds relies heavily on equipment that functions properly to ensure appropriate water flow and quality. Without regular maintenance, fish will die and the facility will not meet its goals. The requested Facility Maintenance Technician position will be vital to ensure the proper functioning of equipment necessary for fish culture, including pumps, generators, mechanical crowders, sorters, and complicated electronics.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
The mission of ODFW is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." These positions contribute directly to ODFW's mission at the Marion Forks Hatchery Complex to offset natural fish production loss due to hydroelectric operations, habitat alteration, and other human activities resulting in reduced fishing opportunities.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The North Santiam and the Marion Forks/Minto Pond Complex produce large numbers of adult spring chinook salmon and summer steelhead that contribute to sport and/or commercial fisheries along the North Santiam, mainstem Santiam, Willamette, and Colombia Rivers as well as ocean fisheries from Oregon to Alaska. This facility will allow safe recycling of these species back into the North Santiam River for added benefit to anglers. This increased opportunity may attract additional anglers and help ODFW increase the percentage of the license buying population with angling licenses or tags (KPM 2). Fish production also contributes to Oregon's commercial fisheries and supports rural communities especially along the coast and the Columbia River (Oregon Benchmark 1).

Minto Pond's new fish-friendly design will aid in out-planting and reintroduction efforts to restore listed salmon and steelhead to their native habitats above two high head dams on the North Santiam River. The Marion Forks/Minto complex will minimize interactions of hatchery and wild fish on the spawning grounds by removing adult hatchery salmon and steelhead from the river and improving smolt acclimation to reduce stray rates of returning adults. The maintenance of wild fish stocks contributes to the statewide goal of decreasing the number of species that are listed as at risk (Oregon Benchmarks 86 and 87).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

.TERNATIVES CONSIDERED AND REASONS FOR REJECTION.

The Minto facility was in the planning and development stage for over two years with design and development from ODFW, USACE, Bonneville Power Administration, and National Oceanic and Atmospheric Administration. The design of this facility went through an in-depth value engineering process to come up with the best design possible. Not funding or under funding this new facility was rejected because it would waste the funds associated with design and construction, and would fail to meet ODFW's fish conservation and production goals of trapping adults and releasing fish above the Detroit Reservoir.

IMPACT OF NOT FUNDING:

If the Marion Forks/Minto complex and staffing is not funded, the North Santiam stocks of Chinook and steelhead would be in jeopardy. These federally listed fish would remain at high risk of extinction. Loss of the spring Chinook and winter steelhead stocks unique to the North Santiam River would disrupt the river's ecology and impact sport and commercial fisheries in the Willamette River, Lower Columbia River, and Pacific Ocean.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):

None.

STAFFING IMPACT

3 Positions / 3.00 FTE
Continue two (1517117 and 1517118) Limited Duration, full-time Fish and Wildlife Technician positions (2.00 FTEs).
Continue one (1517116) Limited Duration, full-time Facility Maintenance Technician position (1.00 FTE).

QUANTIFYING RESULTS

ODFW will quantify the success of the new Marion Forks/Minto Ponds hatchery complex by monitoring the number of adult steelhead that are recycled back in the North Santiam River for benefit to anglers, the number of wild fish out-planted to restore listed salmon and steelhead to their native habitats above two high head dams on the North Santiam; the number of hatchery fish that are removed from the river to protect spawning wild fish, and the number of hatchery fish that are produced for recreational and commercial fisheries. Results will also be quantified by comparing the number of hatchery fish tags purchased, filled within the region, and those purchased and filled elsewhere in Oregon.

REVENUE SOURCE

$600,000 Federal Funds (USACE)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **108 – Idaho Power Company Fall Chinook Production**

Policy Option Package Element Addendum: 4

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

DESCRIPTION OF PROBLEM OR ISSUE:
In the 1960's, the Idaho Power Company (IPC) constructed three hydro dams (Brownlee, Oxbow, and Hells Canyon dams) on the Snake River, eliminating hundreds of miles of spawning and rearing habitat in northeast Oregon and southwest Idaho. The result was the extirpation of fall chinook above the project area and the dramatic reduction of fish below the dams due to altered river flows. In 1980, these dams were relicensed by the Federal Energy Regulatory Commission (FERC). Under this relicensing, IPC was required to produce 1 million fall chinook smolts annually as mitigation. This goal was unmet over the next 10 years, and fall chinook returns continued to decline until the species was listed as threatened under the federal Endangered Species Act (ESA) in 1992. By 2000, the Washington Department of Fish and Wildlife and the Nez Perce Tribe had increased the abundance of fall chinook adults in the Snake River through hatchery production, but the majority of required mitigation remained unmet. At that point, all the IPC mitigation was funded through Idaho Fish and Game.

In 2001, ODFW met with its tribal, state, and federal partners to discuss implementation of IPC's mitigation requirements including the unrealized production of one million fall chinook. In 2002, IPC proposed that ODFW experimentally produce 200,000 fall chinook at Umatilla Hatchery. Oregon Legislative Emergency Board (Department of Administrative Service package number 56) approved the request and Other Fund (obligated) limitation. ODFW was also directed to explore its capacity to produce the entire fall chinook mitigation required by the FERC 1980 Hells Canyon license agreement. ODFW continued to work with Tribal, state, and federal partners through 2008 to implement full production of 1 million fish (2 million per biennium). The parties agreed that ODFW would produce 800,000 fish and Idaho Fish and Game would produce 200,000 fish annually. In December 2010, a longer-term agreement was made and ODFW entered into a new five-year contract agreement, with inflationary adjustments, with IPC to produce, mark, tag, and release 1,000,000 fall chinook annually or 2,000,000 per biennium.

This Policy Option Package for hatchery production of fall Chinook salmon for mitigation was approved by the Legislature in the 2013-15 budget. This request is to continue this program in 2015-17.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This package would approve limitation to maintain production of 1,000,000 fall Chinook annually at Irrigon Hatchery. The expected budget to meet Oregon's obligation in the 2013-15 biennium is $359,000. In brief, adults are collected and spawned at Lyons Ferry Hatchery, WA. Eyed eggs are transferred to Irrigon Hatchery in December. In April, all fingerlings are adipose fin clipped and a portion is coded wire tagged. Smolts are reared to a target size of 3.5 inches (50 fish per pound), and in May, IPC transports fish to the Snake River and liberates them below Hells Canyon Dam.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This proposal specifically supports agency priorities to promote participation in fishing and to implement strategies to increase angling opportunities. This project also supports commercial fishing opportunity for both state and Tribal anglers in the Columbia River.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The mitigation of hydroelectric projects through the production of hatchery fish increases angling opportunity. This increased opportunity is expected to increase the percent of the license buying population with fishing licenses and tags (Key Performance Measure 2). Hatchery fish produced by ODFW are marked by removal of the adipose fin, which allows for a selective harvest and protects ESA listed wild fish in the same system. This marking practice contributes to ODFW's efforts to reduce the percentage of monitored freshwater fish species that are listed under the state or federal ESA (Oregon Benchmark 86). These hatchery fish also contribute to economically important fisheries, increasing the diversity of Oregon's economy by providing jobs in rural communities (Oregon Benchmark 1).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
IPC is contemplating construction of a new hatchery to meet their licensing obligations; however, these plans are not well developed and may be decades away from implementation. The construction of a new facility would potentially cost $10-$20 million and would likely be passed along to rate payers. Increased production by the Nez Perce Tribe and the states of Washington and Idaho were considered, but none have existing capacity to meet the need. The proposed utilization of space in ODFW operated facilities is cost efficient, and will result in direct saving to electric rate payers.

IMPACT OF NOT FUNDING:

If this package is not approved and ODFW is not allowed to continue meeting this fish production goal, results are unclear. IPC may choose to 1) construct a new hatchery deferring cost to rate payers; 2) modify hatcheries in Washington or Idaho to meet their mitigation obligations; or 3) default on their mitigation responsibilities.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

None.

QUANTIFYING RESULTS

The success of this package can be quantified by measuring ODFW's fish production. The agency's goal is to produce and mark 1,000,000 fall Chinook smolts for release. Success can also be evaluated based on the continued existence of a local fishery in the Snake River.

REVENUE SOURCE

$360,000 Other Funds Obligated (Idaho Power Company)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **109 – PR Funding for Wildlife Research & Management**

Policy Option Package Element Addendum: 30

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

This policy option package requests limitation to expend Federal Funds from the Pittman-Robertson Wildlife Restoration Act. This act, which is funded through an excise tax on sporting arms and ammunition, provides federal aid to the states for the management and restoration of wildlife. The funds may be used to support a variety of wildlife projects, including improvement of wildlife habitat, survey and monitor various wildlife species and capital improvement projects on wildlife areas. Nationally, all states have seen an increase in their Pittman-Robertson funding as a result of increased sales of sporting arms and ammunition. In recent years, ODFW has requested limitation increases to invest these additional revenues into projects that meet critical agency needs.

ODFW has seen a steady decline in mule deer and black-tailed deer populations across the state, and a related decline in rates of hunter success. Currently, many Wildlife Management Units are below adopted population objectives. In response, ODFW launched the Mule Deer Initiative in 2009, which is a dedicated effort to improve mule deer populations in five Wildlife Management Units in eastern Oregon. In western Oregon, ODFW is continuing a similar effort for black-tailed deer. The success of both programs will rely heavily on accurate surveys of wildlife populations and their harvest rates to determine if management actions are successful. In addition to declining big game populations, the state of Oregon has identified wetlands as an at-risk habitat in the Oregon Conservation Strategy. These conservation strategy habitats have been threatened by limited water supply, diking and draining, nonpoint source pollution, and the introduction of invasive species. The restoration of degraded wetland habitat can provide benefits to a wide variety of plant, amphibian, and bird species, and improving water quality and quantity.

Deferred maintenance of facilities and infrastructure on ODFW's wildlife areas has been documented as a concern. Key investments in these facilities needs to continue on these areas in order to maintain healthy wildlife habitats and to ensure buildings and equipment remain functional.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

ODFW has used the recent increase in available Federal Funds to address several long-standing issues. This package requests increased Federal Fund limitation for wildlife management to continue mule deer and black-tailed deer initiatives, improve wetland function on key wildlife areas, survey and monitor various wildlife species and address deferred maintenance needs.

Multiple partners are involved in the mule deer and black-tailed deer projects including the National Resource Conservation Service, Bureau of Land Management, U.S. Forest Service, Oregon Hunters Association, Rocky Mountain Elk Foundation, National Wild Turkey Foundation, multiple Soil and Water Conservation Districts, and private landowners. These partnerships have brought funding for the required 25 percent match, including many hours of volunteer time to these projects. Specific projects are detailed below.

Mule Deer Initiative:
In response to public concern, ODFW developed the Mule Deer Initiative plan to identify and address limiting factors of mule deer populations in five Wildlife Management Units — Maury, Heppner, Warner, Steens Mountain, and Murderer's Creek. While strategies in the plan were designed to benefit mule deer, they also benefit many other wildlife species. Objectives and strategies were identified in an Action Plan with an overall goal of reaching Management Objectives for mule deer populations. Previously, four of the five units have used Pittman-Robertson funds for these projects. Projects have included cutting juniper to restore important shrub-steppe vegetation, thinning dense forest canopies to increase available forage, reconstructing livestock fences to protect important winter range, restoring aspen stands, implementing forest practices to improve stand diversity, treating noxious weeds, and implementing controlled burns.

Improved Mule Deer Surveys and Population Assessments:
As part of the Mule Deer Initiative, ODFW has begun the process of changing how mule deer are managed. The keystone of this work is based on managing by herd range instead of by individual management units. Based on the recent work completed in the S. Central Mule Deer Study, the ODFW has begun collaring mule deer in the Blue Mountain Zone encompassing the forested regions from Prineville to the far northeastern corner of Wallowa County. To accomplish this, 500 GPS transmitters have been deployed on mule deer across a broad area. These collars will document deer mortality and movement between summer and winter ranges. This information will identify how deer disperse from winter range areas where they are counted to their summer ranges where they are hunted. This information will make it possible for managers to better estimate the appropriate number of tags to be issued for hunting purposes. Additionally, ODFW will be changing how deer are counted in these areas using aerial survey methodologies developed in other western states that will increase the reliability of population estimates.

Big Game and Waterfowl Aerial Surveys:
Aerial surveys are conducted in Wildlife Management Units throughout the state to collect information on population and distribution trends for big game. Surveys evaluate population trends for big game to inform recommendations that will maintain or increase big game populations and hunting opportunities. Waterfowl surveys are conducted annually as part of a

multi-state effort to meet the Pacific Flyway's obligation for implementation of the Western Mallard Model. The data collected on these surveys is the key component of calculating waterfowl abundance used in determining season length and bag limits for hunting seasons.

Black-tailed Deer Research Project:
Black-tailed deer hunting and wildlife-related activities are an important part of Oregon's culture and economy. Unfortunately, the deer population and associated hunter harvest have declined since 1994. To guide management and address these issues, a statewide black-tailed deer management plan was developed in 2006. The plan emphasizes that knowing critical population parameters and being able to monitor changes in those parameters is of paramount importance to management.

A black-tailed deer research project was initiated in the fall of 2010 to answer several questions of management concern, including habitat use patterns, survival rates, causes of mortality, and herd health. The initial objectives of the project were to collar black-tailed deer and to evaluate the efficiency of tracking collars outfitted with Global Positioning System technology in Oregon's Coast Range. The study started in the Trask Wildlife Management Unit, and has since been expanded to the Alsea, Indigo, and McKenzie Wildlife Management Units. The project has since expanded to include testing the viability of using fecal DNA as a method to estimate black-tailed deer populations. Developed in Alaska for Sitka black-tailed deer, the methodology shows some promise as a viable way to estimate populations. The current tests being run are to determine if this methodology not only can work in Oregon, but the feasibility of implementation at a broad management scale.

Deferred Maintenance Needs on Wildlife Areas:
ODFW manages multiple wildlife areas across Oregon. Many of these areas have buildings, facilities and equipment that are 30 to 70 years old and in need of repair or replacement. ODFW has been systematically replacing old and outdated equipment, replacing barns and updating/repairing living quarters and offices. Further work still needs to be accomplished replacing barns, hay sheds, public restrooms to meet ADA requirements, windows, roofs, parking lots and some equipment.

Wetland Complex Restoration:
Work is nearing completion on a massive wetland restoration project at Summer Lake Wildlife Area. Additionally, the Klamath Wildlife Area has been identified as the next wetland complex that needs replacement and repair for key water management structures (dikes, water diversions and pumps) to better manage the area for wetland dependent species such as waterfowl, geese and shorebirds. Federal funding is a critical component used by ODFW and various partners to complete these multi-year projects.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
The ultimate goal of this work is to increase wildlife populations through habitat improvements and research and measure that response with more accurate surveys. This result will allow ODFW to increase controlled tag numbers or maintain general season

hunts for mule and black-tailed deer. Funding this package will contribute directly to ODFW's mission: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations."

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Research projects and improved surveys contained in this package will contribute to a wide variety of ODFW specific and statewide measures of success. As game populations respond to these efforts, ODFW expects to increase tag allocations. ODFW anticipates that this expanded hunting opportunity may increase the percent of the license buying population purchasing hunting licenses or tags (KPM 1) and increase the number of customers rating their satisfaction with the agency as excellent (KPM 7). Habitat improvements primarily designed to benefit mule deer may also support the conservation of at-risk terrestrial species associated with the shrub-steppe ecosystem, such as sage-grouse (Oregon Benchmark 88). Similarly, efforts to eliminate noxious weeds threatening mule deer habitat will have a direct effect on statewide efforts to exclude or contain invasive species (Oregon Benchmark 90).

STATUTORY REFERENCE:
ODFW is authorized to conduct wildlife management activities under ORS. 496.012 (Wildlife Policy); ORS 496.146 (9) operation of wildlife areas; ORS 496.146 (11) contracts for development and encouragement of wildlife research and management programs and projects; ORS 496.162 (4) (a – d) assess supply and condition of deer and elk herds, availability of forage, effects of deer and elk herds on public and private lands.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not requesting authority to expend funds for the wildlife management detailed in this policy option package. This alternative was rejected because ODFW would need to turn away Federal Funds, and additional habitat projects and research would not be completed. Inability to complete these projects would impact critical assessment of management actions in the Mule Deer Initiative units, and impact the habitat restoration work conducted on private and federal lands.

On-the-ground habitat projects remain critical for restoring habitats to conditions more favorable to mule deer. Long-term declines in mule deer have led to decreased hunter participation and declining revenues. Based on public input, restoring mule deer populations is one of ODFW's highest priorities.

IMPACT OF NOT FUNDING:
Without the increased limitation, ODFW cannot spend the additional funds received which will be a detriment to habitat projects and federally funded projects on wildlife areas and other areas around the state. If no habitat projects are completed, mule and black-tailed deer populations would remain status quo and hunter dissatisfaction would continue.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

None.

QUANTIFYING RESULTS

The results can be measured by additional research data collected and number of habitat projects around the state. Additionally, in conjunction with federal partners, a Global Information System-based mapping project has been initiated that is being used to document current projects and plan for future ones. This mapping is critical for identifying connectivity of habitats and prioritizing habitat areas of high importance. Research in eastern and western Oregon will focus on capturing and collaring deer to determine the survival rate and home range movements.

KPM 1 could be quantified by measuring the increase in annual license sales. Also, if more tags are offered due to success of the MDI program, then an increase in controlled deer hunt applications would be seen. KPM 7 could be quantified by hunter harvest success. Generally, if hunters harvest an animal, their overall satisfaction is increased. This success could be monitored by the Mandatory Hunter Reporting of Hunter Harvest and Effort.

In the 2015-17 biennium, ODFW will use Federal Funds (Pittman-Robertson) to address a wide range of variables that may be inhibiting the recovery of mule deer populations. To measure program implementation, ODFW will track acres of juniper thinned in important shrub-steppe habitat, miles of livestock fence installed to protect winter range or other relevant habitats, acres treated for noxious weed, acres of aspen stand restoration, and acres burned through the use of controlled fire. This habitat work is expected to result in long-term benefits to deer, elk, and other wildlife populations. ODFW will continue to monitor wildlife populations, hunter participation, and hunter harvest as part of normal operations, and to evaluate the success of these Pittman-Robertson funded programs in coming years.

Additionally, ODFW will be able to reduce the backlog of repairs needed under the deferred maintenance needs of the wildlife areas. This will result in increased energy efficiencies in agency housing and offices, increased ADA compliant facilities, and decreased safety issues. These can be quantified by the number of Engineering Section infrastructure assignments.

REVENUE SOURCE

$8,300,000 Federal Funds (USFWS — Pittman-Robertson Act)
$700,000 for Capital Improvement Federal Funds (USFWS – Pittman-Robertson Act)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **110 – Coquille Valley Wildlife Area**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF 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 neotropic 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.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
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.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Restoration of lands in the Coquille Valley furthers this mission by restoring habitat for the benefit of multiple species and providing access to a wide variety of user groups.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:

The habitat restoration and public access provided in this package will enable ODFW to address several Key Performance Measures (KPMs) including KPM 1 (hunting license purchases: percent of the license buying population with hunting licenses and/or tags), KPM 2 (angling license purchases: percent of the license buying population with fishing licenses and/or tags), KPM 4 (percent of fish species of concern [listed as threatened, endangered, or sensitive] being monitored); and KPM 5 (percent of wildlife species of concern [listed as threatened, endangered, or sensitive] being monitored). These funds will help ODFW meet goals and objectives of the Oregon Conservation Strategy for managing and restoring wetland habitats in the Coquille River Basin. The success of this package can also be evaluated by the timely completion and implementation of a management plan governing actions on the properties.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. (See specifically ORS 496.012, 496.138, 496.146, and 496.162)

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
Not funding the habitat restoration and public access work was considered but rejected since this would reduce the benefits to salmonids and birds and angler, hunters, and wildlife viewers.

IMPACT OF NOT FUNDING:
If this package is not funded, ODFW will have insufficient resources to conduct habitat restoration projects, maintain the property, and develop and manage public access on these lands. Recreational opportunities for hunting, angling, and wildlife viewing will be limited.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

None.

QUANTIFYING RESULTS

This package will provide funds for ODFW to collect baseline and post restoration data on several variables relating to habitat, fish, wildlife, and public use. Baseline and post restoration data will be compared to measure the success of habitat restoration, protection and enhancement. Specifically, habitat improvement efforts will be quantified by evaluating the changes in habitat after restoration of tidal influence and the establishment of desired vegetation. Existing staff will establish vegetation photo points to document vegetative responses to restoration activities. In addition, periodic surveys will be conducted to monitor seedling establishment and survival of willow, ash and other tree and shrub plantings. Existing staff will use surveys and passive data loggers to measure parameters of fish habitat quality such as: water temperature, dissolved oxygen, water velocity, riparian shading, pool

availability, large wood availability, and fish passage. Water use and distribution will be monitored using monitoring wells, hydrographs and water height gages placed in key locations.

The success of these habit restoration efforts will be best measured by the response of fish and wildlife populations. Fish use and presence will be monitored through electrofishing, beach seines, fyke traps, hoop traps, and other sampling methods. Wildlife populations will be monitored through visual waterfowl surveys, point counts and transects for beaver and muskrat; and an inventory of invasive species (e.g., nutria).

As habitat improves and wildlife populations respond, ODFW anticipates increased angling, hunting, and wildlife viewing in the area. Public use will be quantified by tracking waterfowl harvest, public involvement in the planning processes, and the number of days the area is visited by hunters, anglers, or wildlife viewers.

REVENUE SOURCE

$369,000 Other Funds Obligated (Timber Revenue from Eel Lake)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **111 – Coquille Valley Tidegate Replacement**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF 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. In addition, if the existing tidegates fail, extensive areas of the valley will be flooded. This will result in substantial impacts to neighboring pasture lands and the local community. 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 Basin.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
The Beaver Slough Drainage District proposes to replace the failing tidegates with muted tidal regulators and associated culverts and dike improvements. The Beaver Slough Drainage District proposes replacing the existing tidegates with seven muted tidal regulators. Four of those seven muted tidal regulators will be dedicated to the specific area including 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 is proposing to assist the Beaver Slough Drainage District in funding 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 would contribute towards 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.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for the use and enjoyment of present and future generations." The proposed replacement of failing tidegates (that currently do not provide adequate fish passage) with muted tidal regulators will improve fish passage into and out of the wetland, improve habitat for native fish and wildlife, and improve water quality through daily tidal exchange.

Replacement of the failing tidegates with muted tidal regulators also helps fulfill key goals of the Oregon Conservation Strategy, including restoring freshwater and tidal wetlands.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The replacement of failing tidegates that currently fail fish passage criteria with muted tidal regulators will help ODFW address several key performance measures including Key Performance Measures (KPM)1 (hunting license purchases-percent of the license buying population with hunting licenses and/or tags) and KPM 2 (Angling License Purchases - Percent of the license buying population with angling licenses and tags). KPM 1 and 2 would be addressed through improved opportunities for anglers through increased salmonid production and increased opportunities for hunters through tidegate control and tidal flooding.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not providing funds to assist the Beaver Slough Drainage District in replacing tidegates. This alternative was rejected because it would result in inadequate fish passage, significantly reduce effectiveness of ongoing habitat restorations, provide little to no control of tidal influence on the Coquille Valley Wildlife Area. Not providing these funds could also result in potential failure of existing tidegates and increase costs to replace failed tidegates.

IMPACT OF NOT FUNDING:
If this package is not funded, ODFW will have insufficient resources to assist the Beaver Slough Drainage District in replacing failing tidegates with muted tidal regulators that improve fish passage, while allowing for controlled tidal influence in the Coquille Valley Wildlife Area. By not replacing the tidegates, there will be reduced habitat improvements for salmon in the Coquille Valley, fewer opportunities for production of coho and Chinook salmon, fewer opportunities for hunters, anglers, wildlife viewers, and potential tidegate failure.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

None.

QUANTIFYING RESULTS

This package will provide the funds for ODFW to assist the Beaver Slough Drainage District in replacing existing failing tidegates with muted tidal regulators and associated culverts and dike improvements. This will improve habitat for native fish and wildlife, and improve recreational opportunities, while also providing more effective water management in the Coquille Valley. The success of tidegate replacement and associated habitat restoration efforts will be measured through measuring habitat changes such as channel form, vegetation, and water quality, by the response of fish and wildlife habitat and populations, and changes in recreational use. Increased recreational use could occur on site, as well as through increased angling opportunity off site. Habitat and fish and wildlife populations will be monitored by ODFW staff in coordination with other agencies and volunteers. Recreational user response will be monitored through periodic site visits and interviews.

REVENUE SOURCE

$1,025,000 Other Funds Obligated (Timber Revenue from Eel Lake)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **112 – Coastal & Lower Col Status & Trend Monitoring**

Policy Option Package Element Addendum: 27

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

Salmon and steelhead fisheries are important drivers of Oregon's economy. The 2012 commercial salmon fishery contributed over $10 million to Oregon's economy. In the same year, the recreational ocean and inland fisheries for salmon and steelhead contributed over $36 million to Oregon's economy. Beyond their economic value, salmon and steelhead are an iconic part of Oregon's natural heritage, and fundamental components of the state's ecology. Despite their commercial, recreational, and ecological value, many of Oregon's salmon and steelhead populations have declined, and several are listed under the federal Endangered Species Act (ESA). Research, monitoring, and evaluation directed at these species are needed to assure Oregon has healthy salmon and steelhead populations and fisheries, as well as local economies that they support, into the future.

The Oregon Department of Fish and Wildlife (ODFW) has several well-established research, monitoring, and evaluation programs to assess the status and trends of salmon and steelhead and their habitats. However, over time, funding for these programs has been eroded. Sport Fish Restoration, License, General, Lottery, and Federal funds have declined or remained flat, while personnel and services and supplies costs have risen. Additional funding is required to continue these programs at adequate levels.

The data that result from this work are used to develop conservation and recovery plans, assess fish status, understand limiting factors and threats, make ESA listing decisions by state and federal governments, make harvest and hatchery management decisions, prioritize habitat restoration, gauge the effectiveness of management actions, support other agencies (e.g., Oregon Department of Forestry, Oregon Department of Environmental Quality, Oregon Watershed Enhancement Board) in management, funding, and legal issues, and adaptively manage naturally-producing salmon and steelhead populations to ensure long term sustainability. Monitoring is for adult and juvenile salmonids and their habitat, and includes spawner and redd surveys for adults, counts of juveniles, trapping of juveniles and adults at life-cycle sites, and habitat surveys. Monitoring for this program occurs on the Oregon coast and the lower Columbia River.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
To address the research, monitoring, and evaluation needs outlined above, this policy option package describes the funding necessary to continue existing monitoring work which is vital for fish management needs and the economic health of local communities which depend upon vibrant fisheries for salmon and steelhead.

To cover most of the funding required to support continued monitoring, the Western Oregon Stream Restoration Program (WOSRP) and Habitat Conservation Biologist (HCB) positions will be eliminated. The WOSRP supports ODFW biologists who provide technical assistance to watershed councils, land managers, agencies, and landowners for habitat restoration, primarily in smaller streams. There is also an effectiveness monitoring component to this program. HCBs provide technical review and recommendations on land and water use actions, largely through regulatory processes of other entities to protect habitat and minimize habitat degradation. The WOSRP and HCB positions achieve a vital role for the agency's mission, given that technical support for habitat restoration is recognized as a limit to the capacity of restoration work able to be completed and that habitat protection (i.e., through minimizing impacts) provides functionally better habitat than restoration for fish (i.e., "protect first, restore second"). However, the agency prioritized the monitoring work over these programs because:

- As with the work of the WOSRP and HCBs, monitoring is vital to achieving ODFW's mission, and it more directly covers multiple aspects of the mission: conservation and utilization
- Monitoring also benefits habitat restoration and protection, as it helps identify priorities and large-scale effectiveness
- Monitoring is also called for directly in conservation and recovery plans, as well as the *Oregon Plan for Salmon and Watersheds*
- This monitoring supports the required development of conservation and recovery plans, status assessments, and ESA listing/de-listing decisions by ODFW and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries, which administers the funding for the WOSRP, HCBs, and monitoring work described herein)
- Monitoring is necessary in some cases to conduct and appropriately manage ODFW hatchery programs which provide fishing opportunity
- Monitoring results are used to directly manage fisheries and provide opportunity
- There is no alternative to ODFW's status and trend monitoring work across the Coast and Lower Columbia, whereas other entities and staff conduct work done by the WOSRP and HCBs (which provide additional capacity)
- Other agencies depend on monitoring results to inform management (e.g., riparian use), funding (e.g., local restoration needs), and legal (e.g., water quality) issues
- During the recent development of the *Coastal Multi-Species Conservation and Management Plan* (CMP), there was a unanimous call across a wide variety of interest groups and individuals for more, and not less, monitoring to help make management decisions which were directly affecting their concerns

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This package directly furthers the mission of ODFW: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Monitoring of fish populations, habitat and management action effectiveness is critical to protection and enhancement of fish resources. State adopted conservation and recovery plans completed under ODFW's Native Fish Conservation Policy require monitoring of species and habitat status and trends to assess progress in recovery and for the purpose of delisting. This package would allow ODFW to maintain base status and trend monitoring critical to effective fisheries management. This work ultimately provides a stronger and more reliable basis for decisions regarding the actions taken to manage and conserve salmon and steelhead populations and their fisheries in Oregon.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The research, monitoring, and evaluation efforts identified in this package will have an indirect impact on angling license purchases (KPM 2) through increased angler opportunities. Work completed under this package will have an impact on the percentage of freshwater species that are considered at risk (Oregon Benchmark 86), and on the percent of fish species of concern being monitored (KPM 4). Some aspects of this package will address hatchery production and management, which can contribute to Oregon's rural economy by supporting commercial fisheries and related jobs (Oregon Benchmark 1).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ODFW is authorized to cooperate with public and private agencies for fish management activities under ORS 496.164.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not funding the research, monitoring, and evaluation work identified in this package. This alternative was rejected given its critical importance for management decisions and accomplishing ODFW's mission.

IMPACT OF NOT FUNDING:
If this package is not approved, the research, monitoring, and evaluation efforts described above will need to be funded through other means, which will necessitate eliminating other programs. Also, the ability of other agencies to make management and legal decisions without the data will be impacted. Conversely, approval of this package will facilitate the targeted, local research, monitoring, and evaluation necessary to support the innovative Oregon solutions that are most directly tuned to management of Oregon's economically and ecologically valuable salmon and steelhead.

EQUIPMENT TO BE PURCHASED:
Field sampling gear (e.g., waders, survey instruments, GPS units, field data loggers, hand held radios, fish sampling equipment, seines, ODFW uniforms, fish tags and detectors, safety gear); fish traps and fish trap repair supplies/replacement equipment; computers and updated software; vehicle use and travel.

STAFFING IMPACT

-14 Positions/-8.09 FTE

Eliminate 1 permanent full-time Natural Resource Specialist 3 position (-1.00 FTE)
Eliminate 11 permanent full-time Natural Resource Specialist 2 positions (-11.00 FTE)
Eliminate 4 seasonal full-time Experimental Biological Aide positions (-1.77 FTE)
Reestablish two (1315240 & 1315241) seasonal full-time (8 months) Experimental Biological Aide positions (0.67 FTE).
Increase 12.62 months on one (2100099) permanent part-time Natural Resource Specialist 3 position to change it back into a permanent full-time position (0.53 FTE).
65 additional positions that have one or more of the following changes; 1) fund shifted, 2) months increased, 3) months decreased, and/or 4) moved to different budget structure(s) (DCRs) (4.48 FTE).

QUANTIFYING RESULTS

This work will directly or indirectly affect Key Performance Measures (KPM) 2 and 4. Data from this work will be used to help guide hatchery and harvest management decisions, which will have an indirect impact on angling license purchases (KPM 2) through angler opportunities and success. Data from this work will also be used to help assess fish species status and the work directly applies to the percent of Oregon fish species of concern being monitored (KPM 4). ODFW reports on these KPMs by tracking license purchases (KPM 2) and the percent of Oregon fish species of concern being monitored (KPM 4).

The success of this program will also be measured through the completion of research, monitoring, and evaluation projects to document and assess the status and trend of salmon, steelhead, and trout. Results will be conveyed in progress and final reports, presentations, and peer-reviewed publications.

REVENUE SOURCE

($920,000) Total Funds

$ 250,000 Lottery Funds
$ 500,000 Other Funds Obligated (Pacific Coastal Salmon Recovery Funds)
($1,670,000) Federal Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **113 – Fish Research, Monitoring, & Evaluation-PCSRF**

Policy Option Package Element Addendum: 10

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This package continues recovery plan implementation and research, monitoring, and evaluation efforts for Pacific salmon and steelhead and their habitats. The work described in this package is a continuation of efforts approved by the Legislature in prior biennia and is funded by Pacific Coast Salmon Recovery Funds (PCSRF). These funds are awarded annually to the state of Oregon by the National Oceanic and Atmospheric Administration (NOAA) through a competitive grant process. A portion of the grant funds are passed through the Oregon Watershed Enhancement Board to ODFW.

This package supports research, monitoring, and evaluation efforts required under recovery plans for native salmon and steelhead on the Lower Columbia River (including and downstream of Hood River) and the mid-Columbia River (from Fifteenmile Creek to the Walla Walla River). These plans were adopted by the Oregon Fish and Wildlife Commission after many years of development with a wide range of stakeholders and interests. The intent of these recovery plans is to improve and maintain healthy populations of these native fish for the social, economic, and ecological benefit of current and future Oregonians.

Reintroduction of Lower Columbia River Chum Salmon
Peak commercial fishery landings of Columbia River chum salmon were greater than 700,000 adults during periods of abundance in the 1920s. Today only a few hundred to a few thousand return, nearly all on the Washington side of the Columbia River. All historical populations in Oregon are considered functionally extirpated. ODFW's salmon recovery plan for the Lower Columbia River calls for the re-establishment of chum salmon populations in Oregon tributaries from Astoria to Hood River. As efforts to re-establish chum salmon populations proceed, it is important to monitor multiple life stages to evaluate the success of the program, guide management actions to ensure biological success, and to direct future funds most effectively. Recreational fisheries for chum salmon exist in other areas of Oregon with higher abundance such as the Miami River. While a harvestable level of abundance in the Lower Columbia is a long-term goal, successful reintroduction and monitoring could provide near-term benefits such as a reduction in the severity of bycatch.

Lower Columbia Adult Salmon and Steelhead Monitoring
The Lower Columbia Steelhead Conservation Plan calls for monitoring the abundance of winter steelhead spawners in nine population areas (Youngs Bay, Big Creek, Clatskanie, Scappoose, Clackamas, Sandy, Lower Gorge, Upper Gorge, and Hood). In addition, ODFW's recovery plan for Lower

Columbia River coho, chum and Chinook salmon and steelhead identified the lack of information on steelhead as a critical uncertainty that needed to be addressed to understand the current population status. This package will provide information on the number of steelhead spawners, the timing and distribution of spawning, and the proportion of hatchery fish spawning naturally in Oregon's nine steelhead populations in the Lower Columbia River. Collecting, analyzing, and reporting this information is called for by the conservation plans and ODFW's Native Fish Policy. This information is needed for: 1) status reviews under the Oregon and federal Endangered Species Acts (ESA) and ODFW's Native Fish Conservation Policy; 2) hatchery program performance reviews under Oregon's Fish Hatchery Management Policy and Hatchery and Genetic Management Plans; and 3) in pre-season harvest management planning and post season assessment of salmon and steelhead fisheries. Steelhead are a highly prized game fish and in recent years, the yearly harvest by Oregon anglers averaged over 6,000 winter steelhead caught in the Lower Columbia region, which is down from the average 20,000 winter steelhead caught by Oregon anglers in this region during the 1980s. Oregon's Lower Columbia River winter steelhead is one of the populations contributing to these fisheries.

Lower Columbia Fish Habitat Monitoring

Functioning stream habitat is essential to the freshwater productivity and survival of juvenile salmon in Oregon's tributaries to the Lower Columbia River Evolutionary Significant Unit. The limiting factors for salmon populations vary by species and watershed. Substrate size and character influences the spawning distribution of adult salmon and affects survival of eggs to fry life stage. The amount of pools, wood complexity, and quality of stream bank structure determines the number and survival of juvenile salmon fry to outmigrating smolt life stage. These habitat features combine hydrologic, physical, and biological characteristics that determine local population persistence and abundance of returning adult coho, Chinook and chum salmon and steelhead and cutthroat trout. Information about these habitat characteristics is needed for status reviews under the Oregon and federal ESA and Oregon's Native Fish Conservation Policy, in meeting goals of ODFW's Lower Columbia River Recovery Plan, to inform the reintroduction effort for chum salmon, and to direct stream restoration priorities. Fall Chinook are harvested by commercial fisheries and recreational anglers in both ocean and freshwater fisheries and steelhead and cutthroat are harvested in Oregon streams. This information will also assist in restoring coho and chum salmon populations to sustainable levels that will support commercial and recreational harvest.

This package continues positions and limitation needed for ODFW to conduct stream habitat and juvenile fish monitoring of coho, chum and Chinook salmon and steelhead (all federal ESA-listed as "threatened") in the Lower Columbia River Evolutionary Significant Unit The comprehensive monitoring was approved by the 2011 Oregon Legislature and started in the 2011-13 biennium.

Northeast-Central Oregon Salmon and Steelhead Research, Monitoring, and Evaluation

This package supports ongoing research, monitoring, and evaluation work identified in the Mid-Columbia River Recovery Plan. This work is largely funded through the Bonneville Power Administration as described in detail in Policy Option Package 114. However, some PCSRF funds are provided to aid in these efforts to monitor salmon and steelhead inhabiting Fifteenmile Creek, Deschutes River Basin, John Day River Basin, Umatilla River Basin, and the Grande Ronde River Basin.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
The intent of recovery plans is to improve and maintain healthy populations of native salmon and steelhead for the social, economic, and ecological benefit of current and future Oregonians. The plans call for specific monitoring to assess progress in recovery and for the purpose of delisting. This package addresses those needs by providing limitation and staffing to perform Research, Monitoring, and evaluation efforts identified in the plans. This work is a good fit for PCSRF because the program was established by Congress in 2000 to protect, restore and conserve Pacific salmon and steelhead populations and their habitats.

Lower Columbia River Chum Salmon Reintroduction
Continuation of Other Fund limitation and position authority is requested to conduct reintroduction activities, field data collection, analysis, and ongoing research necessary for effective reintroduction of chum salmon. This project will monitor multiple life stages of chum salmon before and after reintroduction, conduct reintroduction efforts, and provide direction on the most effective restoration actions. With the completion of broodstock development at Big Creek Hatchery, the reintroduction project will reduce baseline monitoring to focus on reintroduction activities. Several reintroduction techniques will be considered, including transplants of adult spawners, remote site incubators for egg out-planting, direct fry releases, or artificial spawning channels. The project will continue to operate out-migrant traps and conduct spawning ground surveys. The Reintroduction Coordinator position (Natural Resource Specialist 3) collaborates with state, federal, and non-governmental organizations to develop and implement a reintroduction strategy, develop models and analyses to identify reintroduction and restoration sites with high production potential for chum salmon; develops and implements research into limiting factors; designs and oversees implementation of monitoring activities, and analyzes data and prepares reports and publications. The Assistant Project Leader (Natural Resource Specialist 2) implements research into limiting factors, oversees the implementation of monitoring activities and the collection and quality control of survey data, and analyzes data and prepares reports and publications. The Assistant Project Leader oversees the Experimental Biology Aide field technicians that operate fish traps and conduct stream surveys.

Lower Columbia Adult Salmon and Steelhead Monitoring
This package allows ODFW to spend Pacific Coast Salmon Restoration Funds to support field staff stationed in Clackamas, Sauvie Island and Astoria conducting steelhead spawning surveys (February through May) throughout the nine population areas in the Lower Columbia River. Crews work in pairs to conduct the surveys, by either walking upstream or floating downstream depending on the size of the stream being surveyed. Each crew has between 30 and 35 sites that are surveyed once every other week. Crews record the number of live wild and hatchery steelhead, count and mark redds, record GPS coordinates for each redd, and sample any steelhead carcasses to record length, sex, fin clips and collecting a scale sample. These crews are part of the overall Lower Columbia River and Oregon Coast adult salmon and steelhead spawner monitoring program. Funding for the overall program comes from PCSRF base budget, Mitchell Act Monitoring, Evaluation and Reform Funds, and US Fish and Wildlife Service Sport Fish Restoration Act funds.

Lower Columbia Fish Habitat Monitoring
This policy option package would continue ODFW staffing for habitat and juvenile fish monitoring in Oregon tributaries to the Lower Columbia River by funding one Supervisory Fish and Wildlife Biologist, one Natural Resource Specialist 1, and four seasonal Experimental Biology Aide positions.

The Supervisory Fish and Wildlife Biologist provides supervision to the Natural Resource Specialist and four Experimental Biological Aides and has administrative responsibilities for the design, collaboration, and implementation of monitoring area scale monitoring. In addition to this work, the Supervisory Fish and Wildlife Biologist manages a juvenile fish monitoring project in coastal basins and a restoration effectiveness project and is responsible for providing integrated information from these studies to state and federal fisheries biologists, ODFW recovery plan staff, and restoration implementation coordinators. The Supervisory Fish and Wildlife Biologist develops oral and written reports on survey progress and results throughout the biennium.

The Natural Resource Specialist plans field surveys for the Lower Columbia watersheds every year (Youngs Bay to Hood River), oversees the data collection during the field season, enters and analyzes data, provides quality assurance, coordinates with landowners, and writes reports.

The four EBA positions have responsibility for conducting the field surveys. They work in pairs to conduct the surveys by either walking upstream or using a boat floating downstream depending on the size of stream being surveyed. They identify and collect information on channel geomorphology, stream habitat dimensions and complexity, bank condition and fish cover, substrate composition, large wood, and streamside vegetation.

Northeast-Central Oregon Salmon and Steelhead Research, Monitoring, and evaluation
PCSRF spending authority would continue monitoring initiated in previous biennia for salmon and steelhead in the Interior Columbia River Basin. Staffing and Federal Fund limitation for this work is requested in Policy Option Package 114.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
Monitoring of native fish populations, habitat, and recovery actions is critical to ODFW's mission to protect and enhance fish resources for use and enjoyment of present and future generations of Oregonians. This is especially true for those populations for which state of Oregon recovery plans (as directed by ODFW's Native Fish Conservation Policy) have been developed. Monitoring the status and trend of these populations and related habitat is critical to gauging the success of recovery plan actions and directing restoration and reintroduction efforts most effectively. Ultimately, documenting improvements in the status of salmon and steelhead populations can lead to species delisting, improved access to harvest hatchery salmon and steelhead populations, and provide angling opportunities for healthy and abundant wild salmon and steelhead populations.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Along with other statewide conservation measures, the monitoring efforts identified in this package will improve ODFW's performance on Key Performance Measure (KPM) 4 by increasing the percent of fish species of concern being monitored and Oregon Benchmark 86 by working toward increasing the number of monitored species that are not at risk. Monitoring efforts in this package can have an indirect impact on angling license

purchases (KPM 2) through increased angler opportunities. Additionally, project performance measures and milestones are established for data collection, data analyses, reporting, development of management recommendations and data sharing.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered implementing this work with existing staff. This alternative was rejected because there is insufficient staff to conduct the scope of work identified and because staff are already obligated to complete other efforts. ODFW considered not funding or underfunding the research, monitoring, and evaluation work in this package. This alternative was rejected because it would not provide the information necessary to assess the status of salmon populations and habitat conditions for delisting of species, track effectiveness of management actions taken to improve status and reduce threats, and redirect actions that are not producing expected results. This lack of information would not meet ODFW Native Fish Conservation Policy objectives, Lower Columbia River Recovery Plan objectives, and Oregon Benchmarks or ODFW's KPMs for the lower Columbia River (described above). In the Lower Columbia River habitat monitoring component, reducing the Supervisory Fish and Wildlife Biologist position would result in one manager supervising six projects with up to 71 personnel.

IMPACT OF NOT FUNDING:
If limitation and positions are not approved, the research, monitoring, and evaluation efforts identified in the package would not be completed. This would result in a lack of information to support conservation and fisheries management goals. ODFW would not be able to assess stream habitat conditions for chum, coho and Chinook salmon and steelhead populations in the Lower Columbia River, measure progress toward recovery objectives, or influence restoration actions. Chum salmon reintroduction efforts in Oregon will stop. Native salmon and steelhead populations will likely remain at risk for a longer period of time, constraining social, economic, and other opportunities.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Field sampling gear (e.g., waders, hip boots, survey instruments, GPS units and field data loggers, hand held radios, fish sampling equipment, seines, ODFW uniforms, tag detectors, safety gear); inflatable boats (kayaks); fish trap repair supplies and replacement equipment; computers; vehicle use and travel.

STAFFING IMPACT

22 Positions /13.46 FTE

Lower Columbia River Chum Salmon Reintroduction
- Continue one (1517130) Limited Duration, full-time Natural Resource Specialist 3 Reintroduction Coordinator position (1.00 FTE).
- Convert one (1517129) Limited Duration, full-time Natural Resource Specialist 1 to Limited Duration Natural Resource Specialist 2 (1.00 FTE).

- Continue two (1517147 and 1517148) Limited Duration, full-time (18 months) Experimental Biology Aide positions (1.50 FTE).

Lower Columbia Adult Salmon and Steelhead Monitoring
- Continue eight (1517149 -1517156) Limited Duration, full-time (eight months) Experimental Biological Aide positions (2.67 FTE).
- Continue one (1517138) Limited Duration, full-time Natural Resource Specialist 1 position (1.00 FTE).
- Continue one (1517132) Limited Duration, full-time Natural Resource Specialist 3 position (1.00 FTE).
- Continue two (1517135 and 1517136) Limited Duration, full-time Supervisory Fish/Wildlife Biologist positions (2.00 FTE).

Lower Columbia Fish Habitat Monitoring
- Continue one (1517131) Limited Duration, full-time Supervisory Fish & Wildlife Biologist position (1.00 FTE).
- Continue one (1517128) Limited Duration, full-time Natural Resource Specialist 1 position (1.00 FTE).
- Continue four (1517143 - 1517146) Limited Duration, full-time (eight months) Experimental Biological Aide positions (1.33 FTE).

Northeast-Central Oregon Salmon and Steelhead Research, Monitoring, and evaluation
- None (Services and Supplies only; see policy option package 110 for related Federally Funded positions).

QUANTIFYING RESULTS

Lower Columbia River Chum Salmon Reintroduction
ODFW will quantify the number of adults returning, juveniles released, age structure of returns, fecundity, and age-related marine survival rates of the reintroduction broodstock at Big Creek Hatchery as well as the number of spawners, eggs, and fry out-planted in reintroduction activities. By 2015, the broodstock at Big Creek Hatchery should no longer require egg transfers from Washington. Juveniles will be released with marks or tags so we can evaluate broodstock performance and reintroduction success. ODFW will also quantify annual estimates of out-migrant juvenile chum at sites in the coastal strata of the Lower Columbia River; estimates of the abundance of seaward migrating coho, Chinook, and steelhead at those sites; length of spawning habitat surveyed for spawning adult chum salmon; and estimates of adult abundance, redd counts, and spawning locations.

Lower Columbia Adult Salmon and Steelhead Monitoring
Annual estimates of status and trends for spawning by natural and hatchery origin winter steelhead in each of Oregon's nine population units in the Lower Columbia River. This area includes Oregon tributaries of the Lower Columbia River from Youngs Bay to Hood River. Status and trend includes; estimates of the number of adult steelhead and redds on natural spawning grounds, proportions of hatchery and wild steelhead adults on natural spawning grounds, and the spatial and temporal distribution of naturally spawning adult steelhead.

Lower Columbia Fish Habitat Monitoring
The proposed surveys will quantify the numbers of juvenile salmon and trout and status and quality of freshwater habitat at the site and monitoring area scale annually and monitor trends in juvenile salmon and trout populations and stream habitat. Measures will include the distribution and quality of

spawning substrate, the number of miles of high quality juvenile rearing habitat, the number of juvenile fish the watershed could support, and the condition and character of stream banks and streamside vegetation. These indicators will be used to assess limiting factors and potential survival of juvenile fish by species and life stage in the watersheds. The findings of these stream habitat and juvenile fish surveys will be closely integrated with other ODFW efforts in the Lower Columbia River including assessments of adult coho, Chinook and chum salmon, and steelhead populations, the chum reintroduction project, restoration planning and evaluation, and recovery and conservation objectives. The findings will be published on an annual basis and will quantify the status and trends in stream habitat for eight population areas in the Lower Columbia River, the capacity and quality of stream habitat to support salmon populations, and the relationship of stream habitat character to the distribution and abundance of adult chum, fall Chinook and coho salmon, and steelhead.

Northeast-Central Oregon Salmon and Steelhead Research, Monitoring, and evaluation
Quantifiable results include miles of surveys conducted, timely completion of data analyses and completion and dissemination of habitat and population level status estimates. More detailed results are described in related POP 114.

REVENUE SOURCE

$2,400,000 Other Funds Obligated (Pacific Coastal Salmon Recovery Funds):
- Lower Columbia River Chum Salmon Monitoring – $680,000
- Lower Columbia Adult Salmon and Steelhead Monitoring – $1,073,000
- Lower Columbia Fish Habitat Monitoring – $570,000
- Northeast-Central Oregon Salmon and Steelhead Research, Monitoring, and Evaluation – $77, 000

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **114 – Fish Research, Monitoring, & Evaluation - Various**

Policy Option Package Element Addendum: 26

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package addresses a range of research, monitoring, and evaluation needs for fish species throughout Oregon. The work proposed is a continuation of efforts approved in prior biennia and funded through federal or other contracts and grants. The needs addressed by each component of the package are outlined below.

Coastal Chinook Salmon
Over the last decade, declines in the numbers of coastal fall Chinook salmon returning to Oregon's waters have raised concerns within the natural resource, commercial fishing, and recreational angling communities of Oregon. Chinook salmon are a critical component of the commercial and recreational harvest in Oregon and across the Pacific Northwest, and they are an important part of Oregon's coastal economy. In 2009, commercial salmon fisheries contributed $7 million to Oregon's economy. In 2008, recreational freshwater angling along the coast generated $47 million in travel-related and $9.5 million in local expenditures. Saltwater angling generated $69 million in travel-related and $2.6 million in local expenditures. Salmon were the target species in about 30 percent of the freshwater trips, and over 62 percent of the anglers fishing locally reported that salmon was the prime target during saltwater excursions. Partially in recognition of these declines, the Pacific Salmon Commission has awarded ODFW with Federal Funds to address data and infrastructure needs and improve the methods used to determine annual abundance. State, federal, and international fisheries managers use these data to: 1) estimate annual spawner abundance; 2) set ocean harvest limits; 3) manage angling opportunities in Oregon's coastal rivers and bays; and 4) implement conservation measures. Specifically, the information generated by this program is essential for Oregon's participation in the Pacific Salmon Treaty, an international agreement between the U.S. and Canada, to manage harvest of salmon This package addresses these needs by conducting research and monitoring projects to monitor the number of adult coastal fall Chinook salmon returning to Oregon annually.

Lower Columbia Tule Chinook
ODFW's salmon recovery plan for the Lower Columbia River calls for monitoring the abundance of fall Chinook spawners in nine populations (Youngs Bay, Big Creek, Clatskanie, Scappoose, Clackamas, Sandy, Lower Gorge, Upper Gorge, and Hood). This package will provide information on the number of fall Chinook spawners, the timing and distribution of their spawning, and the proportion of hatchery fish that spawn naturally. Collecting, analyzing, and reporting this information is required in conservation plans and ODFW's Native Fish Policy. This information is needed for status reviews under the federal Endangered Species Act (ESA) and Oregon's Native Fish Conservation Policy. This information is also needed for reviews of hatchery program

performance under Oregon's Fish Hatchery Management Policy and Hatchery and Genetic Management Plans. It's also needed in preseason planning for harvest management, and post season assessment of salmon and steelhead fisheries. Fall Chinook are harvested by commercial fisheries and recreational anglers in the ocean and freshwater. Ocean catch of Oregon's Lower Columbia River fall Chinook occurs primarily in the north and secondarily in Oregon fisheries, as the fish return to spawn. Recreational fisheries of ocean salmon off Oregon currently average over 60,000 angler trips per year, compared to 200,000 — 300,000 angler trips per year in the 1980s. In recent years, the commercial and recreational harvest of fall Chinook in Oregon's Columbia River has averaged 45,000 and 16,000 fish a year, respectively. Much of this recreational harvest is in the "Buoy 10" fishery, which recently averaged over 27,000 angler trips per year in Oregon. Oregon's Lower Columbia River fall Chinook are one of the populations contributing to these fisheries. This package requests the authority to spend funds for scientific assessment of the abundance, spawn timing, and distribution of fall Chinook salmon populations, which is essential to determine population status, guide conservation actions, and effectively manage commercial fishing and recreational angling opportunities.

Willamette Salmon and Steelhead

This package requests continued Federal Fund limitation and position authority to implement research, monitoring, and evaluation activities that are necessary components of the National Oceanic and Atmospheric Administration's (NOAA) Biological Opinions for the operation of the U.S. Army Corps of Engineers' (USACE) Willamette Valley Project. By conducting this work, ODFW helps insure continuation of angling opportunities that are highly valued for hatchery spring Chinook salmon and summer steelhead in the Willamette Basin. Also, this package ensures that research conducted on ESA-listed native spring Chinook salmon and winter steelhead is utilized by USACE to make critical structural and operational changes that improve the survival of these species and the viability of their populations. Specifically, this package continues research efforts that identify necessary modifications to the operation and configuration of seven USACE dams to improve fish passage and survival.

This package continues ODFW research, monitoring, and evaluation projects that provide key information on the life histories of salmon and steelhead, and their survival and productivity. This information is used to prioritize habitat restoration and to improve practices of fish production at ODFW hatcheries. The goal is to continue to provide angling opportunities for hatchery fish while increasing the natural production of salmon and steelhead above and below Willamette Valley dams.

ODFW receives Federal Funds for this work and has used primarily Limited Duration (LD) positions to accomplish specific tasks. This package requests to convert positions that were established as LD positions in the 2009-11, 2011-13, and 2013-15 biennia to permanent positions. The Biological Opinion is a 15-year agreement between the NOAA and USACE to increase the natural production of commercially, economically, and culturally important Chinook salmon and steelhead populations in the Willamette Valley.

Oregon Chub

This package requests continued Federal Fund limitation to monitor the status of Oregon chub following delisting, as required by the ESA. As a result of efforts carried out under this project, Oregon chub are proposed for delisting in 2014 with nine years of monitoring to follow. Listing originally occurred because of dam construction and the associated reduction in flooding, which limited off-channel habitat and reduced the ability of Oregon chub to move within the system, creating isolated populations. Clearing riverside habitat associated with forest harvest, agriculture, and residential development

had also degraded habitat, and the introduction of non-native fish added additional predators to the system. As a result of the listing, forest and water use practices are more restrictive within the Willamette valley. ODFW is currently receiving USACE and U.S. Fish and Wildlife Service (USFWS) funds to address research and monitoring needs in the recovery plan provided by USFWS and the Willamette Biological Opinion. Post-delisting, this information will be used to determine whether there are sufficient Oregon chub populations to allow Oregon chub to persist and avoid re-listing under the ESA. This research, monitoring, and evaluation forms the sole basis for any decision to re-list Oregon chub under the ESA, and it is consistent with ODFW's Native Fish Conservation Policy and the USFWS Oregon Chub Recovery Plan.

Clackamas Bull Trout

Bull trout are currently listed as threatened under the federal ESA and several populations within Oregon are at a high risk of extinction. In the Clackamas River system, bull trout were extirpated in the 1960s. As part of a range-wide recovery effort, the USFWS, ODFW, U.S. Forest Service, the Confederated Tribes of the Warm Springs, and Portland General Electric (PGE) began a reintroduction of bull trout into the Clackamas system in 2011. If successful, this population will contribute to the delisting of bull trout and provide a fishery in this basin. Restoring bull trout to historic habitat is a major recovery goal, and it is particularly relevant to habitats in the western portion of the species' range due to the extensive loss of distribution and the documented extirpation of multiple populations of bull trout. ODFW is the lead agency for the collection, transfer, and monitoring of bull trout. Donor fish are collected from the Metolius River, tagged, and transferred to the Clackamas. ODFW then monitors their behavior on a weekly to daily basis to determine whether these fish survive, spawn, and pose a risk to other native salmonids. This package continues bull trout reintroduction and monitoring efforts.

Clackamas Fisheries

This package continues fisheries investigations in the Clackamas River pursuant to the Federal Energy Regulatory Commission (FERC) Hydroelectric License for the Portland General Electric (PGE) Clackamas Hydroelectric Project. PGE is obligated to provide funding to ODFW to conduct studies as a condition of the Settlement Agreement for this hydroelectric project. Pursuant to this FERC Settlement Agreement, the funding is to be used to assess the potential impacts of hatchery produced salmon and steelhead on wild anadromous salmon and steelhead in the Clackamas Basin. These studies will improve our understanding of the interactions between hatchery and wild salmonids in the lower Clackamas River, providing a basis for hatchery reform measures that will better protect the basin's ESA listed salmon and steelhead populations. In addition, the license also specifies that funding may be provided to ODFW to implement measures to reduce the effects of hatchery fish on wild salmonids based on the results of these studies. The design of the studies is cooperatively developed by ODFW and PGE in consultation with interested citizens serving on the PGE Clackamas Fish Committee.

Northeast-Central Oregon Salmon and Steelhead

This package continues Federal Fund spending authority and LD positions that were legislatively approved in the 2011-13 and 2013-15 biennia for research, monitoring and evaluation of federal and state ESA listed salmon and steelhead in the interior Columbia River Basin. In addition, conversion of LD positions that have existed for several biennia to permanent positions is requested. The purpose of this ongoing effort is to monitor progress towards recovery and the eventual delisting of salmon and steelhead inhabiting river basins in Fifteenmile Creek and the Deschutes, John Day, Umatilla Basin and Grande Ronde rivers. A total of 12 listed steelhead and six Chinook salmon populations and associated habitats are monitored in this effort.

Populations were listed due to low abundance and productivity and a variety of limiting factors and threats that impact survival in the Columbia River Basin. The information collected is essential for delisting, which will reduce the regulatory burden on many sectors of the Oregon economy in the Columbia Basin.

This ongoing work conducts high priority monitoring identified in the federal and state adopted Conservation and Recovery Plan for Oregon Steelhead Populations in the Middle Columbia River (Conservation Plan) as well as Reasonable and Prudent Alternatives in the Federal Columbia River Power System Biological Opinion. It evaluates the status of populations and habitat, tracks progress and efficacy of actions taken to improve status and reduce threats, redirects actions that are not producing desired outcomes, and supports decisions regarding commercial, tribal and recreational fisheries.

This package contains 26 LD positions (16.67 FTEs), establishment of seven permanent positions (7.00 FTE), and one seasonal position (0.33 FTE) that function as projects leaders, project assistants and seasonal field staff to implement population and habitat status and trends monitoring as well as habitat and hatchery effectiveness studies. This monitoring helps Oregon maintain policy and science leadership in state and federal planning and decision making. Without ODFW's science leadership in many Columbia Basin management forums, decision making would default to federal and tribal agencies, and the state of Oregon would lose its decision making abilities in this process. The information from these monitoring efforts provides the scientific basis for achieving ODFW's mission to protect and enhance fish and their habitats for use and enjoyment by present and future generations. It supports agency priorities for providing leadership in the conservation of Oregon's fish and wildlife resources.

Impact of Caspian Terns on Redband Trout
Caspian terns consume a large number of ESA-listed juvenile salmon and steelhead in the Columbia River Estuary. To reduce their impact, USACE is reducing the available nesting habitat in the estuary. To offset this loss of habitat, USACE has constructed an artificial island in Malheur Lake, which is expected to attract 300 pairs of fish-eating terns from the Columbia River Estuary. Malheur Lake and its tributaries, specifically the Blitzen River Basin, support a healthy population of redband trout. Within Oregon, redband trout are listed as vulnerable and potentially at risk due to habitat fragmentation and limited water availability. The Blitzen River is one of the few in the state that has retained a migratory component (i.e., fish that migrate from the river to the lake to rear). The Blitzen River is also one of the few in the area that supports large redband trout (>14") and as such was established as a trout reservoir by the Steens Mountain Cooperative Management and Protection Act of 2000.

Peak angling use occurs in June and July; however the Blitzen can often be fished year-round. There are several public access points and most of the upper watershed is within a Wilderness Study Area managed by the Bureau of Land Management. Although creel surveys have not been conducted recently on the Blitzen River, surveys from the 1970s estimated about 8,000 annual angler days of use. This use has likely increased significantly with the publicity of the fishery and improvements to public roads in the area. Unfortunately, the USACE tern island will be sited in a location that forces migratory fish from this population to pass within close proximity, making them vulnerable to predation by dislocated terns. The effect of this predation on the local population of redband trout is unknown, but may pose a risk to long-term viability of this unique population. Without information on the extent of predation by terns or the importance of the migratory component, ODFW is unable to determine whether the

presence of additional predators will have an impact on the local population and thus affect angling opportunities. This policy option package requests Federal Funds limitation and position authority to continue monitoring to determine the impact of the terns on the local redband trout population.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

Coastal Chinook Salmon
This package continues the funding limitation and positions to conduct field data collection, analysis, and ongoing research required for effective management of coastal Chinook salmon. These positions are distributed among various stations on the Oregon coast. Two positions are located in Corvallis, Oregon. Our ability to conduct this research and monitoring is important to evaluating the level of harvest in ocean and freshwater fisheries, and the number of fish returning to spawn annually. This package assures that we can fund and hire permanent and seasonal staff stationed in coastal communities near the resource. The personnel structure we have proposed will provide consistent seasonal labor and crew leadership and a year-round assistant project leader to ensure analyses, reports, data collection, and training are completed safely and efficiently. These positions and related limitation requests are part of an overall program to provide data and analysis necessary for the state of Oregon to successfully participate in the Pacific Salmon Treaty.

Lower Columbia Tule Chinook
This package allows ODFW to spend NOAA Mitchell Act Federal Funds to support field staff stationed in Clackamas and at Sauvie Island to conduct Chinook spawning surveys (September through December) throughout the nine population areas in the Lower Columbia River. Crews work in pairs to conduct the surveys, by either walking upstream or floating downstream depending on the size of the stream being surveyed. The crews each have about 30 sites that are surveyed once per week. Crews record several biological indices on each fish that are useful in generating estimates of population size. These positions are part of the overall adult salmon and steelhead spawner monitoring program for Oregon's Lower Columbia and Coastal river basins. Funding for the program comes from Pacific Coast Salmon Recovery Fund (PCSRF), Pacific Salmon Treaty, NOAA Mitchell Act, and USFWS Sport Fish Restoration (SFR) Act funds.

Willamette Salmon and Steelhead
Continued Federal Fund limitation and position authority will allow ODFW to accept Federal Funds from USACE to conduct specific tasks. These tasks include: monitoring adult hatchery fish returns, juvenile salmon and steelhead monitoring above and below reservoirs; reservoir ecology research; genetic evaluations; and the extent and causes of pre-spawning mortality in Chinook salmon. ODFW research will also be a key component needed to evaluate the success or failure of changes to the operation and configuration of the dams. Field crews cooperate with ODFW district staff, NOAA and USFWS scientists, U.S. Forest Service (USFS) biologists, and private consultants. Work occurs above and below dams in the North Santiam, South Santiam, McKenzie, and Middle Fork Willamette Rivers and throughout the Willamette River Basin. Positions authorized in this package work with established positions as part of a larger research program (Upper Willamette Research, Monitoring, and Evaluation).

Oregon Chub
This package requests continuation of monitoring work for Oregon chub and conversion of the LD Natural Resource Specialist 2 to a permanent position. The tasks of the position include: 1) monitoring the status of existing populations and documenting the presence of previously unknown populations; 2) documenting the occurrence of native and invasive fish species at sites within the Willamette Valley; and 3) conducting an assessment of habitat at locations containing Oregon chub. Continued Federal Fund limitation and position authority will allow ODFW to accept available Federal Funds from the USACE.

Clackamas Bull Trout
This request is for continuation of bull trout reintroduction efforts. The Clackamas River Bull Trout Implementation and Monitoring Plan states that ODFW will collect and transfer 1,000 juveniles each year and monitor for signs of spawning in adult fish in the Clackamas. ODFW is currently receiving USFWS Federal Funds for this work and is using LD positions to accomplish required tasks. To continue the reintroduction, seasonal positions (Experimental Biological Aides) will: 1) collect and transfer multiple age classes of bull trout from the Metolius River to the Upper Clackamas Basin; 2) collect tissue samples for disease testing; and 3) assess survival, movement, natural reproduction and potential impacts on other fish species in the Clackamas Basin. The Natural Resource Specialist 2 position will assist with the tasks conducted by the Experimental Biological Aides, coordinate with partner organizations (listed above, but including NOAA), and is responsible for permitting, reporting, project planning and scheduling, and logistical organization.

The results of monitoring in the Clackamas will be used to determine: 1) whether the project was successful at establishing a self-sustaining population; 2) if there were negative impacts to other native salmonids in the Clackamas; and 3) the value of adult versus juvenile life-stage transfers. The results will be used to inform reintroductions in other areas and contribute to delisting decisions by USFWS.

Clackamas Fisheries
Continuing LD positions and Other Fund limitation will allow ODFW to accept funds from PGE to complete studies required by a FERC Settlement Agreement for the Clackamas Hydroelectric Project. ODFW will utilize these funds to conduct investigations to assess the potential impacts of hatchery produced salmonids on wild anadromous salmonids in the Clackamas Basin. These studies may result in future funding to implement improvements to hatchery programs to reduce any impacts that are identified. Staff funded by this package is responsible for conducting all aspects of the studies, evaluating the information collected, and writing scientific reports for PGE detailing the results and findings of the investigations. This package would continue three LD positions, one Natural Resource Specialist 1, and two Experimental Biologist Aides to conduct this work.

Northeast-Central Oregon Salmon and Steelhead
Spending authority, LD positions and new permanent positions will continue monitoring initiated in the two previous biennia in the following locations:

- Fifteenmile Creek - steelhead abundance, productivity and life history diversity
- Deschutes River Basin - abundance, productivity and life history impacts of stray hatchery steelhead

- John Day Basin - steelhead abundance, productivity and life history diversity; habitat status and trends, and habitat quality and fish survival relationships
- Umatilla River Basin - steelhead abundance and productivity, habitat status and trends and habitat restoration effectiveness through intensively monitored watershed approach
- Grande Ronde River Basin - steelhead and Chinook salmon abundance and productivity; habitat status and trends; habitat restoration effectiveness through intensively monitored watershed approach, and increased hatchery effectiveness monitoring for the Lower Snake River Compensation Plan.

This work is federally mandated as Reasonable and Prudent Alternatives in the Federal Columbia River Power System Biological Opinion, and provides information required to conduct viability assessments for potential delisting. The Northwest Power and Conservation Council approved funding for this monitoring under its Fish and Wildlife Program, and the Federal Columbia River Power System Biological Opinion recommends this monitoring continue through 2018. The current organization and staffing levels that include the new permanent and LD positions are appropriate to continue this ongoing effort. We have considered allowing other federal and tribal agencies to conduct the work; however, they have far less local knowledge and experience with these types of studies, and they lack local connections to landowners and communities. This work is identical to other work ODFW conducts throughout Oregon, including coastal watersheds, under the Oregon Plan for Salmon and Watersheds.

Impact of Caspian Terns on Redband Trout
ODFW requests Federal Funds limitation and position authority for one LD Natural Resource Specialist 2 (NRS-2) position, and four LD seasonal Experimental Biology Aid positions to conduct work, using funding from USACE. The four seasonal employees would be responsible for conducting field work, including collecting biological data on fish. In addition to providing field support, the NRS 2 would provide project oversight including design, reporting, coordination with partner agencies (e.g., USACE, and the Bureau of Land Management), scheduling of seasonal employees, and logistical planning. The study is proposed over a five year period because variation in lake levels may exacerbate predation in dry years as foraging areas for terns become concentrated. Also, the naturally high year-to-year variability in abundance of the redband trout population may mask the effect of tern predation in any given year. The research funded by this package will provide managers with a description of the status and life history of redband trout in the Blitzen River. The project will also document the level of predation on redband trout by introduced Caspian terns and determine if these birds pose a risk to this population of redband trout. The results will inform ODFW's conservation planning efforts for redband trout, and guide recommendations regarding land-use practices that result in fragmentation of habitat (i.e., dams, diversions, weirs, etc.). These results will be used to manage angling opportunities on redband trout and determine whether the proposed relocation of Caspian terns should continue.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This package directly furthers the mission of the ODFW to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. Monitoring of fish populations, habitat and management action effectiveness is critical to protection and enhancement of fish resources. This work assesses the status of federally listed species and their survival; characterizes habitat conditions and key threats; tracks effectiveness of management actions taken to improve status and reduce threats; redirects actions that are not producing expected results; and provides a knowledge base for decisions regarding commercial, tribal, and recreational fisheries. State adopted conservation and recovery plans

completed under ODFW's Native Fish Conservation Policy require monitoring of species and habitat status and trends to assess progress in recovery and for the purpose of delisting. Monitoring of fish populations is also critical to effective fisheries management, providing information needed for: status reviews under the Endangered Species Act; Oregon's Native Fish Conservation Policy; Oregon's Fish Hatchery Management Policy, and Hatchery and Genetic Management Plans; and in preseason harvest management planning and post season assessment of salmon and steelhead fisheries. ODFW and its partners use the research, monitoring, and evaluation data to set state and international fisheries regulations and harvest. An unreliable dataset could lead to either overharvest or lost angling opportunities. The work outlined in this package also promotes ODFW's principle of providing proactive and solution-based management based on sound science.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
ODFW will collect data and analyze measures to assess status and trends of key listed and harvested fish species, including their abundance, productivity, spatial structure, diversity, habitat quantity and quality, and effectiveness of habitat, hatchery and hydrosystem management actions. Work completed under this package will have an impact on the percentage of freshwater species that are considered at risk (Oregon Benchmark 86), and on the percent of Oregon fish species of concern being monitored (KPM 4). Monitoring efforts in this package will have an indirect impact on angling license purchases (KPM 2) through increased angler opportunities. Some aspects of this package relate to the maintenance of hatchery production which can contribute to Oregon's rural economy by supporting commercial fisheries and related jobs outside of the I-5 corridor and Deschutes County (Oregon Benchmark 1). Performance measures identified in Task Orders and Cooperative Agreements between ODFW and the USACE involve conducting all work specified, data quality control, analysis and interpretation, and production of reports. In addition, there are numerous annual and long-term performance measures identified in contracts and Conservation Plans.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ODFW is authorized to cooperate with public and private agencies for fish management activities under ORS 496.164.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered implementing this work with existing staff. This alternative was rejected because there is insufficient staff to conduct the scope of work identified or staff is already obligated to complete other federally contracted efforts. This package relies on additional federal and other funds that are being provided to ensure staffing capacity for ODFW to complete the additional work. The agency also considered conducting the work through federal, tribal or private entities. This alternative was rejected because others did not develop the study plans and do not have local and technical knowledge needed to conduct the work. Having ODFW conduct the work helps ensure that the State's interests in sustainable fisheries and native fish populations are maintained and meet requirement of the Federal ESA.

IMPACT OF NOT FUNDING:
Without the requested Federal Funds limitation and position authority, ODFW will be unable to continue the research, monitoring, and evaluation efforts described in this package. Not addressing these research, monitoring, and evaluation needs is inconsistent with ODFW's role in ensuring angling opportunities and conservation. Not funding or underfunding these efforts will fail to meet ODFW's responsibility to conserve fish populations and

provide recreational opportunities for Oregonians, and ODFW would have to terminate and possibly default on contracts. ODFW, tribal and federal co-managers will have insufficient information to assess effectiveness of management actions, assess status for delisting of species, and manage commercially and ecologically important species. In the Willamette, NOAA could issue an "Endangered Species Act Jeopardy" finding with respect to operation of USACE Willamette Valley Project, which could potentially disrupt operations at each of the major dams and impose additional restrictions that would affect landowners, anglers, and recreational users of the river. In the Blitzen River Basin, ODFW will not know if the translocation of avian predators from the Columbia estuary to Malheur Lake has had an impact on the local redband trout population. This will affect ODFW's ability to manage harvest on these fish. In the Clackamas Basin, the transfer of bull trout to the Clackamas Basin will stop, and ODFW will not know if efforts to date have been successful in meeting the objectives of the draft USFWS recovery plan. In the Willamette Basin, ODFW will not know if Oregon chub have experienced any significant changes in abundance following ESA delisting.

EQUIPMENT TO BE PURCHASED:
Field supplies (e.g., seines, waders, ODFW uniforms, raincoats, sampling gear, hand held radios, GPS units and field data loggers), computers and updated software, fish traps, fish tags and detection systems, boats and motors.

STAFFING IMPACT

115 Positions / 68.10 FTE

Coastal Chinook Salmon 32 Positions / 14.88 FTE

- Convert one (1517134) Limited Duration full-time Supervisory Fish and Wildlife Biologist position to permanent full-time (1.00 FTE).
- Convert one (1517009) Limited Duration full-time Natural Resource Specialist 2 to permanent full-time (1.00 FTE).
- Convert one (1517012) Limited Duration full-time Natural Resource Specialist 1 to permanent full-time (1.00 FTE).
- Convert one (1517010) Limited Duration full-time Experimental Biological Aide to permanent full-time Office Specialist 2 (1.00 FTE).
- Convert eight (1517056, 1517057, 1517058, 1517059, 1517065, 1517071, 1517072) Limited Duration full-time (12 months) Experimental Biological Aides to seasonal positions (3.50 FTE).
- Convert one (1517055) Limited Duration full-time (12 months) Experimental Biological Aides to permanent full-time (0.50 FTE),
- Convert six (1517073, 1517074, 1517075, 1517076, 1517077, 1517078) Limited Duration full-time (eight months) Experimental Biological Aides to seasonal positions (2.00 FTE).
- Convert five (1517066, 1517067, 1517068, 1517069, 1517070) Limited Duration full-time (six months) Experimental Biological Aides to seasonal positions (1.25 FTE).
- Continue three (1517110, 1517111, 1517112) Limited Duration full-time (12 months) Natural Resource Specialist 1 positions (1.50 FTE).
- Continue two (1517098, 1517099) Limited Duration full-time (10 months) Experimental Biological Aide positions (0.84 FTE).
- Continue three (1517100, 1517101, 1517102) Limited Duration full-time (eight months) Experimental Biological Aide positions (1.00 FTE).
- Continue one (1517103) Limited Duration full-time (seven months) Experimental Biological Aide position (0.29 FTE).

Lower Columbia Tule Chinook 5 Positions / 1.46 FTE

- Convert five (1517060, 1517061, 1517062, 1517063, 1517064) Limited Duration full-time (7 months) Experimental Biological Aides to seasonal positions (1.46 FTE).

Willamette Salmon and Steelhead 33 Positions / 21.00 FTE

- Convert one (1517007) Limited Duration full-time Principal Executive Manager-D position to permanent full-time (1.0 FTE).
- Convert one (1517008) Limited Duration full-time Supervising Fish and Wildlife Biologist position to permanent full-time (1.0 FTE).
- Convert one (1517006) Limited Duration full-time Natural Resources Specialist 3 position to permanent full-time (1.0 FTE).
- Convert two (1517005, 1517029) Limited Duration full-time Natural Resources Specialist 2 positions to permanent full-time (2.0 FTE).
- Convert two (1517003, 1517004) Limited Duration full-time Natural Resources Specialist 1 positions to permanent full-time (2.0 FTE).
- Continue two (1517030, 1517031) Limited Duration full-time Experimental Biological Aide positions (2.0 FTE)
- Convert 23 (1517032, 1517033, 1517034, 1517035, 1517036, 1517037, 1517038, 1517039, 1517040, 1517041, 1517042, 1517043, 1517044, 1517045, 1517046, 1517047, 1517048, 1517049, 1517050, 1517051, 1517052, 1517053, 1517054) Limited Duration full-time (12 months) Experimental Biological Aide to seasonal positions (11.50 FTE).
- Convert one (1517055) Limited Duration full-time (12 months) Experimental Biological Aides to permanent full-time (0.50 FTE)

Oregon Chub 1 Position / 1.00 FTGE

- Convert one (1517013) Limited Duration full-time Natural Resource Specialist 2 position to permanent full-time (1.00 FTE).

Clackamas Bull Trout 3 Positions / 2.00 FTE

- Convert one (1517027) Limited Duration full-time Natural Resource Specialist 2 position to permanent full-time (1.00 FTE).
- Convert two (1517124, 1517125) Limited Duration full-time (12 months) Experimental Biological Aides to seasonal positions (1.00 FTE)

Clackamas Fisheries 3 Positions / 0.79 FTE

- Continue two (1517104 and 1517105) Limited Duration full-time (~~6.5~~ seven months) Experimental Biological Aide positions (~~0.54~~ 0.58 FTE).
- Continue one (1517113) Limited Duration full-time (six months) Natural Resource Specialist 1 position (0.25 FTE).

Northeast-Central Oregon Salmon and Steelhead 34 Positions / 24.00 FTE

- Convert one (1517025) Limited Duration full-time Principal Executive Manager D position to permanent full-time (1.00 FTE).
- Convert two (1517096, 1517097) Limited Duration full-time Supervisory Fish and Wildlife Biologist positions to permanent full-time (2.00 FTE).
- Continues one (1517095) Limited Duration full-time Supervisory Fish and Wildlife Biologist Natural Resource Specialist 3 position (1.00 FTE).
- Convert three (1517002, 1517022, 1517023) Limited Duration full-time Natural Resource Specialist 2 positions to permanent full-time (3.00 FTE).
- Continues three (1517092, 1517093, 1517094) Limited Duration full-time Natural Resource Specialist 2 positions (3.00 FTE).
- Establishes one new (1517126) Limited Duration full-time Natural Resource Specialist 1 position (1.00 FTE).
- Convert one (1517024) Limited Duration full-time Office Specialist 1 position to permanent full-time (1.00 FTE).

- Continues four (1517001, 1517014, 1517015, 1517016) Limited Duration full-time Experimental Biology Aide positions (4.00 FTE).
- Continues two (1517088, 1517089) Limited Duration full-time (18 months) Experimental Biology Aide positions (1.50 FTE).
- Continues seven (1517079, 1517080, 1517081, 1517017, 1517019, 1517020, 1517021) Limited Duration full-time (12 months) Experimental Biology Aide positions (3.50 FTE).
- Continues eight (1517082, 1517083, 1517084, 1517085, 1517086, 1517087, 1517090, 1517091) Limited Duration full-time (eight months) Experimental Biology Aide positions (2.67 FTE).
- Convert one (1517018) Limited Duration full-time (eight month) Experimental Biology Aide position to a seasonal position (.33 FTE).

Impact of Caspian terns on Redband Trout 5 Positions / 3.00 FTE
- Continue one (1517114) Limited Duration full-time Natural Resource Specialist 2 position (1.00 FTE).
- Continue four (1517106, 1517107, 1517108, 1517109) Limited Duration full-time (12 months) Experimental Biological Aide positions (2.00 FTE).

QUANTIFYING RESULTS

The monitoring described in each component of this policy option package is directly incorporated into the calculation of ODFW KPM 4, the percent of Oregon fish species of concern being monitored. Improved monitoring methods, abundance and distribution information, enumeration of harvest, and assessment of hatchery and wild fish interactions will all contribute directly to the effective management of salmon and steelhead populations and fisheries. This is expected to enhance angler opportunities and increase angling license purchases (KPM 2). Similarly, monitoring and evaluation of redband trout in the Blitzen River Basin and bull trout in the Clackamas River Basin will provide the information needed for conservation and fishery management efforts that provide a foundation for angler opportunity.

Additional information regarding the quantification of results specific to each component of this package is provided below:

Coastal Chinook Salmon
The success of this program will be measured through the completion of projects to generate precise and accurate estimates of fall Chinook salmon populations on the Oregon coast within the time frames and budgets described in contracts and for use in international and local fisheries management. Projects will also be completed that improve existing monitoring methods. The successful implementation of these projects will provide data to: 1) generate ODFW's pre- and post-season estimates of Chinook salmon populations; 2) create more precise, accurate, and cost effective methods to estimate the numbers of spawning adults returning to Oregon's coastal watersheds; 3) improve our understanding of the distribution through space and over time of adult Chinook salmon in basins where little quantitative information is available; and 4) enumerate the harvest of adult fall Chinook salmon in coastal estuaries, freshwater, and the ocean. The Pacific Salmon Commission and its technical teams have developed specific data standards to which these projects will be held. The data will be used by the ODFW and the Pacific Salmon Commission and its technical teams to

assess the status of Oregon's coastal populations of fall Chinook salmon, and subsequently design management objectives and strategies for the long term success of the populations and fisheries within the framework of existing state, federal, and international agreements and treaties.

Lower Columbia Tule Chinook
The success of this package will allow ODFW to deliver specific quantifiable annual results for the nine populations in the Lower Columbia River, including an index of abundance (peak count per mile) of Chinook on natural spawning grounds; an estimate of the proportions of hatchery and wild Chinook adults on natural spawning grounds; and a description of the spatial and temporal distribution of naturally spawning adult Chinook. The information developed through this work will also be used to research and develop methods to provide annual estimates of abundance of fall Chinook spawners in each of Oregon's nine population units with a precision of $\pm$ 30 percent. This information is necessary to support conservation and fishery management efforts.

Willamette Salmon and Steelhead
The success of this program will be measured by the completion of research, monitoring, and evaluation actions that support implementation of the Reasonable and Prudent Alternatives in the Willamette Project Biological Opinion. Peer review and evaluation of results occurs at regular meetings of the Biological Opinion research, monitoring, and evaluation workgroup; public presentations at the annual USACE Willamette Basin Fisheries Science Review; Biological Opinion reviews and conference; project progress and completion reports; and in peer reviewed journals.

Continuing work includes: 1) monitoring of hatchery and naturally-produced spring Chinook and steelhead returning to hatcheries, fish monitoring facilities, and spawning grounds; 2) assessments of reintroduction programs for spring Chinook above USACE dams; 3) evaluation of hatchery release strategies; 4) assessment of impacts by hatchery summer steelhead; 5) monitoring of juvenile salmonids migrating into USACE reservoirs; and 6) ecological and behavioral studies of salmonids rearing in these reservoirs. The need for such activities can reasonably be expected to continue through the duration of this Biological Opinion, which sunsets in 2023. Base monitoring needs for these populations is perpetual. Data collected from these projects will be used by USACE and fisheries managers to develop actions that will result in compliance with ODFW's conservation goals for the Willamette Basin and to evaluate performance relative to the goals set in the jointly developed ODFW and NOAA "Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead", formally adopted in August, 2011.

Oregon Chub
The success of this component will be measured by ensuring Oregon chub remain unlisted under the federal ESA. This decision is based on the Post Delisting Monitoring Plan that is currently under review. Continued monitoring of Oregon chub contributes directly to the calculation of ODFW KPM 4, the percent of Oregon fish species of concern being monitored.

Clackamas Bull Trout
The success of this component will be measured by achieving the actions laid out in the Clackamas River Bull Trout Implementation, Monitoring and Evaluation Plan. Specifically, staff will quantify the number of fish transferred, the occurrence of natural spawning, retention of fish in the Clackamas

Basin, and lack of impact to other salmon and steelhead in the basin. The results of this work are summarized in an annual report to USFWS and NOAA annually, by March 31. This project also has a significant outreach component that involves educating the public on the role of bull trout in a healthy and resilient ecosystem. This component is critical as bull trout were historically subjected to removal efforts because of the perceived threat to salmon and steelhead.

Clackamas Fisheries
The results of studies to assess the potential impacts of hatchery produced salmonids on wild anadromous salmonids in the Clackamas Basin will be quantified in annual reports ODFW provides to PGE. The exact information that will be gathered is developed PGE and ODFW, in consultation with PGE Clackamas Fish Committee. This information will be used to determine if improvements to hatchery programs are necessary to reduce impacts from the interaction of hatchery and wild fish, facilitating population recovery while maintaining angler opportunity.

Northeast-Central Oregon Salmon and Steelhead
The key, quantifiable results include miles of surveys conducted, timely completion of data analyses, and completion and dissemination of habitat and population level status estimates. We will complete steelhead redd surveys on 20 miles in the Deschutes Basin, 60 miles in the John Day Basin, 30 miles in the Umatilla Basin, 35 miles in the upper Grande Ronde Basin and 35 miles in the Joseph Creek Basin. We will provide annual productivity estimates of adult abundance for steelhead and Chinook salmon populations. Estimates will be provided to NOAA and posted on ODFW's "Salmon Recovery Tracker" website. Annual smolt abundance and smolt-to-adult survival estimates will be provided for Fifteenmile Creek, Deschutes River Eastside, Umatilla River and the Upper Grande Ronde River steelhead populations. We will conduct annual habitat surveys, including digital elevation models, of 30 stream reaches (3.8 miles) in the John Day Basin, 30 reaches (3.8 miles) in the Umatilla Basin and 30 reaches (3.8 miles) in the upper Grande Ronde Basin. These measures are necessary to support conservation and fishery management efforts.

Impact of Caspian Terns on Redband Trout
The success of this component will be measured by ODFW's ability to quantify avian predation, obtain population abundance estimates of redband trout, document the number of trout using the lake, and determine the survival and residence time of redband trout in Malheur Lake. Annual project reports will be completed by March 31 each year, and a final project report will be completed by March 31, 2016 or 2017 (funding dependent). The information on the biology of redband trout will be published in peer reviewed journals and will be used to inform conservation planning for redband trout in Oregon.

REVENUE SOURCE

$12,475,000 Federal Funds:
Coastal Chinook Salmon: $2,470,000 Federal Funds (Pacific Salmon Commission, NOAA)
Lower Columbia Tule Chinook: $200,000 Federal Funds (NOAA Mitchell Act)
Willamette Salmon and Steelhead: $3,900,000 Federal Funds (USACE)

Oregon Chub: $200,000 Federal Funds (USACE)
Clackamas Bull Trout: $340,000 Federal Funds (USFWS)
Northeast-Central Oregon Salmon and Steelhead: $4,945,000 Federal Funds (Bonneville Power Administration, US Forest Service, Bureau of Reclamation)
Impact of Caspian terns on Redband Trout: $420,000 Federal Funds (USACE)

$250,000 Other Funds:
Clackamas Fisheries: $155,000 Other Funds (PGE)
Northeast-Central Oregon Salmon and Steelhead: $95,000 Other Funds (Pacific States Marine Fisheries Commission through Oregon Watershed Enhancement Board)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **115 – Deschutes Basin Fish Monitoring & Recovery**

Policy Option Package Element Addendum: 16, 17, 18

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

The package provides staffing for fish monitoring in the Middle and Upper Deschutes River and limitation to continue development of a Habitat Conservation Plan (HCP) for the Upper Deschutes Basin. This package also requests continuation of one Limited Duration (LD) Natural Resource Specialist 1 position and two Experimental Biological Aides (EBA) to implement and oversee a fisheries monitoring program on the Deschutes River between Wickiup Reservoir and Lake Billy Chinook, including Tumalo Creek. Limitation requested for the Natural Resource Specialist 1 remains at 1.0 FTE. However, based on the previous two fish sampling seasons in the Deschutes River, there is a need to increase the length of the sampling period (and seasonal employee months) to adequately monitor fish populations in both the upper and middle reaches of the Deschutes River. Thus, this package requests an increase in limitation for two Limited Duration, seasonal Experimental Biological Aide positions from six months (0.5 FTE) to twelve months (1.0 FTE), each.

This reach of the Deschutes River flows through the heart of rural and urban central Oregon. River flows have been substantially altered due to the construction and management of reservoirs and delivery of irrigation water. This has negatively impacted native fish populations and limited recreational angling opportunity. In response, numerous area stakeholders, including irrigation districts and non-governmental organizations, have engaged in water conservation projects over the past 10 years resulting in significant increases in stream flow in the Middle Deschutes River reach from the city of Bend to Lake Billy Chinook. Increasingly, area stakeholders seek quantitative documentation that fish populations are responding favorably to improved flows to justify continued support for investments and water management strategies.

The most recent quantitative data gathered by ODFW for the Middle Deschutes River dates back to 1981. In the Upper Deschutes River reach from Wickiup Reservoir to the city of Bend, critically low winter flows continue to substantially limit fish production. Water conservation measures have yet to be implemented in the upper Deschutes Basin thereby providing the opportunity to collect baseline data prior to anticipated conservation efforts. As with the use of surface water, extensive groundwater development in central Oregon has the potential to significantly affect recharge via springs in the reach of the Deschutes River where federally listed mid Columbia summer steelhead are being reintroduced and native redband trout populations are present. Monitoring is needed to document the value of these cold water stream reaches to salmonids and to evaluate groundwater development and the effects of conservation.

This package also requests limitation so that ODFW can continue to provide two annual grants of approximately $750,000 each to develop a Habitat Conservation Plan (HCP) for the Upper Deschutes Basin by the Deschutes Basin Board of Control (DBBC). The DBBC is a consortium of seven irrigation districts and the city of Prineville. Since 2009, ODFW has been the only entity within the state of Oregon that can apply for Section 6 Endangered Species Act (ESA) grants and serves as a "pass through" agency for funds from the U.S. Fish and Wildlife Service (USFWS) to develop the HCP. Successful development of this plan will allow the USFWS and NOAA to issue incidental take permits for "take" of federally listed threatened and endangered species in the Crooked, Metolius, and Upper Deschutes River basins. In the short term, NOAA has issued letters of prosecutorial discretion so that the DBBC and the city cannot be prosecuted for take of listed species.

Anadromous chinook and ESA-listed steelhead were reintroduced to historically occupied habitat in the Upper Deschutes Basin with the construction of upstream and downstream fish passage facilities at the Pelton Round Butte Project. This project is jointly owned by the co-licensees, Portland General Electric and the Confederated Tribes of Warm Springs. ESA-listed native bull trout are also present and affected by water diversions for agriculture in the upper basin. These funds give the DBBC and city of Prineville the ability to hire consultants to work through a public process to develop and implement appropriate protection, mitigation and enhancement measures. This work will result in an HCP that will allow incidental take of listed species while continuing their current operations for appropriated use of water. The HCP process has been designed to be a collaborative effort with a wide spectrum of partners from non-governmental organizations to irrigators to agencies that are voluntarily working together to achieve a mutually acceptable outcome that meets the interests of all participants. The DBBC and city of Prineville are conducting a public process to identify potential impacts of their operations on listed species, such as diversions for irrigated land, and develop mitigation measures to improve the success of the HCP.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

To address fish monitoring efforts, this package provides the ODFW Deschutes District with a Natural Resource Specialist 1 (with funding from Upper Deschutes Watershed Council) and two seasonal EBAs (with funding from Central Oregon Irrigation District Mitigation and Enhancement Program) to implement important fish monitoring activities and report the results to interested stakeholders in the Deschutes Basin. Without established limitation and positions, ODFW will not be able to utilize the secured funds and the status of fish populations in the Middle Deschutes River will remain unknown.

The requested ODFW staff will conduct monitoring activities employing protocols established by Corvallis Research staff to evaluate salmonid populations in multiple discrete reaches of the Deschutes River between Wickiup Reservoir and Lake Billy Chinook. Additional sampling will occur in Tumalo Creek to evaluate the importance of this cold water tributary to mainstem Deschutes River salmonid populations. The field sampling will be conducted by two seasonal EBAs from May through October. Monitoring activities will include single pass cataraft electrofishing, mark–recapture electrofishing, multiple pass removal backpack electrofishing, and radio telemetry. Data collected via radio telemetry will document seasonal fish movement in response to thermal increases. Electrofishing and mark-recapture surveys will determine species relative abundance longitudinally throughout the middle Deschutes River.

This data will be analyzed and summarized in technical reports to inform fish and water management decisions. These data and reports will establish a biological baseline over a five-year period to monitor the relationship between water management and fisheries populations. It is anticipated the ODFW Deschutes District will continue a condensed version of the protocol to continue monitoring in the future. Long-term sampling will include biannual electrofishing surveys in each of the reaches. Results of this effort will be used to frame fish and water management decisions in the Deschutes River basin.

Full implementation of the program will cover a five-year period from 2012-2017. Funding for the NRS 1 position is secured from the watershed council for the initial four years (2012-2017) with additional grant funds anticipated for the remaining year. Funding for the two seasonal EBAs is secured from the Central Oregon Irrigation District Monitoring & Evaluation Program (COID M&E Program) for a five-year period from 2012-2017.

To complete DBBC and city of Prineville's multi-year public process to develop the Upper Deschutes Basin HCP for ESA-listed species, ODFW proposes to provide annual grants totaling up to $1.5 million during the 2015-17 biennium. When completed and approved, the HCP will allow incidental take of listed species via implementation of conservation measures that will benefit aquatic and riparian-dependent species in the Deschutes Basin while meeting current and future irrigation and municipal water needs in a balanced and economically viable manner. The HCP development process provides federal, state, tribal, county, and local stakeholders a collaborative means to develop conservation measures that will result in broad and comprehensive benefits for the Deschutes River Basin. Additional funding to continue development of the Deschutes Basin HCP will allow for this collaboration to continue and help ensure the long-term success of the conservation measures and implementing strategies.

Types of conservation measures for native fish populations and listed fish species in the HCP could include improvement of fish passage and screening at irrigation dams and diversions, improvement of stream flows in key riverine reaches, and restoration of riparian and wetland habitats. For example, fish from streams follow flow through unscreened diversions and are entrapped and die when spread on irrigated lands. Low flows from diversions create unusable habitat to fish and is further complicated by changes in water quality such as high temperatures. Barriers, created to facilitate diversion of water, are impassable to fish moving upstream and downstream between spawning and rearing habitats. These types of facilities and operations can be modified by mitigation and enhancement measures such as screens and bypass devices, improvement to managing flows in rivers, and fish passage facilities.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

ODFW's mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. Regarding the Deschutes River, ODFW does not have current data to evaluate whether the mission is effectively being achieved. Central Oregon is one of the premier sport fishing destinations in the state. Residents and visitors alike seek recreational angling opportunities in close proximity to the cities of Bend and Redmond. It is the Deschutes District's goal to provide diverse angling opportunities for both families and angling purists. Implementation of this package will establish a program to effectively evaluate whether ODFW is meeting this goal.

ODFW's facilitation of the funding of the HCP and participation in the public process with the DBBC and city of Prineville ensures that ODFW will provide appropriate recommendations for conservation measures to mitigate for impacts to fish and wildlife species and their habitats.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Success of the proposal will be evaluated through the collection of biological data and preparation of summary reports quantifying the status of fisheries populations in the Deschutes River. This work will add to ODFW's efforts to increase the percentage of fish species of concern that are monitored (KPM 7), and will contribute, along with other statewide efforts, to the ultimate goal of reducing the number of monitored freshwater species that are at risk (Oregon Benchmark 86).

The HCP will result in improved fish passage and screening at dams and diversions, increased streamflow in reaches of the Deschutes River, Crooked River, Whychus Creek and several tributaries, and restoration of historic wetland and riparian areas. This addresses KPMs 7 and 8 by increasing monitoring of listed fish and wildlife species, respectively, and KPM 9 by increasing screening and passage for migratory fish species. Anticipated completion date of the HCP, if funding continues, is 2017 and issuance of incidental take permits for listed bull trout and steelhead by the USFWS. Implementation of mitigation activities will begin and continue for several years beyond issuance of the HCP. ODFW expects this project, along with other conservation actions, to contribute to statewide efforts to increase the number of monitored freshwater species that are not at risk (Oregon Benchmark 86).

STATUTORY REFERENCE:
ODFW has authorization to conduct fish and wildlife management activities under ORS. 496.012 and ORS 496.124, and cooperate with public and private agencies for wildlife management activities under 496.164. The Food Fish Management Policy ORS 506.109 directs that food fish shall be managed to provide the optimum economic, commercial, recreational and aesthetic benefits for present and future generations. The Oregon Water Resources Department is authorized under ORS 537.336 to protect instream flows for the benefit of native fish populations through the issuance of instream water rights. ODFW is also authorized to implement fish screening and fish passage at artificial fishways through ORS 498.301, ORS 315.138, and ORS 509.605.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
The ODFW Deschutes District considered conducting the fish monitoring activities with existing staff. This was rejected because staff is charged with conducting all facets of fisheries population and habitat management activities over 2,200 square miles in the upper Deschutes River Basin. Capacity to conduct additional activities is limited and undertaking the proposed action would preclude the district from meeting established management obligations.

The Upper Deschutes Watershed Council was considered as the employer for the staff positions required to conduct the project. This option was rejected due to lack of technical expertise by council staff to provide the necessary supervision and oversight of the project and liability and safety concerns associated with council staff utilizing ODFW equipment.

Without the USFWS grant funds acquired via ODFW's grant applications, the DBBC and city of Prineville would have an extremely limited capacity to develop an HCP, and it likely would not be completed. ODFW has experience with seeking Section 6 funds and wants to facilitate successful

development of the HCP to improve fish and wildlife habitat in the Upper Deschutes basin. None of the other considered funding alternatives provided the same level of streamlined development of the HCP, collaboration with a wide range of stakeholders, and development and implementation of conservation measures.

IMPACT OF NOT FUNDING:
If limitation for the requested positions is not granted, the monitoring efforts will not be conducted and the cost share between the council and the COID M&E Program will not be executed. This could result in inefficient water conservation measures and failure to meet fish management goals. If this package is not funded, the HCP would likely not be completed, possibly exposing the DBBC and city of Prineville to eventual prosecution for take of a listed species.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

STAFFING IMPACT

3 Positions / 2.0 FTE
Continue one (1517123) Limited Duration full-time Natural Resource Specialist 1 (1.0 FTE).
Continue two (1517121 and 1517122) Limited Duration full-time (12 months) Experimental Biology Aides. (1.0 total FTE)

QUANTIFYING RESULTS

Goals and objectives of the monitoring project will be met through the successful monitoring of fish populations within a minimum of four discrete reaches in the middle Deschutes River between the city of Bend and Lake Billy Chinook. These reaches will be sampled using an electrofishing cataraft. An additional two reaches of Tumalo Creek will be sampled via backpack electrofishing. Where possible, population density estimates will be generated through mark-recapture or multiple pass removal sampling. Reaches with limited access and complex habitat will have estimates of species relative abundance generated through single pass electrofishing. This sampling will be complimented by seasonal migration information collected through radio telemetry studies. Data on stream temperature and flow will also be collected. Fish population data will be evaluated to quantify the relationship between species composition and density and water quality and quantity parameters. Field data will be collected during August – October annually for five years from 2012-2016. Both technical reports and informational reports will be distributed to interested stakeholders by January of each year. Results will be evaluated to determine if fish populations change with increases in stream flow through water conservation projects implemented over the five-year period. This information will be used to shape future fish and water management in the Deschutes River Basin.

Measures used to quantify the results of HCP effort have been reported and will continue to be reported in annual completion reports required by those entities that spend USFWS Section 6 ESA dollars. Types of progress made on this project in the past year include completed reports for Covered Area and Covered Species. The districts and city anticipate the HCP and associated National Environmental Policy Act (NEPA) documents will be completed in 2017.

Six tasks to be accomplished from now through 2017 are: (1) completion of technical studies, (2) development and agreement by USFWS and National Ocean and Atmospheric Administration and a broad group of stakeholders of conservation measures in 2014-2015; (3) preparation of the complete draft Habitat Conservation Plan in 2014-2015; (4) initiation of the National Environmental Policy Act process in late 2014 to early 2015; (5) preparation of the final Habitat Conservation Plan and final National Environmental Policy Act compliance document (Environmental Impact Statement) in 2015-2016; and (6) completion of the ESA and National Environmental Policy Act decision documents, including the implementing agreement, in late 2016-17.

REVENUE SOURCE

$1,500,000 Federal Funds (USFWS Section Grant for HCP)
$ Other Funds 235,000
Upper Deschutes Watershed Council $138,750 Other Funds
COID M&E Program $96,250 Other Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **116 – Coastal Multi-Species Plan Implementation**

Policy Option Package Element Addendum: 28

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
ODFW is required to develop conservation plans through the Native Fish Conservation Policy. Given the relatively healthy status of anadromous salmon, steelhead, and trout on the Oregon coast, from Elk River, near Cape Blanco, to the Necanicum River, near Seaside, ODFW developed the *Coastal Multi-Species Conservation and Management Plan* (CMP) for Chinook, steelhead, chum, and cutthroat trout. The CMP addresses angling opportunities and conservation relative to the use of hatchery fish and the harvest of naturally-produced fish, as well as habitat and predation issues. Hatchery and harvest management are of specific interest to angling and conservation citizens. ODFW worked with numerous interest groups and the public to develop a set of management actions in the CMP. Although most of the CMP can and will be implemented with current staff and program levels, a few of the actions will require additional funding for ODFW. These include:

- reducing the number of hatchery Chinook that spawn naturally in Salmon River and Elk River
- working to better understand and improve the status of chum salmon

If these two actions are not funded, the rest of the CMP will be implemented. However, given public support for the plan, it is important for ODFW to also implement the two aforementioned actions. The CMP identifies other, less immediate funding needs for ODFW, which are not included in this policy option package or are not appropriate for this fund type. The plan also identifies actions for which costs were not determined, and funding will be primarily sought by partner entities; these are also not included in this package. Note that implementation of most actions in the CMP is not contingent on new funding. Most actions identified in the plan can and will be implemented by ODFW and partners with existing staff, volunteers, and funding levels.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
The two general actions will be addressed as described below.

Reduced Hatchery Spawners in Salmon and Elk Rivers
Funds are requested to more readily collect hatchery fall-run Chinook salmon at hatcheries and traps, so they will not interact with naturally-produced Chinook salmon on spawning grounds. Scientific studies have shown hatchery-produced fish have a negative effect on naturally-producing salmonid populations. In Salmon River, the Salmon River Hatchery ladder and trap will be modified for better collection, or, in order to also improve the fishery and if a suitable location and operating partners can be secured, an ancillary acclimation site will be established higher in the basin. In Elk River, modifications to the Elk River Hatchery trap will be made and two seasonal weirs and traps (with staff to operate them) will be used on two tributaries with high hatchery spawner numbers.

Chum Status
To better understand the population structure of chum salmon, a genetic study will be completed. Identifying the uniqueness of the few currently existing and consistent chum runs will help elucidate the scope of restoration and protection needs. In addition to the genetic study, funding for staff to identify, restore, and protect chum spawning habitat is requested.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This package directly furthers the mission of ODFW: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." The reduction of hatchery spawners and the work to better understand and re-establish chum are intended to protect and enhance wild salmon populations.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Work to reduce hatchery spawners and understand chum status will have an impact on the percentage of freshwater species that are considered at risk (Oregon Benchmark 86), and on the percent of Oregon fish species of concern being monitored (KPM #4). Some aspects of this package will address hatchery production and management, which will contribute to Oregon's rural economy by supporting commercial fisheries and related jobs (Oregon Benchmark 1).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ODFW is authorized to cooperate with public and private agencies for fish management activities under ORS 496.164.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not funding the work identified in this policy option package. This alternative was rejected because there is an expectation by stakeholders and the public, and a desire by ODFW, that the actions in the plan will be implemented.

IMPACT OF NOT FUNDING:

If this package is not approved, native naturally-producing fall-run Chinook and chum salmon will remain at an elevated risk of population failure and ODFW's mission would be compromised.

EQUIPMENT TO BE PURCHASED:
Field gear (e.g., waders, GPS units, hand held radios, fish sampling equipment, seines, ODFW uniforms, safety gear); fish weirs, traps and fish trap repair supplies/replacement equipment; vehicle rental and mileage; laboratory analyses; capital construction.

STAFFING IMPACT

7 Positions / 2.5 FTE

- Establish two (*1517185 & 1517186*) Limited Duration full-time (6 months) Experimental Biological Aide positions (0.50 FTE).
- Establish two (*1517187 & 1517188*) Limited Duration full-time (8 months) Experimental Biological Aide positions (0.67 FTE).
- Establish two (*1517189 & 1517190*) Limited Duration full-time (4 months) Experimental Biological Aide positions (0.33 FTE).
- Establish one (*1517191*) Limited Duration full-time Supervisory Fish/Wildlife Biologist position (1.0 FTE).

QUANTIFYING RESULTS

This work will directly or indirectly affect KPM 4. Work to reduce hatchery spawners and understand chum status will have an impact on the percent of Oregon fish species of concern being monitored (KPM 4). ODFW reports on these KPMs by tracking the percent of Oregon fish species of concern being monitored (KPM 4).

Relative to the needs identified in the CMP, the success of this work will be quantified through other metrics: a reduced proportion of hatchery Chinook on natural spawning grounds in Salmon and Elk Rivers, and an improved understanding and status of chum salmon in the Coastal planning area. Results will be conveyed in reports, presentations, and status assessments.

REVENUE SOURCE

$ 770,000 Lottery Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **117 – OHRC Research Proposal**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE: Current funding for the Oregon Hatchery Research Center (OHRC) is adequate to fund the basic operations of the OHRC (personal services/services and supplies) but not the research the Center was designed to address. With the passage of House Bill 3441 in 2013, the Oregon Legislature re-affirmed Oregon's commitment to the OHRC and its mission. To address the short to long-term research priorities and funding needs of the OHRC, the OHRC Board, in collaboration with ODFW and Oregon State University (OSU), developed and adopted a research plan for the Center and a proposed budget to support priority research for the 2015-2017 biennium. As the operators of the OHRC, this policy package describes ODFW's funding request in support of the research plan the OHRC Board, ODFW and OSU developed collaboratively.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This POP request funds for specific research on mechanisms that makes hatchery and wild fish different, followed by the development and implementation of management actions that would reduce or eliminate these differences where possible. The OHRC Board has developed three primary areas of research that offer the best opportunity to address these issues, as follows:

1. If and how the differences in mate selection between hatchery and wild fish influences the reproductive success of hatchery fish in the wild, and how practices could be improved to increase the reproductive success of hatchery fish. (Cost = $650,000/2 years)
2. If and how hatchery rearing practices alter the selection of traits with resultant fitness consequences, and how hatchery practices could be altered to minimize hatchery versus wild fitness differences related to selection in the hatchery. (Cost = $350,000/2 years)
3. If and how manipulation of hatchery rearing and water can improve olfactory imprinting by juvenile salmonids and homing of adults to their hatchery of origin. (Cost = $1,000,000/2 years)

A funding request of $2,000,000 is proposed to implement the initial phases of these research proposals in the 2015-17 biennium.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission is "to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." This proposal specifically supports our mission to conserve wild fish and enhance fisheries for present and future generations.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:

Success implementing this POP should result in improvements in Key Performance Measure (KPM) 2 that tracks the percent of license buying population with angling licenses and/or tags and KPM 4 that tracks percent of fish species of concern (listed as threatened, endangered, or sensitive) being monitored.

STATUTORY REFERENCE:

Relevant statutes are ORS 506.109, 506.119, 506.124, and 506.129

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:

None

IMPACT OF NOT FUNDING:

The OHRC would operate as it has since it was opened in 2005. Funding would be available for basic operations and research would be limited by the availability of grant funding and other external sources of funding. This funding has typically been limited, of short duration, and narrowly focused, often not on the primary mission of the OHRC.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):

None

STAFFING IMPACT

None

QUANTIFYING RESULTS

As outlined in HB 3441, the OHRC Board is required to report to the Legislative Assembly, the State Fish and Wildlife Director (Director) and the State Fish and Wildlife Commission on or before February 1 of each calendar year on "the findings of research projects carried out by the Oregon Hatchery Research Center and any recommendations regarding current hatchery management practices based on the research projects."

REVENUE SOURCE

$2,000,000 General Fund

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **118 – Voluntary Access & Habitat Incentive Program**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
The Access and Habitat (A&H) Board was created by the 1993 Oregon Legislative Assembly to review and recommend to the Oregon Fish and Wildlife Commission (Commission) projects designed to improve wildlife habitat and public hunting access in Oregon. The program also seeks to recognize the important contributions of landowners and to foster landowner/hunter relationships.

In 2011, the A&H Program was awarded $1.56 million of VPA-HIP funds (from the 2008 Farm Bill). In total, these funds opened 60,000 acres of private land and helped improve 32,000 acres of wildlife habitat, affecting 22 private landowners. Additional funding from the current proposal would allow us to expand our access programs and continue to improve wildlife habitat on private lands.

The 2014 Farm Bill authorized $40 million through the US Department of Agriculture's (USDA) Voluntary Public Access and Habitat Incentive Program (VPA-HIP), to be allocated over three years to state and tribal private lands access programs. Oregon Department of Fish and Wildlife (ODFW) has budgeted $750,000 for the 2015-2017 biennium. Additional funding provided by VPA-HIP is expected to enroll 40 to 50 new landowners, create 90,000 acres of additional recreational access, and improve 3,000 acres of habitat on private lands.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
All funds will be administered through ODFW's existing A&H Board to increase public hunting access to private lands. The Commission appoints citizen volunteers to the seven-member A&H Board, which in turn appoints volunteers to six A&H Regional Advisory councils. Project proposals are prepared by private landowners, corporations, organizations, or government agencies, and are initially reviewed by the respective Regional Advisory Council, which provides local insight and makes recommendations to the A&H Board. The A&H Board approves projects in concept and forwards recommendations to the Commission for final funding approval. Project applications are accepted on a quarterly basis. Current program funding is derived primarily from a $4 surcharge on all hunting licenses and from the auction/raffle of special deer and elk tags. This is a very popular program that receives more landowner interest than current funding can support.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

Additional funding for the A&H program from this federal grant would support ODFW's initiative to increase public access to private land, a lack of which is widely considered to be a barrier to hunter recruitment and retention. Funding would also improve wildlife habitat on private lands, particularly for mule deer. Wildlife habitat improvements and hunting access are central to ODFW's mission to "protect and enhance Oregon's fish and wildlife and their habitats for the use and enjoyment by present and future generations."

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Performance of the A&H Program is summarized in a biennial Legislative Report. The report contains information on the number of landowners enrolled in the program, total acres of private land hunting access and habitat enhancement, and the additional lands that were enrolled using outside funding sources such as VPA-HIP. In addition, ODFW staff would closely monitor hunter use and satisfaction regarding individual properties through voluntary access permits. Southwick Associates, an independent economic/statistics research firm, has been hired by the Association of Fish and Wildlife Agencies to estimate the economic benefits of VPA-HIP in each state by collecting and analyzing survey data from landowners and hunters.

STATUTORY REFERENCE:
ODFW is authorized to conduct wildlife management under ORS 496.012 (Wildlife Policy).

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
An alternative considered was to not apply for funding through the VPA-HIP program. ODFW rejected this alternative because the A&H Program met the VPA-HIP funding criteria quite well, and because Oregon landowners and hunters will benefit significantly from increased funding for the A&H Program. There is currently more landowner interest in A&H projects than the program can support, and this funding is an opportunity to continue to expand public hunting access and wildlife habitat in Oregon.

IMPACT OF NOT FUNDING:
Not utilizing these grant funds would result in 40 to 50 fewer landowners enrolled in the A&H Program, approximately 90,000 acres of private land hunting access that would not be available to public hunters, and approximately 3,000 acres of wildlife habitat that would not be improved.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

QUANTIFYING RESULTS

The results can be measured by the number of increased landowners enrolled in the program, increased total acres of private land hunting access and habitat enhancement, and hunter use on participating properties.

STAFFING IMPACT

2 Positions/1.0 FTE

Establish two (1517202 & 1517203) Limited Duration full-time (12 months), Natural Resource Specialist 1 positions (1.0 FTE).

REVENUE SOURCE

$750,000 Federal Funds (USDA's Natural Resource Conservation Service)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **119 – Fish Screening**

Policy Option Package Element Addendum: 24

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package addresses two needs: 1) the continuation of a position that provides maintenance on existing fish screens (such maintenance is mandated by statute), and 2) limitation for funds to complete a fish screen project on Honey Creek in Lake County. Over 75,000 water diversions exist to deliver water in Oregon for beneficial uses such as irrigation, livestock watering, and municipal supply.

Fish present in the stream at the point of diversion are often diverted with the water, which often results in fish mortality. A variety of fish screens exist that can be installed at or near the point of diversion. These fish screens protect fish by preventing them from being entrained into a water diversion. The screens come with an initial cost to install, and long-term maintenance needs to ensure continued operation. ODFW administers a cost share program to assist water users with the installation of fish screens at water diversions. Through this voluntary cost share program, ODFW is typically able to fund 60 percent of the project costs, up to a maximum of $75,000. The applicant is responsible for the remaining project expenses that can be contributed through cash or in-kind contributions. In much of Oregon, where fish listed under the Endangered Species Act (ESA) are present, fish screens also protect water users by reducing their risk of violating the federal ESA through inadvertent take of these listed species.

ORS 498.306 mandates that ODFW is responsible for major maintenance at fish screens installed through the cost share program that divert less than 30 cubic feet per second of water. Fish screens operate in a challenging environment, and the screens are subject to damage from floating debris, extreme temperatures, and many other factors. Without inspection and maintenance, fish screens will not continue to operate to protect fish or deliver a reliable source of water. As additional fish screens are installed through the cost share program, the number of projects in need of maintenance increases. In the 2011-13 biennium alone, 191 screens were installed. Timely maintenance by ODFW staff is required to protect listed fish populations and ensure consistent water delivery to users.

In addition to maintaining screens, ODFW staff work with local and federal partners to identify diversions in need of fish screens. The Rookery Diversion is an unscreened irrigation diversion on Honey Creek in Lake County that severely impacts sensitive and ESA listed fish. This project was scheduled for completion in the 2013-15 biennium through a package approved for that biennium. The fish ladder and diversion were completed as scheduled. The fish screen portion of this project was contingent on measuring water flow after the installation of the new diversion structure, and sizing the fish screen according to water use. Extreme drought conditions in the spring of 2014 prevented water from being delivered, thus no measurement could be obtained to appropriately size and install

the fish screen. This package would allow ODFW to accept and use Other Funds to complete the fish screen at this site in Honey Creek. The project will prevent ESA listed fish from being removed from the stream, thereby reducing the risk of water users from un-authorized take under the ESA.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

The proposed solution is to extend the identified position to continue the maintenance actions necessary for fish protection. If not renewed, this position will be eliminated at the end of the current biennium. This technician conducts periodic inspections to ensure screens are functioning appropriately to protect fish and deliver water. Screen maintenance is conducted based on needs identified during inspections or from communication with the water user. Typical maintenance actions include lubricating moving parts, replacing worn seals, adjusting bypass to maintain safe release of fish, removing debris from in and around the screen, replacing bearings and screen material, adjusting water levels, and installing or removing screens based on seasonal water use.

The Honey Creek project will install two self-cleaning fish screens at a new diversion structure and fish ladder constructed during the 2013-15 biennium. The ODFW Fish Screening and Passage Program is uniquely qualified and experienced in the design and construction of fish screens that meet current fish protection standards while providing water that is essential for the user's operation. The fish screens will be designed and installed to meet current fish screening criteria. If this project is constructed through the ODFW cost share program, major maintenance will be addressed by ODFW, providing greater assurance that this site will function to protect fish and water use for many years. The water users will continue to divert and use their legal allotment of water without current risks to sensitive fish resources. Mitigation funds from Ruby Pipeline will be used to fund up to $100,000 of the costs associated with this project. These funds are available and intended to offset the impacts of the Ruby Pipeline project constructed in southeast Oregon. The Lakeview Soil and Water Conservation District anticipates contributing up to $100,000 to implement this project. The remaining funds are expected to come from the U.S. Fish and Wildlife Service (USFWS). The fish screen project was expected to be completed during the 2013-15 biennium. The diversion structure and fish ladder were completed on schedule in 2013. Extreme low stream flows in 2014 prevented water from being diverted, so the diversion rate could not be measured. Without the diversion rate, the fish screen design could not be completed, causing the project to be delayed to 2015-17.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

This package directly contribute to the ODFW mission to protect and enhance Oregon's fish for use and enjoyment by present and future generations by conserving fish while allowing safe use of Oregon's water resources. Maintaining fish screening and passage at water diversions is described as a need in multiple recovery plans in Oregon. The Honey Creek project would contribute to reestablishing migration corridors and screening irrigation diversions which are actions identified in the Warner Sucker recovery plan conservation measures.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:

This proposal contributes to Key Performance Measure (KPM) 6, by decreasing the number of unscreened water diversions in Oregon. The target associated with this performance measure is the installation of 150 fish screens or 150 cubic feet per second of

water screened per biennium. ODFW takes great pride in continuing to meet this key performance measure. As additional screens are installed in support of this performance measure, the demand for maintenance activities also increases. The position identified in this package will contribute to addressing this maintenance need. Fish screens operate in a challenging environment and require inspection and maintenance to continue operating appropriately for the protection of fish and water users. By providing timely screen maintenance that protects fish and delivers needed water to users, technicians contribute directly to ODFW's efforts to increase the number of customers that rate their satisfaction with the agency as above average or excellent, KPM 7.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. Specific to this proposal, ORS 498.306(2)(a) states that ODFW shall establish a cost share program to implement the installation of screening or by-pass devices on not less than 150 water diversions or 150 cubic feet per second of diverted water per second. ORS 498.306(6) states that ODFW is responsible for major maintenance and repair of screening or by-pass devices at water diversions less than 30 cubic feet per second.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW has considered reducing maintenance activities at fish screens; however, this alternative was rejected because more responsibility for screen maintenance would be placed on private landowners. This strategy has been attempted in the past, and resulted in screens that were not maintained and in many cases removed due to problems with water delivery. ODFW may then be responsible for the increased replacement costs due to our major maintenance responsibility as described in ORS 498.306(6), or the site will continue to operate, unscreened, resulting in untold mortalities to valuable fish resources. In summary, if maintenance of screens by ODFW was lessened, the deferred costs would be substantially higher than they would if ODFW is able to maintain screens.

Using a private contractor was considered for the Honey Creek project. However, ODFW is uniquely qualified and experienced in the design and construction of fish screening and passage projects, and has staff that focuses on these types of projects to both protect fish and deliver water. A fish screen project was completed by an outside private contractor in this region a number of years ago. This contractor was not adequately experienced in the challenges of these types of projects, and that fish screen project failed almost immediately and still does not provide fish protection. Under ORS 498.306(6) ODFW is responsible for fish screen major maintenance activities necessary at diversions less than 30 cubic feet per second that are constructed through the ODFW cost share program. ODFW is not responsible for any maintenance at projects completed outside this cost share program. Project cooperators at this site have stated a preference to implement this project through ODFW to ensure the best on the ground result and be eligible for maintenance assistance in the future. ODFW successfully completed the first stage of this project. The project was on schedule but delayed due to extreme weather circumstances outside our control.

IMPACT OF NOT FUNDING:
The screening project on Honey Creek would not be completed by ODFW using the funds available from the Ruby Pipeline mitigation fund. If the technician position is not extended, ODFW will reduce support for fish screening throughout eastern Oregon. Water users will receive less assistance with screen maintenance from ODFW, and fish will be more susceptible to mortalities at diversions, due to inadequate fish screens.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

STAFFING IMPACT
1 Position /0.42 FTE

Fish Screen Maintenance:

- Convert one (1517011) Limited Duration (10 months) Fish and Wildlife Technician to a seasonal position (10 months; 0.42 FTE).

No staffing impact related to the Honey Creek project.

QUANTIFYING RESULTS
This policy option package will result in additional fish screens and fishways that are able to be maintained. Fish screen maintenance is critical to the continued operation of fish screens. Currently, over 250 screens are operating in areas served by the position identified in this package. Without adequate maintenance, water users will experience problems in water delivery, in addition to being responsible for fish entrainment. The customer service associated with the maintenance of fish screens directly addresses KPM 7 through increasing water user's satisfaction with the agency. Twenty-six fishways are also inspected and maintained by the position identified in this package to ensure fish passage. ODFW will measure the success of this package by tracking the number of screens maintained. New fish screens are currently designed, constructed, and maintained to meet state and federal fish screen criteria. Although there are many variables involved, generally the performance of a screen to protect fish and deliver needed water can be quantified by compliance with the following standards: 1) screen mesh size of 3/32 inch for circular or square openings and 1/16 inch for slotted openings; 2) screen area large enough to maintain an approach velocity (through screen) of 0.4 ft/s or less; 3) a self-cleaning mechanism powered by solar energy, a paddle wheel, or electricity; and 4) adequate bypass flow to transport fish from the screen back to the waterway.

This policy option package will also result in two new fish screens operating at the Rookery Diversion on Honey Creek. This project will function such that the water users are able to divert and use the water legally available to them without risk to native fish in Honey Creek. Fish will be protected through the use of a fish screen on each canal that operates consistent with current fish screen criteria. Upon project completion, fish resources in Honey Creek will no longer be lost due to this diversion. This project will not restrict the landowner's ability to divert and use the water legally available to them. Once completed, this project will be included in a report to the legislature that will be submitted consistent with ORS 496.141.

This addresses KPM 6 through the installation of two new screens and ensuring screens installed in the past continue to operate.

Updates on ODFW's fish screening program are provided to the Legislature annually as directed by ORS 496.141

REVENUE SOURCE

$49,000 Federal Funds

Honey Creek Project: USFWS $49,000 Federal Funds

$258,000 Other Funds

Fish Screen Maintenance: $58,000 Other Fund Dedicated (Screen Surcharge)

Honey Creek Project: $100,000 Other Fund Obligated (Ruby Pipeline Mitigation funds)

Honey Creek Project: $100,000 Other Fund Obligated (Lakeview Soil and Water Conservation District)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **120 – Culverts Fish Passage**

Policy Option Package Element Addendum: 39

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
The Oregon Department of Transportation (ODOT) maintains a large state highway system throughout Oregon that impacts fish passage for native migratory fish. Some maintenance actions that ODOT conducts at culverts trigger Oregon's fish passage rules, which are administered by the Oregon Department of Fish and Wildlife (ODFW). The large number of culverts embedded within the state highway system has created a large and extremely expensive backlog of culvert maintenance needs.

ODFW and ODOT negotiated an agreement to implement a pilot program that provides ODOT more flexibility in maintaining the state highway system without triggering full fish passage requirements. Part of this agreement includes ODOT contributing $1.8 million to an ODFW fund created to fix priority fish passage barriers statewide. This package provides ODFW the spending authority to use these funds as negotiated to restore fish passage at high priority sites throughout Oregon as mitigation for ODOT not coming into full compliance with current fish passage criteria at culverts maintained under the pilot agreement.

ODOT will also contribute the funds necessary to fund one Limited Duration position to represent ODFW's interests at road crossings. This position will help implement the pilot program from ODFW's perspective and process fish passage approvals to allow ODOT the most flexibility and cost efficient means to maintain culverts on the state highway system.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
As part of the pilot ODOT Culvert Maintenance Agreement, $1.8 million will be contributed to an ODFW fund to address high priority fish passage barriers statewide. Projects will be selected by ODFW based on statewide passage priorities where there are willing landowners and cooperating stakeholders.

A limited duration position that implements the culvert maintenance agreement and facilitates fish passage approvals associated with state highways will be established. This dedicated position oversees ODFW interests with ODOT and provides an expedited fish passage review process for ODOT projects.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

ODFW's mission is "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Fish passage is critical in allowing fish to meet all their life history needs, including access to spawning and rearing habitats, and can lead to increases in fish populations.

This project supports the agency principle to provide proactive and solution-based fish and wildlife management based on sound science. This fish passage pilot agreement increases ODOT's ability to maintain the state highway system concurrently with fish passage improvements at statewide priority barriers.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The performance measure that will best quantify the success of this proposal is the restoration of fish passage at sites considered a high statewide priority. This project is expected to address sites identified on the ODFW Fish Passage Priority List and help contribute towards sustainable native migratory fish populations. Culverts maintained under the maintenance pilot agreement will see fish passage improvements concurrently with road system improvements.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ORS 509.585(1) states that the policy of the state of Oregon is to provide upstream and downstream passage for native migratory fish and that the Legislative Assembly finds that cooperation and collaboration between public and private entities is necessary to accomplish this policy. Certain actions proposed by ODOT to maintain culverts trigger fish passage requirements. The pilot agreement developed by ODOT and ODFW increases the flexibility by allowing ODOT to implement less costly culvert fixes while improving fish passage at other barriers of statewide significance. ORS 509.585(3) directs ODFW to complete and maintain a statewide inventory and prioritization of artificial obstructions. ORS 509.585(5) directs ODFW to seek cooperative partnerships to remedy these fish passage problems as soon as possible. This package will provide ODFW the ability to expend funds to resolve fish passage at sites identified in the statewide passage barrier prioritization. This package also allows ODOT and ODFW to work in a more collaborative manner to efficiently provide input and review of ODOT activities that impact fish passage.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
A number of alternatives were considered in an attempt to balance highway maintenance needs with fish passage needs. The resulting agreement is something both agencies could live with as a pilot project for a set period of time (3-years) to learn from and assess the impacts of. Other alternatives considered ranged from seeking additional funds to install full fish passage to exempting certain maintenance actions from triggering fish passage. These options were rejected due to a lack of funds, lack of support, or being inconsistent with current rules and statutes.

IMPACT OF NOT FUNDING:
If this policy option package is not funded, the pilot culvert maintenance agreement developed jointly by ODOT and ODFW will not be able to be implemented through a fish passage fund managed by ODFW. This may delay the implementation of valuable fish passage projects developed as mitigation for delaying fish passage at culverts maintained by ODOT under the pilot agreement. Not approving the Limited Duration position will eliminate a dedicated resource that serves to review ODOT projects and represent ODFW in implementing the culvert maintenance agreement.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

STAFFING IMPACT

1 Position/1.0 FTE

Create one limited duration full-time Natural Resource Specialist 4 (1517201) position (1.0 FTE).

QUANTIFYING RESULTS

The main result will be the restoration of fish passage at sites identified as a high statewide priority. This project is expected to resolve barriers identified on the 2013 Oregon Fish Passage Priority List. Another result is an increase in the number of culverts maintained by ODOT.

REVENUE SOURCE

$1,973,267 Other Funds Obligated (ODOT)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **121 – North Canal Dam Fish Passage**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This package requests $1,000,000 in General Funds to fulfill ODFW's commitment to assist in the installation of fish passage facilities at North Canal Dam on the Deschutes River. North Canal Dam is a longstanding diversion structure without fish passage. The structure diverts water for Central Oregon Irrigation District, Swalley Irrigation District, and North Unit Irrigation District. This dam is approximately 40 feet tall and creates a complete barrier to upstream fish passage at river mile 164.8 on the Deschutes River. Due to impacts to fish, primarily redband trout, the diversion is identified on the Statewide Fish Passage Priority List.

As part of the irrigation district's hydroelectric developments, ODFW entered into a fish passage agreement with the irrigation districts to install fish passage at North Canal Dam. This agreement satisfied fish passage requirements at the North Canal Diversion Dam and allowed the hydroelectric projects to move forward in support of alternative energy development in Oregon. The intent of the agreement is to install fish passage facilities at North Canal Dam by April 2017 with funds provided by ODFW and the irrigation districts. ODFW's responsibility in this agreement is to secure $600,000 for the construction of this fish passage facility. The total project estimate at the time of negotiations was $1 million with the irrigation districts securing the remaining $400,000. After development of construction designs and estimating current market prices, the cost estimate has climbed to $1.64 million with ODFW's portion estimated to become $982,000. The 60:40 cost share ratio is consistent with the ratio in statute (ORS 498.306(4)) that describes the ODFW Fish Screening Cost Share Program.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This package is requesting $982,000 in General Funds to provide the state's share of the cost to install a fish ladder at North Canal Dam. The irrigation districts are on track to secure their portion of the funds by April 2015. The intent of the agreement is to install the project by April 2017. Once the fish passage facilities are constructed, the irrigation districts will be responsible for the ongoing inspection and maintenance necessary to ensure the long term success of this project.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Fish passage is critical to allowing fish to meet all their life history needs, including access to spawning and rearing habitats, and can lead to increases in fish populations. In conjunction with existing and soon to be upgraded fish screens, this

project will restore the complete barrier at North Canal Dam to full up and downstream fish passage. Ongoing efforts to provide fish passage upstream at Mirror Pond Dam, combined with the North Canal Dam, are expected to reconnect over 190 miles of spawning and rearing habitats for fish. The Deschutes River is a renowned fishing destination and the project site is located within the city of Bend. The North Canal Fish Passage project and other restoration actions underway on the Deschutes River should increase the popularity of this area to the angling public, and complement ongoing restoration and water conservation efforts in this region.

This project supports the agency principle to provide proactive and solution-based fish and wildlife management based on sound science. The fish passage agreement allows energy development to move forward while ensuring fish passage within a specified time frame. The General Fund dollars requested show the importance placed on implementing energy development concurrently with natural resource protection and restoration.

ODFW negotiated a solution for fish passage at North Canal Dam that benefits fish, while supporting the development of hydroelectric energy. Previously, North Canal Dam had been a long-time barrier to fish passage.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
The performance measure that will best quantify the success of this proposal is the installation and operation of a fish ladder that meets the needs of native migratory fish while supporting the production of renewable energy. This project is expected to improve the angling experience within the city of Bend, contributing to angling license sales described in Key Performance Measure 2. Key Performance Measure 7 is based on the quality of customer service provided by ODFW. Meeting the terms of the North Canal Fish Passage Agreement is critical in providing good customer service.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ORS 509.585(1) states that the policy of the state of Oregon is to provide upstream and downstream passage for native migratory fish and that the Legislative Assembly finds that cooperation and collaboration between public and private entities is necessary to accomplish this policy. Specific to this proposal, ORS 543.765(5) requires fish passage be addressed as required by ODFW as a condition of a certificate to use water for hydroelectric purposes. 509.585(4) identifies a fundamental change in permit status, such as occurred with this project, as a trigger requiring fish passage to be addressed.

The 2010 Fish Passage Plan Agreement fulfilled the legal requirements of fish passage at this site and was developed through a collaborative negotiation between a public and private entity.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
An initial alternative considered was to require fish passage at this dam prior to issuing the permits. This alternative was rejected because the cost of installing the fish ladder was the responsibility of the applicants. The applicants do not own the dam and under this alternative would be required to front the costs of the ladder prior to generating revenue from the hydro project.

Also considered was an alternative to implement a mitigation project in lieu of passage at this site. This alternative is allowed under current rule but was rejected due to the significant benefits of fish passage at this site. An alternative mitigation package that would result in a net benefit to fish passage would have been cost prohibitive.

IMPACT OF NOT FUNDING:
If this policy option package is not funded, ODFW will not have funds available to meet the terms of the North Canal Fish Passage Plan Agreement. This may delay the implementation of the North Canal fish passage project, continue to block fish passage, and negatively impact ODFW's relationship and credibility with area stakeholders.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None

STAFFING IMPACT
None.

QUANTIFYING RESULTS
The main result will be the restoration of fish passage within the Deschutes River at the North Canal Dam. This will meet the intent of the Fish Passage Plan Agreement developed in response to energy development in the three irrigation canals diverted at this dam. This barrier, identified in the Statewide Fish Passage Priority List, will be added to other recent priority barriers in Oregon that have been resolved. Key Performance Measure 7 is based on the quality of customer service provided by ODFW. Meeting the terms of the North Canal Fish Passage Agreement is critical in providing good customer service. This project is expected to improve the angling experience within the city of Bend, contributing to angling license sales described in Key Performance Measure 2.

REVENUE SOURCE
$1,000,000 General Fund

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **122 – Oregon Conservation Strategy Implementation**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This package creates three positions and provides funding for survey and inventory work to monitor at-risk species identified in the Oregon Conservation Strategy (Conservation Strategy). The Conservation Strategy was part of a national effort guided by Congress and the U.S. Fish and Wildlife Service (USFWS) to encourage states to develop comprehensive wildlife planning for at-risk species to keep them from being listed under the federal Endangered Species Act (ESA). 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 addressed species conservation through a fine filter approach and identified 286 strategy species based on their population status or that represent the diversity and health of wildlife in Oregon. ODFW has recently developed a list of 15 high priority species that would be the focus of enhanced survey and inventory efforts funded by this package.

Current ODFW staffing and funding levels do not allow for adequate monitoring of at-risk species. Only high-profile species, such as bald eagles and peregrine falcons are consistently monitored by ODFW due to federal requirements associated with their recent delisting from the ESA. Consequently, ODFW has been unable to be proactive in providing biological data used to evaluate species and population health, while assisting other state agencies and private landowners to ensure long-term stable habitats to prevent ESA listings.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
A total of three new Conservation Program Biologists (one in the northeast, southeast and southwest parts of the state, respectively) would be added 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 (there are currently positions in Bend and in Clackamas).

Additional Services and Supplies 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.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This proposal specifically supports ODFW's mission by gathering at-risk species information in order to enhance those populations and their habitats for use and enjoyment by the citizens of the state.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
These additional positions will allow for ODFW to better implement aspects of the Conservation Strategy including meeting Benchmarks 85 (percent of monitored freshwater species no at risk), 87 (percent of terrestrial species not at risk), and 88 (percent of at risk species populations protected in dedicated conservation areas). Additional staff capacity will provide opportunities to better develop inventories of species and habitats including GIS maps and distributions. These positions will also allow ODFW to meet the challenges of emerging issues such as climate change which will impact both at-risk and not at-risk species by reducing or altering habitats.

STATUTORY REFERENCE:

ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:

The agency considered seeking alternative revenues to fund these positions. However, this alternative was rejected since this type of work is specifically identified as an appropriate use of Lottery Funds.

IMPACT OF NOT FUNDING:

Without these positions ODFW will be unable to meet the challenges of emerging issues such as climate change and energy development which will impact both at-risk and not at-risk species by reducing or altering habitats. Population declines of at-risk species could result in listing under the ESA which could have significant economic and social impacts to communities throughout Oregon.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):

None

STAFFING IMPACT
3 Positions/3 FTE
Establish three (1517198, 1517199 and 1517200) Limited Duration, full-time Natural Resource Specialist 3 (C8503) positions (3 FTE).

QUANTIFYING RESULTS

Overall effectiveness of this Policy Option Package will be determined by the number of at-risk and priority species that are monitored. Efforts will focus on the 15 priority species where additional information is needed to help inform public land managers and private landowners on how to avoid and/or minimize impacts to those species and their habitats as to not warrant a listing under the ESA.

REVENUE SOURCE

$1,000,000 Lottery Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **123 – Willamette Wildlife Mitigation Program**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

This policy option package proposes continued staffing for the Willamette Wildlife Mitigation Program (WWMP), which will be funded entirely by Federal Funds provided to ODFW. These funds originate from the Bonneville Power Administration as part of the WWMP, which was ratified in October 2010. ODFW briefed the Legislative Emergency Board about the Settlement Agreement and funding increase in November 2010 and established several new positions in the 2013-15 biennium to support the WWMP. The funds are intended to mitigate for habitat losses due to inundation of habitat by flood control and hydropower reservoirs in the Willamette River Subbasin as required by the Northwest Power Act of 1980. In 2010, the Bonneville Power Administration agreed to increase acquisition funding from $2.5 million to $8 million annually, during 2014 — 2025 and support program funding to ODFW of approximately $26 million over the course of the Settlement Agreement. ODFW has agreed to work with landowners, local governments, Tribes, and other interested parties to identify at least 16,880 acres of habitat for protection and restoration over the course of this Agreement. This package requests additional limitation and positions for ODFW to expend Federal Funds to pay for expanded program operations, maintenance, restoration, and management of these habitats.

ODFW's primary role is to review, assess, and recommend potential properties for acquisition to the Bonneville Power Administration, as well as monitor WWMP acquisitions for compliance and ecological condition. Acquisition funds are a separate funding source managed by the BPA 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 BPA 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 hydrosystem are mitigated and the state's interests are protected. Program operation funds will cover current ODFW staffing costs, will be passed through to contractors, and will be used to pay for additional ODFW employees and the expanded program outlined in the Settlement Agreement. Funding includes an overhead assessment to cover indirect expenses.

Although the intent of this 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.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
Fully staffing the WWMP will ensure continuation of current conservation and acquisition efforts. Staffing allows ODFW to meet the expanded acreage objectives by 2025 as stipulated in the Settlement Agreement. In many cases, the sponsoring organizations or local governments use the monies they are allotted from the operations and maintenance part of the program to match outside funding sources that generally require a 50/50 match.

The South Willamette Watershed District Natural Resource Specialist 2 position will be responsible for on-the-ground implementation of the WWMP monitoring plan, as well as assistance with restoration and management of newly-acquired conservation properties in the program. Duties include coordination of the local solicitation process; habitat management assistance; compliance monitoring and reporting; cultural resources protection; procurement, outreach, writing and reviewing management plans; grant writing and defense in support of restoration, access management assistance, and assisting other staff in completion of annual reports.

Three Fish and Wildlife Technicians located in the North and South Willamette Watershed Districts are needed as the program expands. These positions will implement on-the-ground habitat restoration projects, manage access, monitor and enforce easements, assist with operational and maintenance needs, and assist existing ODFW Wildlife staff with habitat restoration and conservation activities throughout the Willamette Valley.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
This proposal specifically supports ODFW's mission: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations" by ensuring mitigation for loss of wildlife habitats through acquisition and restoration of property for the impacts of flood control and hydroelectric projects in the Willamette Basin. The program will also assist in the design, review and implementation of habitat management activities to implement the Willamette Project Biological Opinion and recover listed fish species.

The WWMP also supports agency priorities that provide valuable habitat for native and migrating species; promotes habitat development in the Willamette Valley; promotes wildlife viewing opportunities; provides hunting and fishing access; provides assistance to landowners for enhancement of private property for the benefit of fish and wildlife; provides technical assistance to landowners and other agencies; and coordinates with other agencies to address land and water use issues associated with fish and wildlife habitats.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Successful acquisition of 16,880 acres by 2025 will contribute in a meaningful way to ODFW's efforts to reduce the number of Oregon species listed under the state or federal Endangered Species Act. Implementation of WWMP actions will also contribute to recovery of listed freshwater and terrestrial species. Regular surveys of acquired properties will increase the number of fish and wildlife species of concern that ODFW is monitoring. As such, the work proposed in this Policy Option Request addresses KPM 4 (Oregon species of concern: percent of fish species of concern [listed as threatened,

endangered, or sensitive] being monitored); and KPM 5 (Oregon species of concern: percent of wildlife species of concern [listed as threatened, endangered, or sensitive] being monitored). Restoration efforts on these lands will help increase the percentage of Oregon that is in natural habitat.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
Funding at current levels and without continuation of proposed Limited Duration positions is sufficient for limited program operation and outreach. However, this option was rejected because current funding will not allow staff to keep up with expanded Bonneville Power Administration funding, perform necessary stewardship activities of fish and wildlife and their habitats; and achieve subsequent increases in annual acquisition and restoration targets. The absence of additional funding and staffing may lead to failure of ODFW's obligation to ensure successful mitigation as required by federal law and impact other ODFW operations, thereby reducing overall agency efficiency.

IMPACT OF NOT FUNDING:
Without continuation of the proposed limited duration positions and associated funding, staffing will be insufficient for expanded efforts including the complexity of work and responsibility for ODFW as the annual acquisition funding rose to $8 million in 2014, and operational funding from the Bonneville Power Administration to ODFW doubled between 2012 and 2014. This may lead to a failure by ODFW to meet its obligations under the Settlement Agreement, permanent damage to Oregon wildlife resources, and reduced funding to private landowners in the Willamette Valley.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Farm implements, such as mowers, spray booms, etc., as needed to create and manage habitat for fish and wildlife in the Willamette Valley.

STAFFING IMPACT

4 Positions / 2.33 FTE

Continue one 1517194 Limited Duration, full-time Natural Resource Specialist 2 position (1.00 FTE).
Continue two 1517195 and 1517196 Limited Duration, full-time Fish and Wildlife Technician positions, and increase each position from six months to 12 months per biennium (1.00 FTE).
Continue one 1517197 Limited Duration (8 months) full-time Fish and Wildlife Technician (0.33 FTE).

QUANTIFYING RESULTS

The success of this policy option package can be quantified by tracking the number of acres acquired or restored. The goal of the WWMP is the steady acquisition of approximately 1,100 acres of land each year to meet the final obligation of 16,880 acres by the year 2025. The Policy Option Package

will contribute to obtaining that goal. To date, approximately 2,900 acres have been acquired, with another 1,900 anticipated to close in 2014. The program will also establish a compliance monitoring process to quantify and track the achievement of restoration goals on acquired properties through the expenditure of program dollars. To determine success, program staff and contractors will monitor a range of variables including species diversity, the number of acres restored, and changes in habitat values.

REVENUE SOURCE

$1,560,000 Federal Funds (Bonneville Power Administration)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **124 – Coordination of Energy Dev. & Transmission**

Policy Option Package Element Addendum: 11, 15, 34

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:

Since Congress passed the 2005 Energy Policy Act, the workload associated with energy projects has increased dramatically (e.g., wind, solar, liquefied natural gas terminals and pipelines, coal bed and sandstone methane wells, geothermal wells, biodiesel plants, an integrated coal gasification plant, electric transmission lines, and hydroelectric projects including river impoundments, wave, tidal and other ocean-based projects). The State of Oregon's 10-year Energy Plan identifies energy as one of the top issues of our time with no single issue having a greater impact on Oregon's economy, environment, and quality of life in the coming decade. Coupled with the Governor's strong desire to develop renewable energy sources to stimulate rural economies in Oregon, potential impacts to fish and wildlife will need to be clearly identified. Many of these alternative forms of energy are in their infancy and little is known about the potential effects of these projects on animals and their habitats.

Currently, the Oregon Department of Fish and Wildlife (ODFW) has limited resources to identify impacts to fish and wildlife and their habitats from renewable energy projects. To continue to meet the mission of ODFW, additional resources will be needed as the number and types of energy projects will likely increase significantly in coming years. Examples include: planning for licensing of wave energy projects (marine hydrokinetic) off the coast of Oregon; development of the first marine hydrokinetic test center in the Pacific Ocean; and proposed electrical transmission lines including the 500 kilovolt line from Boardman, Oregon to Hemingway Butte, Idaho. Due to their size and geographical length, some of these projects will require significant staff resources to coordinate ODFW's input among fish and wildlife districts; provide consistent policy direction and statewide coordination for reviews and to guide permitting processes; evaluate and negotiate licensing of energy projects; and review studies involving impacts on fish and wildlife, with the ultimate goal of minimizing impacts to Oregon's fish, wildlife, and their habitats.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:

ODFW proposes three projects in this package to allow the agency to provide input on energy development and transmission projects. These solutions provide staffing resources to address energy issues and provide coordination and oversight by ODFW staff to minimize impacts to Oregon's fish, wildlife, and their habitats.

Electric Transmission Line from Boardman, Oregon to Hemingway Butte, Idaho: ODFW worked closely with Oregon Department of Energy and the Idaho Power Company to develop agreements that provide funding for an electric transmission line project. In 2013-15, the Idaho Power Company provided an estimated $285,794 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 the 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. The Idaho Power Company anticipates the permitting processes for the Boardman-to-Hemingway Butte project to be completed by September 2017. The agency is requesting to continue this position and to shift 25 percent of the cost to General Fund to assist in regional energy coordination as described below.

Regional Energy Coordination: ODFW is requesting to shift a portion of three existing positions to General Fund. These positions are currently funded with hydroelectric funds. This limits the type of work that can be completed using these funds. By shifting these positions to 25 percent General Fund, as well as the Electric Transmission Line position above, these positions would be able to work on energy related tasks and provide assistance within the ODFW energy program. Allocation of General Funds to these positions would give them flexibility to address other emerging energy issues and projects outside current dedicated funding streams. There are six goals for these positions: 1) to coordinate across districts and with headquarters; 2) to work with project developers on recommended fish and wildlife surveys; 3) to recommend mitigation and enhancement measures for fish and wildlife habitats; 4) to coordinate with state and federal land managers and private landowners; 5) to participate in local, state, and federal permitting process reviews; and 6) to coordinate with other state and local agencies as appropriate.

Ocean Energy Development and Environmental Mitigation for Hydroelectric Projects: ODFW requests continuation and conversion to permanent the Ocean Energy Coordinator Limited Duration position (Natural Resource Specialist 3) to permanent status. The position was approved in 2011-13 and 2013-15 budget to address development of ocean energy projects as they expand along the Oregon coast.

The Ocean Energy Coordinator will function like other hydroelectric program coordinators in ODFW but would be devoted to the review of at-sea projects. ODFW expects that over the next 10 to 15 years, as demand for renewable energy sources continues

to increase in accordance with Oregon's Renewable Portfolio Standard, ocean energy projects will proliferate along the Oregon coast. ODFW will need staff knowledgeable in marine ecology and potential impacts from energy facilities to serve as an advisor for marine ecological needs and impacts associated with energy facility development. The position will review project proposals to determine impacts to marine environments, identify mitigation measures, and participate in permitting and licensing processes. The Ocean Energy Coordinator will continue to be based in Newport to represent ODFW and provide analysis and input on marine resources for the Federal Energy Regulatory Commission and other federal and state permitting and licensing processes. Work will include negotiating settlement agreements, participating in post-licensing activities, addressing adaptive management needs, and resolving fish and wildlife issues related to individual projects including potential impacts to sport and commercial fisheries and fisheries management.

This also requests limitation to allow ODFW to accept and expend funds provided by hydroelectric companies through project-specific fees (ORS 543.080). These project-specific fees fund are agreed to by the companies to implement tasks and actions at each hydroelectric facility to address and mitigate for environmental needs identified for the implementation of the hydroelectric licenses.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:

ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." This policy option package furthers this mission by enabling ODFW to provide recommendations for the appropriate development, transmission, and use of energy facilities in interior and coastal Oregon in accordance with the Renewable Energy Portfolio and the 10-year Energy Plan. The energy coordinator positions outlined in this policy option package will allow ODFW to represent and protect Oregon's fish and wildlife resources and the stakeholders who rely on those resources in the licensing and implementation process. Specifically, this policy option package will support ODFW's efforts to work collaboratively with the Energy Facility Siting Council, Oregon Department of Energy and other permitting agencies; Idaho Power Company and other project developers; land managers, landowners, and local governments. The collaborations between ODFW and various entities and individuals will support development, transmission, and use of energy in Oregon in a manner that protects and enhances Oregon's fish, wildlife, and their habitats.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:

The siting of transmission corridors and other energy projects is a time-intensive process that demands collaboration with multiple entities and individuals. By funding staff dedicated to work on the project, ODFW will be able to respond in an efficient and coordinated manner to requests from permitting agencies, state and federal agencies, proponents of energy projects, local governments, other stakeholders and the general public. Timely responses to requests from any of these entities or individuals will contribute to efforts to increase the number of customers who rate their overall satisfaction with ODFW as above average or excellent (KPM 7).

ODFW's main focus when evaluating energy projects is to protect the ability of Oregon habitats to produce and sustain wildlife and conserve at-risk species. Wildlife populations supported by functioning habitats contribute to additional hunting and angling opportunities for Oregonians, which can be measured by an increase in the percent of the population buying licenses and tags (KPMs 1 and 2). Mitigating for impacts to important habitats by energy projects will contribute to state-wide efforts to reduce the number of at-risk terrestrial and freshwater species (Oregon Benchmarks 86 and 88). Appropriate mitigation is also expected to slow the rate of decline in the percent of land that is in a natural habitat condition (Oregon Benchmark 89). ODFW typically requests that energy companies conduct pre and post project monitoring for sensitive fish and wildlife species. Also, mitigation by energy projects for impacts to fish and wildlife habitats will contribute to efforts to increase the number fish and wildlife species of concern that are monitored (KPMs 4 and 5).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS chapters 496-498, 503-513, and 543. ORS 543.014, ORS 543.015, ORS 543.050, ORS 543.260 and ORS 543.265 (Hydroelectric Projects) – the fees pay for state agencies to participate in the state and federal energy licensing processes. ORS 543.080 (2) project specific fees are negotiated with the individual projects and compensate a state agency for the agency's reasonable and necessary oversight of a holder's implementation of the protection, mitigation and enhancement measures. Agreements establish mitigation funds to be used to improve fish, wildlife and their habitats impacted by the project's operation.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW has considered continuing to have staff take on an additional workload. This alternative was rejected due to placing additional tasks and workloads on limited staff resources. ODFW would need to reprioritize staff away from other obligations to adequately address project requirements. An obligated funding source under ORS 543.078 already exists for this activity so other funding sources were not considered. For the project specific fees, ODFW and the hydroelectric facilities owners have agreed that the tasks agreed to in the licenses and settlement agreements are reasonable and necessary and the hydroelectric companies have agreed to compensate ODFW for this work.

IMPACT OF NOT FUNDING:

Electric Transmission Line from Boardman, Oregon to Hemingway Butte, Idaho: ODFW will not be able to complete the work that Energy Facility Siting Council, Oregon Department of Energy, Idaho Power Company, and local, state, and federal partners are requesting without funding. Lack of funding will result in Energy Facility Siting permitting delays and potential negative impacts from development to Oregon's fish, wildlife, and their habitats.

Regional Energy Coordination: Staff funded by hydroelectric funds is not able to work on regional energy issues due to the constraints on their funding. Staff in these positions have the best set of skills and expertise to work on these broad energy issues and have experience coordinating agency responses and recommending mitigation measures. If funding is not given, this type of work would not get done, which could severely impact Oregon's fish, wildlife, and their habitats.

Ocean Energy Development and Environmental Mitigation for Hydroelectric Projects: ODFW would lose the ability to provide input and oversight for fishery resources and their habitats to ocean energy development and understanding about federal and state permitting and licensing processes. ODFW will also lose expertise in the understanding of the relationships between ocean energy facilities and fishery resources and their habitats. Other existing staff workloads would increase, spreading staff resources thinner, with the result of possibly diverting resources from other marine-related activities and projects. Reduced staffing will result in increased response times and decreased efforts for addressing individual projects and implementing measures for existing projects. Other funding sources were considered and rejected as revenues for these types of activities already exist in an obligated hydroelectric fund, funded through an annual fee under ORS 543.078. If ODFW were not provided with the limitation to expend the funding already provided through negotiated agreements, then ODFW would be unable to implement tasks, actions, reviews and oversight as authorized under ORS 543.080 (project-specific fees).

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Computer hardware and software.

STAFFING IMPACT

2 Positions/ 2.00 FTE

Electric Transmission Line from Boardman, Oregon to Hemingway Butte, Idaho
Continue one (#1517120) Limited Duration full-time, Natural Resource Specialist 3 position (1.00 FTE).

Regional Energy Coordination:
Shift three (#1300117, 3000021, and 3200077) full time Natural Resource Specialist 3 positions from 100 percent Other Funds to 25 percent General Fund/75 percent Other Funds.

Ocean Energy Development and Environmental Mitigation for Hydroelectric Projects:
Convert one (#1517204) Limited Duration to a permanent, full-time Natural Resource Specialist 3 position (1.00 FTE).

QUANTIFYING RESULTS

Electric Transmission Line from Boardman, Oregon to Hemingway Butte, Idaho: The primary result of this staff position will be the completion of the Energy Facility Siting Council siting process and the permitting process for the National Environmental Policy Act in a coordinated manner that conserves habitat, and hence the fish and wildlife that use that habitat. ODFW can quantify increased coordination by evaluating whether the liaison position reduced the amount of time district and headquarters staff spent on the project (i.e. travel time, meetings, document reviews). ODFW can quantify the effectiveness of coordination, by periodically contacting cooperating agencies to determine if having a single point of contact for ODFW, compared to contacting each district and headquarters staff directly, saved time and increased productivity (KPM 7, customer service). Another quantifiable result will be the percentage increase in the number of at-risk fish and wildlife species and the acres of strategy habitats that are monitored (KPMs 4 and 5) as a result of requested mitigation.

Regional Energy Coordination: The number of hunting licenses will be quantified by comparing the annual number of licenses/tags sold for deer and elk, species principally impacted by energy development (KPM 1). The number of fish and wildlife species of concern will be quantified by monitoring conducted annually by district staff, the four regional energy coordinators, and project developers (KPMs 4 and 5). ODFW typically requests that energy development companies conduct pre and post project monitoring for sensitive fish and wildlife species to determine if project impacts occur. If negative impacts do occur at development sites, mitigation site recommendations are made so that impacted species and their habitats are restored to achieve a no-net loss and a net benefit in species abundance.

Ocean Energy Development and Environmental Mitigation for Hydroelectric Projects: This will allow ODFW to continue work on planning and implementing wave energy projects off the Oregon coast. Success can be quantified by ODFW's ability to review baseline studies, analyze data, and monitor marine hydrokinetic facilities to determine response of biological communities, including species of concern, to wave energy facilities (KPMs 4 and 5); provide recommendations on adaptive management procedures; monitoring and assessment. Staff will provide review and recommendations on addressing fish and wildlife concerns and impacts for permit requirements for expansion of Northwest National Marine Renewable Energy Center wave energy test sites. Staff will participate in the permitting processes for new projects that will be proposed as a result of the state adopting revisions to the Territorial Sea Plan Part 5. The effectiveness of this program will be measured by successful implementation of ocean energy siting and permit review including participating in Joint Agency Permit Team to be assembled as part of the Territorial Sea Plan Part 5, negotiating settlement agreements, participating in implementation teams as required by the Federal Energy Regulatory Commission, working with ocean energy proponents, collaborating with stakeholders, and coordinating development of natural resource impact monitoring studies.

REVENUE SOURCE

Total: $1,033,000

$225,000 General Fund

$808,000 Other Funds

Electric Transmission Line from Boardman, Oregon to Hemingway Butte, Idaho:
$ 62,448 General Fund
$162,552 Other Funds Obligated (Idaho Power Company)

Regional Energy Coordination:
$162,552 General Fund

Ocean Energy Development and Environmental Mitigation for Hydroelectric Projects:
$230,900 Other Funds Dedicated (Hydroelectric Annual Fees)
$ 32,000 Other Funds Obligated (Eugene Water and Electric Board, Carmen-Smith Project Specific Fee)
$ 37,000 Other Funds Obligated (Portland General Electric, Clackamas Project Specific Fee)
$500,000 Other Funds Obligated (PacifiCorp Prospect 1, 2 and 4 settlement agreement-mitigation fund)
$ 6,100 Other Funds Obligated (Warm Springs Irrigation District settlement agreement-stocking fund)
$ 2,000 Other Funds Obligated (Baker County Phillips Reservoir Stocking Supplemental Fund)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **125 – Portland Harbor Injury Assessment**

Policy Option Package Element Addendum: 13

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package requests limitation to allow ODFW to accept and expend funds to complete an injury assessment of Portland Harbor, discuss settlement agreements, and evaluate potential restoration sites. In 2000, the Environmental Protection Agency declared Portland Harbor a Super Fund site under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 for sediment contamination. In 2002, a Natural Resources Trustee Council was formed to develop and coordinate damage assessment activities at Portland Harbor and plan for the restoration of natural resources caused by the contamination. Restoration is addressed through the Natural Resource Damage Assessment where ODFW represents the state of Oregon on the Trustee Council. The Trustee Council is conducting an injury assessment and developing a restoration plan to restore injured natural resources and address the public's lost use of those resources. Restoration actions will improve habitat conditions along the lower Willamette River, its shorelines, floodplain, and river-associated habitats. The actions will focus on the most important habitat needs of injured fish and wildlife.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
Currently the Trustee Council is working with a group of participating parties to complete phase two of the injury assessment to determine the extent of natural resources that will need to be compensated for through restoration. The intent is to fund ODFW's cost for the completion of the assessment and then work with each participating party to determine whether restoration settlements can be negotiated. Additionally, participating parties will also be asking for the trustee council to evaluate potential restoration sites to determine adequacy for restoration. This package would provide ODFW with the ability to expend funds provided by participating parties to participate in completion of the Phase Two Injury Assessment process, negotiate settlements, and evaluate restoration sites.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
Funds would be used to negotiate settlements with participating parties who would provide restoration for fish and wildlife habitat. Working with parties to restore habitat furthers ODFW's mission by facilitating the agency's efforts to improve native fish

conservation and ecosystem management in Portland Harbor and the Willamette basin.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
This proposal's success will be measured by the completion of Phase Two of the Portland Harbor Injury Assessment, the negotiation of settlement agreements and evaluation of potential restoration sites. The proposal will increase the monitoring of fish and wildlife species of concern (KPM 4 and 5) and, along with other statewide conservation measures, contribute to increasing the number of monitored species that are not at risk (Oregon Benchmark 86).

STATUTORY REFERENCE:
ORS 468B.060 provides ODFW with authority to seek damages in a court of competent jurisdiction for the value of fish and wildlife injured or killed as the result of pollution or violation of the condition of any permit, and for all costs of restoring fish and wildlife production in affected areas. In addition, the Comprehensive Environmental Response, Compensation, and Liability Act provides for recovery of damages to natural resources by the federal government and/or state governments. For Portland Harbor, the Trustee Council is following the Department of Interior's Natural Resource Damage Assessment process (43 Code of Federal Regulations part 11).

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
State funds have not been allocated to fund Portland Harbor Natural Resource Damage Assessment tasks, actions and reviews. State statutes allow for agencies to seek damages for the value of fish and wildlife injured or killed as the result of pollution or violation of the condition of any permit, and for all costs of restoring fish and wildlife production in affected areas.

IMPACT OF NOT FUNDING:
If this policy option package is not authorized, tasks, actions and reviews would not occur and the state would not have input into the injury assessment or the state would need to use other state funds, to do the assessments. Regardless of whether the state participated in the assessments, Oregon would still be expected by the potential responsible parties to agree to settlements developed by the trustee council.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Associated supplies, DAS motor pool vehicle lease.

STAFFING IMPACT

None.

QUANTIFYING RESULTS

Staff will complete development of the Portland Harbor Injury Assessment, review and determine credits and debits for up to 50 proposed restoration sites, and negotiate with up to 25 participating parties on settlement agreements to address their restoration liability associated with Portland Harbor contamination. Additionally, there is the potential for negotiating with over 100 other potential responsible parties.

REVENUE SOURCE

$100,000 Other Funds Obligated (Portland Harbor settlement funds)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **126 – Blue Mountain Fish Habitat Improvement**

Policy Option Package Element Addendum: 14

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
The primary goal of the Grande Ronde Fish Habitat Program is to create, protect, and restore riparian and instream habitat for anadromous salmonids, thereby maximizing opportunities for natural fish production in the basin. These restoration projects work towards recovery goals for salmonids listed under the Endangered Species Act, improve recreational fisheries, and address water quality issues. The program also provides direct and indirect benefits to local economies through improvements in recreational fisheries and local program expenditures.

The Grande Ronde Fish Habitat Program is primarily funded by Bonneville Power Administration (BPA) and currently has four permanent staff. Recently the Bureau of Reclamation (BOR) began working in the basin and requested assistance to implement the Catherine Creek Tributary and Reach Assessment and develop and implement the Upper Grande Ronde Tributary and Reach Assessment. ODFW staff in the Grande Ronde Fish Habitat Program collectively have decades of experience designing and implementing over 70 fish habitat projects within the Wallowa, Catherine Creek, and Upper Grande Ronde basins. For this reason, BOR asked that the Grande Ronde Fish Habitat Program assist with planning, coordination and project implementation. This has resulted in an increased work load for the program. Therefore, the Bureau of Reclamation has provided funding through a separate five-year contract to help cover additional personnel costs. These changes have resulted in an increase in work load due to an increase in the number of new projects annually. Therefore, the agency is requesting to continue a 24 month, full-time, Limited Duration position that was approved in the 2013-15.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
Due to the increase in number of projects, ODFW is requesting to continue a full-time, Limited Duration, Experimental Biology Aide for the 2015-17 biennium. Continuing this position will help ensure that contract work can be completed within established timelines. This position would be used to conduct additional on-the-ground habitat work such as riparian plantings, fencing, restoring meanders, floodplain connectivity, and in-stream habitat. This additional habitat work increases the positive benefits of this program to salmonids listed under the Endangered Species Act (ESA).

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
The Grande Ronde Fish Habitat Program implements restoration projects that directly contribute to the protection and enhancement of fish and wildlife resources for use and enjoyment by present and future generations of Oregonians. Our contracts with BPA and BOR fund recovery actions for ESA listed fish species as identified under the federal Columbia River Biological Opinion and other regional plans.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Creation of this position is critical to the implementation, monitoring and maintenance of several projects funded through signed federal contracts with BPA and BOR. These contracts include project milestones and deliverables that are specified in ODFW's statement of work. These are reviewed quarterly and annually by the funding agencies. Failure to meet milestones and deliverables may result in loss of funding. Habitat projects implemented by the Grande Ronde Fish Habitat Program, in collaboration with other statewide efforts, are expected to contribute to delisting of at-risk freshwater species under the state and federal ESAs (Oregon Benchmark 86). They are also expected to contribute to Key Performance Measures 2 (Angling License Purchases), 4 (Oregon Species of Concern monitoring), and 7 (Customer Service). Angling license purchase is affected by the quality and quantity of fishing opportunities, with a key driver being fish abundance. Habitat protection and improvement help increase short and long term survival, productivity and abundance of salmon and steelhead. Increases in survival, productivity and abundance of salmon and steelhead should translate into increased fishing opportunities and customer satisfaction with ODFW. Habitat projects designed and implemented by the Grande Ronde Fish Habitat Program benefit federal and Oregon ESA listed species and species of concern (salmon, steelhead, bull trout, and redband trout) and are inspected, monitored, and maintained to ensure effectiveness. This includes monitoring response of habitat and fish to habitat improvement actions.

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW considered not taking on this additional work from BOR. This would result in no change in status quo and a lost opportunity for the Grande Ronde Fish Habitat Program to be a leading entity in fish habitat restoration in the basin. The quality or quantity of fish habitat projects would suffer and the recovery of ESA listed salmonids would be delayed resulting in continued negative impacts to local economies. Alternatively, ODFW could take on additional BOR work without additional staff. Understaffing this project was rejected, because it would result in less staff time devoted to maintenance and monitoring, both of which are required under our existing BPA contract.

IMPACT OF NOT FUNDING:

Without the continuation of the Limited Duration, Experimental Biology Aide, existing staff would not be able to both fulfill existing contractual responsibilities to BPA and also take on additional duties for the Bureau of Reclamation. The new work requested by BOR would take second priority and would not be completed. The Grande Ronde Fish Habitat Program has an excellent track record of fulfilling ODFW duties in these areas and has received highly favorable comments from the Independent Scientific Review Panel who conducts reviews of all BPA projects. Failure to complete these tasks could jeopardize future BPA funding. Less time devoted to operation and maintenance would strain ODFW's long-term relations with landowners and hamper ODFW's ability to maintain landowner obligations and expectations

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT

1 Position / 1.00 FTE

Continue one (1517119) Limited Duration full-time Experimental Biology Aide position (1.0 FTE).

QUANTIFYING RESULTS

One of the quantifiable results will be an increase in the acres of riparian area and miles of stream channel that have been restored for anadromous salmonids. The program reports accomplishments annually through an annual report. Results will be compared over time and ODFW anticipates the results will show a continued increase in acres and miles of restoration accomplished.

Another quantifiable result will be an increase in the recreational fishing opportunity and angler satisfaction in the Grande Ronde watershed. Fisheries harvest success is monitored by creel surveyors. Data from these surveys will be assessed to determine if there are changes in angler harvest rates and catch per unit effort, over time. Increased recreational fishing and increased programmatic expenditures will provide a net benefit to local economies. Over time, the program will contribute to the potential delisting of anadromous salmonids in the Grande Ronde watershed. Delisting will remove some of the burden ESA listing has caused for local communities and private landowners.

REVENUE SOURCE

100,000 Federal Funds (BPA)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **127 – Willamette Falls Fish Ladder Repairs**

Policy Option Package Element Addendum: 43

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
The fish ladder(s) at Willamette Falls provide passage for multiple species of resident and migratory fish, including Endangered Species Act (ESA) listed spring Chinook salmon and winter steelhead. Without a functioning ladder at the falls, population declines and a loss of available fisheries would be inevitable. The fishway has existed in one form or another for over 100 years. Periodic floods, age, and normal wear and tear have combined to threaten the structural integrity of Fishwaym1 and Fishway 3 at the falls, which is a critical component for fish passage.

The purpose of this project is to repair two portions of the Willamette Falls Fishway. The first is to repair Fishway 1 at the Willamette Falls Fishway to restore the structural integrity and stability of the facility. Fishway 1 is one of three fishways at Willamette Falls in West Linn, Oregon. Fishway 1 serves the cul-de-sac leg of the river where fish are attracted to over 5,000 cubic feet per second discharged from the T.W. Sullivan Power Plant. Structural displacement, stress cracks, and leakage have been monitored for years and are worsening. The second is to repair the apron slab at Fishway 3 to remove the large void under the apron and restore a clear fish passage route to the entrance to ladder leg 3.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
Fishway 1: Repair structural joints and stabilization pier foundations to restore the integrity of the fishway structure.
Fishway 3: Fill the void with cementitious material to stabilize the structure to prevent further loss of the apron.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
Restoring the structural integrity of this fishway is key to maintaining successful upstream migration of anadromous fish in the Willamette Basin.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
This package supports the agency's several key performance measures (KPM) including KPM 2 (percent of the license buying population with fishing licenses and/or tags); KPM 3 (percentage of species listed as threatened or endangered under the Oregon Endangered Species Act that have been de-listed in the last year); KPM 5 (personal income generated from commercial fishery landings; and KPM 7 (percent of fish species of concern being monitored).

STATUTORY REFERENCE:
The agency is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
Fishway 1: An engineering study including instrumentation monitoring, determination of the failure mechanism, evaluation of alternatives and development of recommendations for repair is nearing completion. Leaving the structure in its present condition is not recommended.

Fishway 3: Several site investigations have been conducted and ODFW considered filling the void with riprap and a well graded gravel fill. However, due to the large hydraulic score forces, this option was deemed a temporary solution. Leaving the structure in its present condition is not recommended.

IMPACT OF NOT FUNDING:
Not conducting this work will likely lead to further structural damage to both Fishway 1 and Fishway 3, risk to fish passage, and higher repair costs in the future.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
Crack and strain gages will be installed after the repair.

STAFFING IMPACT

None

QUANTIFYING RESULTS

Annual monitoring of structural performance and condition will help to quantify the results of the repairs.

REVENUE SOURCE

Total $ 1,000,000 Federal Funds
Fishway 1: $800,000 Federal Funds
Fishway 3: $200,000 Federal Funds

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **128 – Lower Deschutes River Ranch Acquisition**

Policy Option Package Element Addendum:

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package requests limitation to expend funds acquired through the U.S. Fish and Wildlife Service. These funds will be combined with existing match funding from the Ruby Pipeline LLC mitigation settlement agreement, which was provided to acquire real property that provides wildlife habitat and public access to fish and wildlife. These funds will be combined with other grants that will be submitted by the Trust for Public Lands to acquire over 10,000 acres, for a total acquisition price of $3,100,000. This property will be incorporated into the current Lower Deschutes Wildlife Area and will be managed for fish and wildlife habitat and public access to hunt, fish, and view wildlife. This acquisition will address key conservation issues identified within the Oregon Conservation Strategy to conserve strategy habitats and species. This property lies wholly within the Lower Deschutes Conservation Opportunity area of the Columbia Plateau Ecoregion. The property contains five key habitats (Aquatic, Riparian, Shrub Steppe, Oak Woodland, and Grasslands) that will benefit five targeted species (ferruginous hawk, sagebrush lizard, Lewis' woodpecker, summer steelhead, and bull trout). The parcel targeted for acquisition provides protection for over 2.5 miles of known spawning and rearing habitat for federally-listed mid-Columbia summer steelhead, and support meeting recovery goals for these fish. The parcel also contains the eastern-most, intact stands of Oregon white oak.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
This cooperative acquisition project with the Trust for Public Lands will ensure protection of over 10,000 acres, and provide the opportunity to enhance and maintain habitat quality and connectivity for many fish and wildlife species. The significant attributes of this property, as outlined within the Conservation Strategy, will become the management focus for ODFW, under its ownership. This project will also increase opportunities for hunting, angling, wildlife viewing, and outdoor recreation.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
Acquisition of property and focusing land management on fish and wildlife needs directly supports ODFW's mission: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Acquisitions of land to be managed for fish and wildlife ensures long term public benefits not achievable by leases or easements.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:

The acquired land will provide habitat for fish and wildlife species associated with high desert environments. Providing additional fish and wildlife related recreation access will also benefit the local rural economy through travel related expenditures by recreationists. ODFW key performance measures addressed by this package include KPM 1 (hunting license purchases), KPM 2 (angling license purchases, KPM 4 Oregon species of concern (fish), KPM 5 Oregon species of concern (wildlife), and KPM 7 (customer service). Additional access to hunting and fishing likely will translate into increased license sales. Customer satisfaction will result from increased hunting, angling, and wildlife viewing opportunities.

STATUTORY REFERENCE:
The Oregon Fish and Wildlife Commission is authorized under ORS Chapter 496.146 to accept appropriations from whatever sources to use for fish and wildlife management purposes and acquiring by purchase, lease, agreement or gift real property for wildlife management and wildlife-oriented recreation purposes.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
The Trust for Public Lands considered working with the Bureau of Land Management to pursue federal purchase of this property. However, the Trust for Public Lands decided this option was less desirable to the local constituency and county government as it would remove the property from the county tax roles. Conservation easements on this property are not desirable as an alternative to the current property owners.

IMPACT OF NOT FUNDING:
It is likely that the land would be partitioned to facilitate sales to private individuals. This would reduce habitat values for fish and wildlife species, and would not be desirable to neighboring landowners.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
None.

STAFFING IMPACT
None.

QUANTIFYING RESULTS
Results to be quantified include amount of habitats that are enhanced and protected; the productivity of the habitat acquired; the amount of additional land opened to public access for fish and wildlife recreation; and recreation visitor days. Productivity of habitats will be assessed through surveys conducted on strategy species that utilize these habitats. These include monitoring surveys for spawning steelhead, relative abundance of bull trout in the Deschutes River, and population surveys for ferruginous hawk, sagebrush lizard, and Lewis' woodpecker, all of which are Oregon sensitive species. The recreational access for hunting, angling, and wildlife viewing will be a direct measure of the amount of land open to public access and will be additional to existing conditions. The number of user days on the new lands will be measured by user surveys, which should reveal an increase over existing use.

REVENUE SOURCE
$1,250,000 Federal Funds (USFWS pending)

Agency Name: **Department of Fish and Wildlife**

Policy Option Package Initiative: **129 – Hunter Ed, Recruitment, Retention - PR Funds**

Policy Option Package Element Addendum: 25

PURPOSE

DESCRIPTION OF PROBLEM OR ISSUE:
This policy option package uses available Federal Funds to recruit and retain Oregon hunters, increase the availability and accessibility of hunter education courses (mandatory for youth desiring to legally hunt), increase the number of hunting workshops, and reduce barriers to participation in hunting. Oregon, like many states, is experiencing a downward trend in hunting and angling participation. This decline in participation results in lost revenue to support fish and wildlife management, weakens support for legal angling and hunting, and decreases revenue for local economies, including motels, restaurants, retail outlets, manufacturers, guides, and businesses and industries related to fish and wildlife recreation. Funding for this package comes from the U.S. Fish and Wildlife Service (USFWS) through the Pittman-Robertson Act, which is funded through an excise tax on the sale of firearms and ammunition. Due to very strong firearms and ammunition sales, the amount of federal funding available for ODFW is projected to increase in the 2015-17 biennium.

The package provides funding for hiring temporary staff to conduct mandatory hunter education classes, hunting clinics, and develop cooperative efforts with local, regional, and state hunting organizations, retailers and manufacturers to recruit new hunters. Additionally, this package provides funding to increase the availability of digital and printed material to increase awareness of hunting opportunities and encourage participation in hunting and shooting sports. This package also includes funding to provide additional resources and facilities for use for hunter education field days, youth events, workshops, clinics, and other events open to the public.

This package continues an effective pilot project initiated in 2013 which resulted in increased availability and accessibility of hunter education courses, increased participation in hunting, and generated additional license sales. This package is funded through increased federal funding that is currently available to ODFW.

HOW ACHIEVED

PROPOSED SOLUTION TO THE PROBLEM OR ISSUE:
Available federal funding will continue an effective pilot project that resulted in increased availability of hunter education courses and increased participation in hunting. Temporary employees will be hired to conduct mandatory hunter education courses during times of peak demand in late summer and early fall. The temporary employees will also conduct a wide variety of hunting clinics to introduce new and returning hunters to upland bird, big game and waterfowl hunting. Additionally, grants will be available for hunting sports groups and other organizations to conduct similar events. These workshops will expand upon a successful model of

providing hands-on instruction to new hunters. This package also provides funding to expand ODFW social media outreach and to provide hunting information in mobile friendly formats. This is essential to attracting young hunters and diverse audiences. Additionally, funding will be used to develop and enhance online maps, digital and printed materials, workshops, outreach efforts and other resources designed to increase awareness of hunting opportunities and encourage participation in hunting and shooting sports.

HOW THIS FURTHERS THE AGENCY MISSION OR GOALS:
ODFW's mission is: "To protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations." Approximately half of ODFW's funding is directly related to the purchase of hunting or fishing licenses or associated federal funding. This proposal increases ODFW's fiscal stability by increasing sales of hunting licenses. Additionally, this proposal specifically supports ODFW priorities to promote participation in hunting, fishing and wildlife viewing.

PERFORMANCE MEASURES TO QUANTIFY THE SUCCESS OF THE PROPOSAL:
Effectiveness of this effort will be measured in number of hunter education courses offered during periods of peak demand, number of students certified, number of participants in introductory workshops, and use of online, digital and printed materials.

This effort is modeled on a pilot project initiated in 2013. That project was designed to increase the availability of hunter education training and introductory workshops prior to and during hunting season. The effort resulted in 26 hunter education sessions offered during late summer and early fall, and the certification of 450 hunter education students. In addition, 115 adults were introduced to hunting and many of them reported they continued to hunt afterwards.

This package relates to KPM 1 (percent of the license buying population with hunting licenses and/or tags).

This package also relates to KPM 7 (customer service).

STATUTORY REFERENCE:
ODFW is authorized to conduct fish and wildlife management activities under ORS Chapters 496-498 and ORS Chapters 503-513. ODFW is required by ORS 497.360 to administer a hunter safety (hunter education) program. The statute also makes hunter education mandatory for any hunter under18 years of age.

ALTERNATIVES CONSIDERED AND REASONS FOR REJECTION:
ODFW has considered continuing to rely solely on volunteer instructors for hunter education. However, volunteer instructors have been unable to meet the need for hunter education training during periods of high demand during and before hunting season. As a result, youth who were interested in hunting were unable to hunt because of the lack of hunter education courses offered. This likely contributed to the long-term decline in hunting participation. This proposal is expected to increase hunting license sales A 2013 survey of 12 states found that students completing hunter education during late summer through early fall showed a high likelihood of purchasing a license. The study found that 67 percent of hunter education graduates purchase a license at least one of six years after completing hunter education.

The pilot project resulted in a 20 percent increase in hunter education sessions and a 17 percent increase in students certified. ODFW anticipates approval of this policy option package will enable it to better meet customer demands by increasing the availability of mandatory hunter education courses. This policy option package may also lead to an increase in hunting license sales.

IMPACT OF NOT FUNDING:
Inability to meet demand for hunter education courses during periods of peak demand, and decreased participation in hunting.

EQUIPMENT TO BE PURCHASED (IF APPLICABLE):
N/A

STAFFING IMPACT

Seven temporary Program Analyst 1 positions (#CO860). The work period generally will be from July through December.

QUANTIFYING RESULTS

KPM 1 and KPM 7 – The effectiveness of this effort will be measured in number of hunter education courses offered during periods of peak demand, number of students certified, number of participants in introductory workshops, and use of online, digital and printed materials.

This effort could result in an increase in hunting license sales. A 2013 survey of 12 states found that students who completed hunter education during late summer through early fall showed a high likelihood of purchasing a license. The study found that 67 percent of hunter education graduates purchase a license at least one of six years after completing hunter education.

This effort is expected to increase customer satisfaction by meeting the need for hunter education training during periods of high demand.

REVENUE SOURCE

$3,100,000 Federal Funds (USFWS Pittman Robertson).