



Oregon

Kate Brown, Governor

Oregon Watershed Enhancement Board

775 Summer Street NE, Suite 360

Salem, OR 97301-1290

(503) 986-0178

FAX (503) 986-0199

www.oregon.gov/OWEB

MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: Renee Davis, Deputy Director

**SUBJECT: Agenda Item M: Focused Investment Partnership Priority-Setting and Solicitation Process
April 28-29, 2015 OWEB Board Meeting**



I. Introduction

This staff report updates the Board about the status of the Focused Investment Partnership process to date, presents Focused Investment Partnership Priorities for the Board's consideration, and recommends minor changes to the 2015-2017 Focused Investment Partnership solicitation process. The report reflects feedback provided by the Board at its March 2015 meeting about both items.

II. Background

In June 2013, the Board approved its Long-Term Investment Strategy Framework with four major areas of investment: Operating Capacity, Open Solicitation, Focused Investments, and Effectiveness Monitoring.

Though OWEB has participated in efforts similar to 'focused investments' in the past, there has been no formal definition, process or solicitation approach for the program. In October of 2013, OWEB kicked off a nine-month process to develop the definition, criteria, and program design (including solicitation approach and process) for the Focused Investment category of OWEB funding. The process involved external stakeholder and internal staff work groups that provided input to the Board regarding the design and implementation of the program. The initial nine-month process included the following milestones and opportunities for public comment:

- January 2014 Board Meeting (Portland) – Board reviewed draft documents and solicited public comment; work groups then continued design process.
- March 2014 (all six OWEB regions) – OWEB staff held listening sessions in all regions of the state to receive input on the first draft of the solicitation process for Focused Investment Partnerships.
- April 2014 Board Meeting (Bandon) – Board received public comment on the draft solicitation process and other aspects of the Focused Investment Partnerships program as outlined above.
- July 2014 Board Meeting (The Dalles) – Board approved definition, criteria, solicitation approach, timeline and priority selection processes.

Attachment A describes the definition, criteria and solicitation approach the Board adopted in July 2014. The document describes a two-phase process for the Focused Investment Partnership program: 1) Priority-setting by the Board for Focused Investment Partnerships and 2) Solicitation for Focused Investment Partnerships. These two phases are distinct and sequenced, with the Board first setting priorities that have clear ecological significance to the state, then soliciting for proposals within the priorities.

III. Focused Investment Partnership Priority Setting Process to Date

The Board then initiated a nine-month priority-setting process at their July 2014 Board meeting. This phase will conclude in April 2015 with the selection of Focused Investment Partnership Priorities for use during the first solicitation for Focused Investment Partnerships, to begin in May 2015.

Attachment B describes the evolution of the priority themes that occurred during this process. Between August and October 2014, the Board solicited input from stakeholders around the state about priorities, and received 42 submissions. Following submission of these priority suggestions, staff and the Board Subcommittee on Focused Investments reviewed input and grouped related submissions into 12 priority theme areas. This grouping assisted technical experts convened to answer questions and provide feedback to the Board to inform its deliberations about priorities of significance to the state.

At the January 2015 meeting, staff presented the 12 priority themes (see Attachment B), and the Board received public comment. The Board discussed both broad issues related to priority setting (e.g., how to leverage previous work to identify limiting factors for habitats/species of interest, at what scale can priorities be set to help achieve ecological outcomes of significance to the state) and specific questions about each of the 12 priority theme areas. The Board also considered other options for organizing the priority themes that would result in a more defined focus on 1) habitat, 2) species supported by these habitats, 3) primary limiting factors for these habitats and species, and 4) actions that can be taken to address the limiting factors.

Ultimately the Board discussed reframing the themes into seven areas: 1) Sage-grouse/Sage-steppe Habitat; 2) Dryside Forest habitat; 3) Oak Woodland Habitat; 4) Closed Basin Wetland Habitat; 5) Coastal Coho Habitat and Populations; 6) Inland Anadromous Fish Habitat and Populations; and 7) Inland Non-Anadromous Fish Habitat and Populations.

Following the January Board meeting, staff worked with the Focused Investment Subcommittee and technical experts to flesh out the priority themes. Based on this additional input from experts, staff refined the thematic titles for six priority categories: 1) Sagebrush/Sage-steppe Habitat; 2) Oregon Closed Lakes Basin Wetland Habitat; 3) Dryside Forest Habitat; 4) Oak Woodland and Prairie Habitat; 5) Coastal Coho Habitat and Populations; and 6) Inland Aquatic Habitat for Native Fish Species (see Attachment B). In preparation for the March Board meeting, staff prepared summaries for the six

themes and developed a crosswalk of how the 42 priority suggestions crosswalk into the six thematic categories listed above (see the crosswalk in Attachment B).

The summaries listed the habitat type, highlighted the key species of interest/significance to the state which depend on this habitat, listed the key limiting factors for the habitat and/or species, and denoted the major conservation and recovery plans that outline limiting factors and the priority actions needed to address the limiting factors. At the March meeting, the Board directed staff to reach out to experts to develop maps and identify additional information needed for Board consideration. In addition, the Board instructed staff to develop a draft Priority for estuary habitat for their consideration.

IV. Draft Priorities for Board Decision-Making

At the April meeting, the Board will consider Focused Investment Partnership Priorities for the 2015-2017 biennium, including a review and public comment. Attachments C1-C7 are the seven draft Priorities for consideration by the Board with additional information as identified in section III. The seven draft Priorities are:

- 1) Sagebrush/Sage-steppe Habitat,
- 2) Oregon Closed Lakes Basin Wetland Habitat,
- 3) Dry-Type Forest Habitat,
- 4) Oak Woodland and Prairie Habitat,
- 5) Coastal Coho Habitat and Populations,
- 6) Inland Aquatic Habitat for Native Fish Species, and
- 7) Coastal Estuaries.

V. Board Focused Investment Partnership Decision-Making Process

In October 2014, the Board approved an outline and schedule of the solicitation process for Focused Investment Partnerships that was developed by the staff, the Focused Investment Partnership work group, and the Board Subcommittee on Focused Investments. The process is outlined in Attachment D.

At the March 2015 meeting, stakeholders requested the Board and staff be clear about their expectations for potential Focused Investment Partnerships so that local partnerships can select the appropriate path (i.e., capacity building vs. implementation funding) when applying to the program. Given that this is a new program, the approach would enable partnerships to avoid spending time applying if their partnerships are not yet ready for the program. The Board further discussed this topic, and directed staff to revise the outline and schedule of the solicitation process for Focused Investment Partnerships that was approved in October 2014. Three items in the schedule were revised: 1) adding a pre-application consultation requirement for Implementation funding; 2) adding an update to the Board about the solicitation process at the July 2015 meeting; and 3) correcting dates listed in the previous version so that deadlines do not occur on weekends. Attachment D shows a revised version of the outline and schedule for Board approval.

VI. Recommendation

Staff requests the Board approve:

- A. Focused Investment Partnership Priorities for 2015-2017 as described in Attachments C1-C7 of the staff report; and
- B. A revised solicitation timeline for the Focused Investment Partnership program as described in Attachment D of the staff report.

Attachments

- A. Focused Investment Partnership Program definition and program design document
- B. Evolution of the Focused Investment Partnership Priority Themes and Draft Priorities, October 2014-April 2015
- C. Drafts of the Seven Focused Investment Partnership Priorities
- D. Revised Focused Investment Partnership Program solicitation timeline

Focused Investment Partnerships

Definition, Criteria and Solicitation Approach

The OWEB Board will establish a process for identifying and updating a set of Focused Investment Priorities that have clear significance to the state. Within those priorities, the Board will solicit for Focused Investment Partnerships, one of several forms of focused investments.

Focused Investment Partnership Definition

A Focused Investment Partnership is an OWEB investment that:

- Addresses a Board-identified Focused Investment Priority of significance to the state;
- Achieves clear and measurable *ecological outcomes*;
- Uses integrated, results-oriented *approaches* as identified through a *strategic action plan*;
- Is implemented by a high-performing *partnership*.

OWEB's Focused Investment Partnership investments will be made in two categories:

- 1) Focused Investment Partnership Implementation - For an investment with an existing strategic action plan that is ready for implementation, a Focused Investment will be made by OWEB for a defined dollar amount over a limited time. Partnerships may apply subsequently for a different Focused Investment Partnership program in the same or a different Board-identified Focused Investment Priority.
- 2) Focused Investment Partnership Capacity-Building - The Board will also provide two-year funding for partnerships who are prospective FIP applicants to strengthen their capacity and to strengthen strategic action plans for a Focused Investment priority.

Criteria Categories *The definition is further refined by criteria in the following categories that will be used by the OWEB Board to select investments.*

Focused Investment Partnerships will have both limited funding and duration. As such, groups selected for a Focused Investment Partnership will need to demonstrate that their Focused Investment Partnership programs meet a high standard of achievement. Board investments will be determined within the following criteria categories:

- 1) Significant, clear and measurable *ecological outcomes* that address a Board-Identified Focused Investment Priority.
- 2) The partners must have an existing *strategic action plan* that employs integrated, results-oriented *approaches*. The strategic action plan will:
 - a) Clearly define the measurable ecological outcomes as identified above, ensuring they are reasonable given resources and constraints.
 - b) Clearly articulate achievable goals, an identified geography and a realistic scale and time period for the program.
 - c) Identify the metrics, milestones and established benchmarks for success for the outcomes.
 - d) Utilize an adaptive management approach. This includes measuring and monitoring progress including monitoring procedures to evaluate the success of goals and objectives described in the strategic action plan.
 - e) The plan must also include communication strategies with funders and others regarding the plan's progress toward implementation.

The strategic action plan and any associated OWEB requests for funding must be realistic in terms of conservation impact, outcomes, partnerships and effectiveness monitoring.

- 3) The applicants must clearly demonstrate the *Partners* involved are necessary and sufficient to implement the program outlined in the strategic action plan. Partners must have formed a productive partnership that includes:
- a) Defined relationships that clearly describes the roles and responsibilities of each partner.
 - b) Demonstrated capacity to:
 1. Take on their identified roles and operate under a common vision;
 2. Implement conservation work at a scale larger than a single project;
 3. Realistically accomplish the identified ecological outcomes.
 - c) A clear link that shows the outcomes are within each organization's mission and scope
 - d) A demonstrated strong record of conservation achievement by the partners individually and collectively.

The partnership must also leverage OWEB funding with other resources. This may be achieved by recruiting funding partners, or by accessing other resources critical to implementation.

Solicitation Approach

OWEB is developing three processes for Focused Investment Prioritization, Partnership Capacity and Implementation solicitation. The priority selection process will be completed before solicitation for programs can begin. The program selections (2&3 below) will run simultaneously.

- 1) A Board process for identifying and updating a set of Focused Investment Priorities that have clear significance to the state, drawing from proposals by groups, organizations, state and federal agencies, individuals, OWEB, the Governor's office, Oregon Tribes, and others. Proposed priorities should be based on sources such as the state's Conservation Strategy, the Oregon Plan for Salmon and Watersheds, Governor's priorities, the Agricultural Water Quality Program, the Integrated Water Resources Strategy, recovery plans, etc. The Board will review priorities each biennium to consider adding new priorities and ensure the existing priorities continue to be important.

Process for selecting each of the OWEB Focused Investment Partnership types:

- 2) Capacity-Building - A process for selecting among proposals for investments up to two years that support existing partnerships within Board-identified priorities to:
 - a) Enhance or strengthen a strategic action plan for a Focused Investment Priority; and/or
 - b) Strengthen the capacity of existing partnerships. Applications must:
 - Demonstrate a strong commitment of the partners to meet the Focused Investment criteria in the future, and
 - Clearly identify how this funding will help them achieve the steps to meet Focused Investment Partnership criteria.

NOTE: Receipt of Capacity funding does not guarantee Focused Investment Implementation funding from OWEB.
- 3) Implementation - A process for selecting applications for Focused Investment Partnerships funding as outlined in the criteria, in which applicants must:
 - Identify the Focused Investment Priority the proposal addresses
 - Provide a strategic action plan
 - Demonstrate partnership capacity

OWEB Board Priority-Setting Process October 2014 – April 2015

42 Suggestions for Focused Investment Priorities -- October 2014

Staff received 42 priority suggestions from interested groups around the state.



12 Geographic/Habitat-Based Themes -- October 2014

Staff grouped the 42 priority proposals into 12 mainly geographic themes to assist the Board with having a focused discussion around priority-setting at its January 2015 meeting in Astoria. Staff met with small groups of “experts” for each of the 12 themes, then prepared brief summaries for each theme. The twelve themes were:

- | | |
|--|--|
| 1 – Oak Woodlands | 7 – Deschutes Aquatic Habitat |
| 2 – Closed Basin Wetland/SONEC | 8 – Grande Ronde Native Fish |
| 3 – Sage-Steppe/Sage Grouse | 9 – Willamette Basin Aquatic Habitat and Water Quality |
| 4 – Lower Columbia Native Fish Habitat | 10 – Oregon Coast |
| 5 – U. Klamath Native Fish Habitat and Water Quality | 11 – Dryside Forests |
| 6 – John Day Native Fish Habitat | 12 – Cross-Theme |



7 Habitat/Species-Based Themes -- January 2015

At the January 2015 meeting, the Board reframed the priority themes from a more geographically oriented focus to a habitat based focus. The end result was seven broad habitat based themes:

- | | |
|--|-------------------------------------|
| 1 –Coastal coho habitat and populations | 5 – Sage-steppe/Sage-grouse habitat |
| 2 –Inland native non-anadromous fish habitat and populations | 6 – Dryside forest habitat |
| 3 –Inland anadromous fish habitat and populations | 7 – Oak woodland habitat |
| 4 – Closed Basin wetland habitat | |



6 Habitat/Species-Based Themes -- March 2015

In preparation for the March 2015 special Board meeting, staff met with fish experts to discuss the aquatic habitat themes (i.e., themes 1-3 above). Experts recommended combining 2 and 3 above into one thematic category, given that anadromous and non-anadromous species often use the same inland aquatic habitats and share limiting factors. The six themes are:

- | | |
|---|--|
| 1 – Sagebrush/Sage-steppe Habitat | 4 – Oak Woodland and Prairie Habitat |
| 2 – Oregon Closed Lakes Basin Wetland Habitat | 5 – Coastal Coho Habitat and Populations |
| 3 – Dryside Forest Habitat | 6 – Inland Aquatic Habitat for Native Fish Species |

7 Habitat/Species-Based Themes -- April 2015

At the March 2015 special meeting, the Board instructed staff to retain the existing six themes, revise the existing theme summaries based on Board input, and develop draft Focused Investment Partnership Priorities for consideration by the Board in April 2015. The seven draft Priorities are:

- | | |
|---|--|
| 1 – Sagebrush/Sage-steppe Habitat | 5 – Oregon Coastal Coho Habitat and Populations |
| 2 – Oregon Closed Lakes Basin Wetland Habitat | 6 – Inland Aquatic Habitat for Native Fish Species |
| 3 – Dry-Type Forest Habitat | 7 – Coastal Estuaries |
| 4 – Oak Woodland and Prairie Habitat | |

**PREPARED FOR MARCH 2015 BOARD MEETING –
Cross-Walk of All Priority Proposal Submissions with the Six Thematic Categories**

NOTE: At the request of the OWEB Board, staff cross-walked the 42 priority proposal submissions into the six thematic categories discussed at the March 2015 Board meeting.

Organizing Theme for Priorities
Suggested Priority Ideas submitted as part of OWEB's 2014 Priority Input Process (see http://www.oregon.gov/OWEB/Pages/FIP-Proposed-Priorities.aspx for more information)
Dryside Forest Habitat
Restoration of dry-mixed conifer forests
Inland Aquatic Habitat for Native Fish Species
Assessments of water utilities and irrigation districts
Fish and wildlife habitat connectivity
Fish passage restoration
Conserving a unique spring-fed river system
Lower Deschutes salmon and steelhead stronghold
Salmon and steelhead reintroduction in the Deschutes River Basin
Upper Grande Ronde native fish habitat
Accelerated restoration in the Upper North Fork John Day
Instream habitat and upland plant communities of the John Day Basin
John Day Basin cold water salmonid habitat
John Day Basin restoration of aquatic and upland habitats
Lower John Day River whole watersheds restoration initiative
Restoration of habitats in the John Day River Basin
Chum conservation
Hood River salmon, steelhead, and bull trout habitat
Sandy River Basin initiative
Rogue Basin native fish population, capacity building
Rogue River stream corridors
Umpqua and Rogue River basins native fish habitat: Lamprey
Aquatic ecosystems in Upper Klamath Basin
Governor's water quality priority: Upper Klamath Basin
McKenzie River conservation of native fish, wildlife and other natural resources
Oregon's river/Our river: Willamette Basin rivers, streams and riparian forests
Governor's water quality priority: Willamette Basin
Oak Woodland and Prairie Habitat
East Cascades oak woodlands
Oak woodlands in southern Oregon
Willamette Valley oak and prairie habitats
Oregon Closed Lakes Basin Wetland Habitat
Harney Basin wetlands
SONEC basin floodplains
Fish and wildlife habitat connectivity
Fish passage restoration
Coastal Coho Habitat and Populations
Fish and wildlife habitat connectivity
Fish passage restoration
Protecting Oregon estuaries from climate change
Governor's priority: Coastal Coho
Integrated land stewardship for salmon, Cape Blanco area
Oregon Coast Coho
Oregon Coast estuarine habitats
Oregon Coastal Coho habitat, with focus on family, forests, and farms
Reigniting the Oregon Plan: Achieving restoration-scale in coastal sedimentary basins
Rogue Basin native fish population, capacity building
Rogue River stream corridors
Tillamook-Nestucca fish passage partnership
Upland/Riparian restoration in the coastal ecoregion
Wild rivers coast estuaries
Sagebrush/Sage-steppe Habitat
Governor's priority: Sage Steppe
Oregon model to protect sage grouse

SAGEBRUSH/SAGE-STEPPE HABITAT

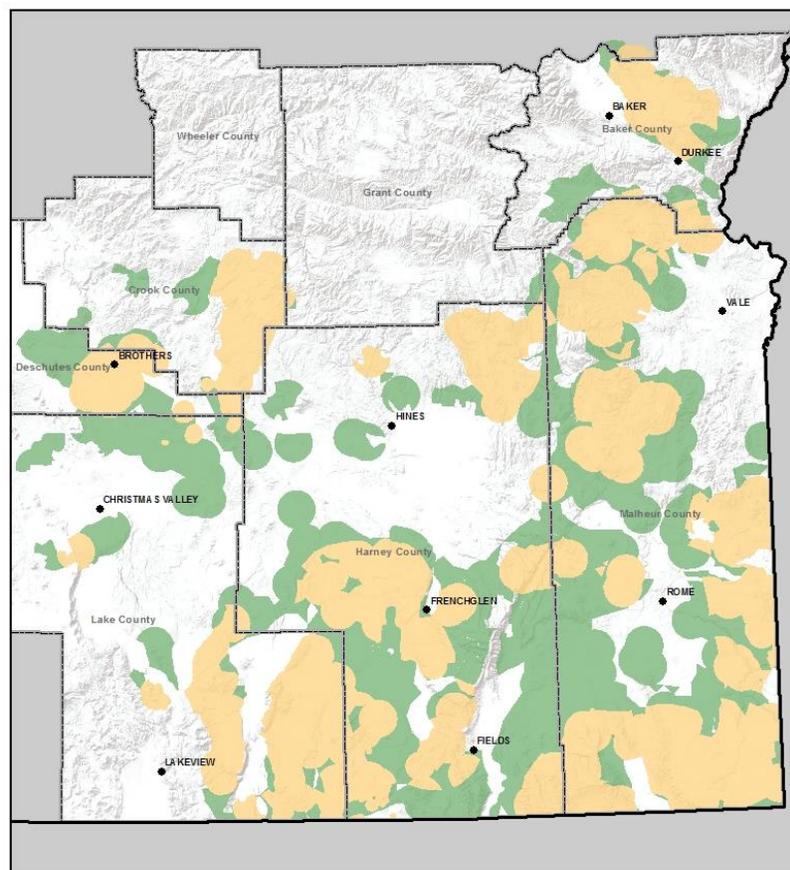
Summary Statement of Priority

The OWEB Board will consider proposals for investment in **sagebrush/sage-steppe habitat** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

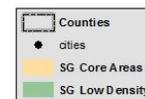
OWEB's Focused Investment Priority for sagebrush/sage-steppe habitat guides voluntary actions that address primary ecological threats and limiting factors related to the quality of this habitat type. These actions also will support and/or improve ecosystem functions and processes, including those required by Greater sage-grouse, which is an indicator species for this habitat type. **These actions will be guided by the habitat and population objectives set forth in the State's sage-grouse strategy and the combined ecological and social outcomes described in the State's "Oregon Sage Grouse Action Plan" which are listed on page two of this document.**

Focal areas for this Priority are Priority Areas for Conservation (PACs) and the important connectivity corridors between these areas (see explanation and map). PACs do not represent individual populations, but rather key areas that have been identified as crucial to ensure adequate representation, redundancy, and resilience for conservation of its associated population or populations. Oregon Department of Fish and Wildlife's (ODFW's) sage-grouse strategy identifies core areas of habitat that align with U.S. Fish and Wildlife Service's (FWS's) PAC habitats. The core area approach uses biological information to identify important habitats with the objective of protecting the highest density breeding areas.

Landscape-scale sage-grouse conservation is critically important in Oregon as the



Sage Grouse Core and Low Density Areas



¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

habitat present here, along with that in southwest Idaho and northeast Nevada, has been identified by FWS as one of two sage-grouse ‘strongholds’ in the U.S. These sage-grouse strongholds are distinguished primarily as those areas that contain the highest densities of birds, are the most resistant and resilient to invasive species and altered fire regimes, and are the least vulnerable to impacts associated with the onset of climate change.

Background

Where it occurs – Sage-steppe habitat occurs throughout eastern Oregon and in parts of Central Oregon. Several ecoregions identified in the Oregon Conservation Strategy (i.e., Northern Basin and Range, Blue Mountains, Columbia Plateau and East Cascades) contain this habitat type.

These habitats are both extensive and diverse. In general, sagebrush habitats occur on dry flats and plains, rolling hills, rocky hill slopes, saddles and ridges where precipitation is low. Sagebrush-steppe is dominated by grasses and forbs (more than 25 percent of the area) with an open shrub layer. In sagebrush steppe, natural fire regimes historically maintained a patchy distribution of shrubs and predominance of grasses. Connectivity corridors of similar habitats between these areas are important to connect otherwise fragmented sage-steppe habitat.

Indicator species and/or species of interest supported by this habitat – Oregon Conservation Strategy Species associated with sagebrush include Greater sage-grouse, ferruginous hawk, loggerhead shrike, sage sparrow, Brewer’s sparrow, sagebrush lizard, Washington ground squirrel, and pygmy rabbits. Other wildlife closely associated with sagebrush include: black-throated sparrow, sage thrasher, sagebrush vole, and pronghorn.

One particular species supported by sagebrush/sage-steppe habitat—the Greater sage-grouse—currently is being considered for listing under the federal Endangered Species Act (ESA) and would be considered the primary indicator species for identification of priority investments for the Board through the Focused Investment Partnership program.

Why it is significant to the state – Sagebrush/sage-steppe habitat is an imperiled habitat that supports a range of species. These areas are associated with an economically and socially important ranching and agricultural industry in communities throughout a large portion of the state. The state of Oregon is developing an “Oregon Sage Grouse Action Plan” to outline the actions necessary to conserve sage-grouse in Oregon in an effort to proactively avoid ESA- listing of the species. The plan has broad support by state and federal agencies, the ranching industry and conservationists.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Altered fire regimes, which result in changes to native plant communities and increased risk of habitat loss due to intense wildfires;
- Invasive species such as juniper and non-native grasses, which increase the frequency, intensity and extent of wildfires;
- Conversion to other land uses, which results in habitat loss and connectivity; and
- Limitations of current restoration technologies and the need for successful restoration approaches, particularly in low-elevation areas that face severe challenges to native plant species regeneration following wildfire.

Reference plans –

- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)

- 2) ODFW's Greater Sage-Grouse Conservation Assessment and Strategy for Oregon
(<http://www.dfw.state.or.us/wildlife/sagegrouse/>)
- 3) Final report from the Sage-Grouse Conservation Objectives Team (COT) 2013
(<http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/COT/COT-Report-with-Dear-Interested-Reader-Letter.pdf>)
- 4) Oregon Sage Grouse Action Plan (in development)

OREGON CLOSED LAKES BASIN WETLAND HABITATS

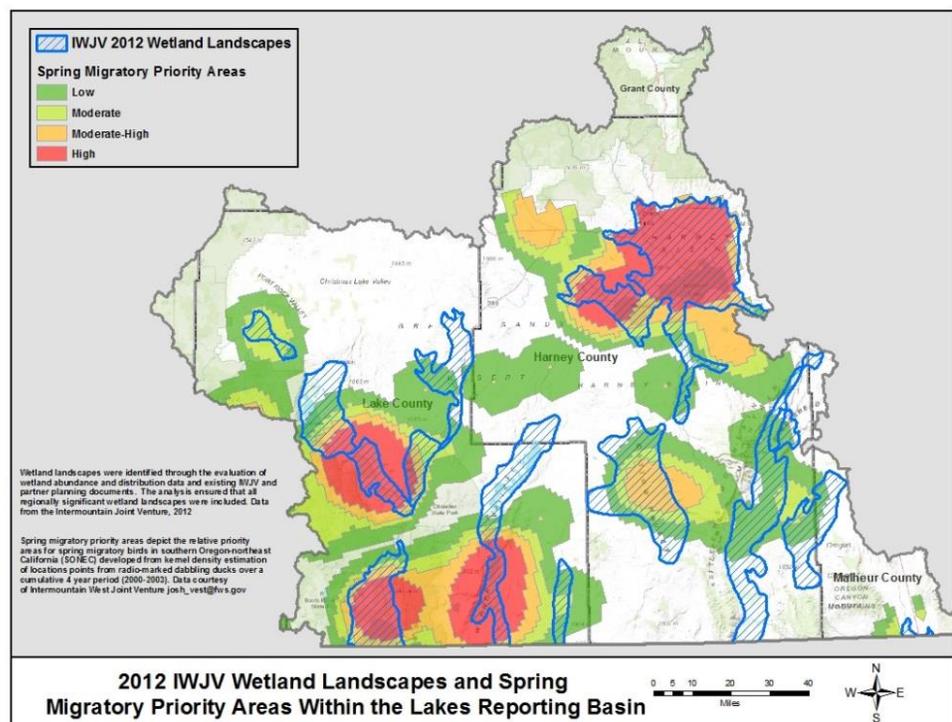
Summary Statement of Priority

The OWEB Board will consider proposals for investment in the **Closed Lakes Basin wetland habitats** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for Closed Lakes Basin wetland habitats guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also will support and/or improve watershed functions and processes. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Conservation Strategy and the Intermountain Joint Venture's (IWJV) Habitat Conservation Strategy Implementation**

Plan, which are listed on page three of this document.

Focal areas for this Priority are identified as high-priority wetland and floodplain habitat for migratory and resident bird and native fish species in the associated plans. These areas exist within the Oregon portion of the Closed Lakes Basin area (within Harney, Lake and a small portion of Malheur counties).



Background

Where it occurs – The Closed Lakes Basin wetlands exist within the Southern Oregon Northeast California (SONEC) region, which is a portion of the Closed Lakes network within the Great Basin (see map). The SONEC region geography and habitat has been defined by the IWJV and in the federal North American Waterfowl Management Plan. The Closed Lakes Basin within the SONEC region is an important part of the intercontinental Pacific Flyway. Within the SONEC region, 75% of wetland habitat is located on private lands, most of which is managed as flood-irrigated hay and pastureland. In Oregon, Closed Lakes Basin wetland habitat exists primarily in Lake and Harney Counties (including Malheur National Wildlife Refuge), with a small portion in Malheur County. Closed Lakes Basin wetland habitats include shallow lakes and marshes, wet meadows, and irrigated pasturelands. Many of the managed

¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

wetland/pastures exist in the floodplain of tributaries and lakes in the area. Closed Lakes Basin wetlands represent a unique chain of desert oases that, as an integrated network, provide critical habitat and food for waterbirds throughout the seasonal cycle.

Indicator species and/or species of interest supported by this habitat – An estimated 70 percent of migratory birds—including over 6 million waterbirds—annually pass through the SONEC region, which includes the Oregon Closed Lakes Basin. Moreover, the Closed Lakes Basin provides critical habitat to important bird species that utilize this region as part of the Great Basin network of habitat: 1) most of North America’s snowy plovers (federally listed under the Endangered Species Act [ESA]) breed in the region; 2) most of North America’s eared grebes, long-billed dowitchers, and all of the world’s Wilson’s phalaropes use the region during migration; 3) most of the world’s American avocets (a keystone species) use the region for an extended post-breeding period, and over 50% of this species breeds in the Great Basin; 4) most of the world’s white-faced ibis breed in the Great Basin; and 5) about 80% of nesting greater sandhill cranes in Oregon are found into the Closed Lakes Basin. Additional migratory and resident bird species also rely on this habitat.

Of particular importance is habitat for shorebird species and migratory birds on the spring migration path. This region provides a diversity of food production at different salt regimes throughout the year; thus, seasonal water conditions drive habitat function and productivity. Additionally, the Closed Lakes Basin wetlands support native fish species such as Warner and Modoc sucker fish (ESA-listed), tui chub, and redband trout.

Why it is significant to the state – Closed Lakes Basin wetlands are ecologically unique high-desert wetlands that provide critical habitat for numerous migratory and resident bird species. This region has international importance as habitat for migratory birds, including the ESA-listed species cited above. Oregon’s Closed Lakes Basin wetlands habitat are a significant portion of the greater SONEC complex of wetlands that are so critical to the millions of birds that travel the Pacific Flyway each year. The Intermountain West Joint Venture recognizes the SONEC region as one of two priority areas in the Intermountain West for wetland-dependent birds. Greater sage-grouse depend on these wetland habitats for foraging habitat for brooding (see related priority). ESA-listed Warner and Modoc sucker fish also are found in this habitat, as referenced above.

The region also fosters an historic and vitally important ranching community and associated economy that depends on the ecological health of these wetland habitats. In addition, Malheur National Wildlife Refuge and other wildlife areas in the Closed Lakes Basin are critical recreational and economic resources for these rural counties. The U.S. Fish and Wildlife Service has documented over 65,000 annual visitors to the Malheur National Wildlife Refuge alone.

Finally, the implications of climate change in this region may lead to a reduction in water availability, further altering the natural hydrologic regime, which could lead to higher salinity levels in lakes and wetlands. This issue lends added urgency to the importance of conservation efforts concerning this unique habitat.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Loss and degradation of wetlands habitat, including salinization and an imbalance of seasonal saline gradients;
- Seasonal water availability as a result of altered natural hydrologic functioning, including the conversion to sprinkler irrigation from flood irrigation that provided surrogate wetland habitat and impacts of climate change;

- Proliferation of invasive common carp, whose feeding behavior has destroyed vast natural marsh habitat by uprooting vegetation and increasing suspended sediments and turbidity that significantly reduces vegetation otherwise available as a food source for birds and other wildlife; and
- Invasive plant and macroinvertebrate species, which can reduce food production for native bird species.

Reference plans –

- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
- 2) North American Waterfowl Management Plan
(<http://www.fws.gov/birdhabitat/NAWMP/Planstrategy.shtm>)
- 3) Intermountain West Joint Venture Habitat Conservation Strategy Implementation Plan
(<http://iwjv.org/2013-implementation-plan>)

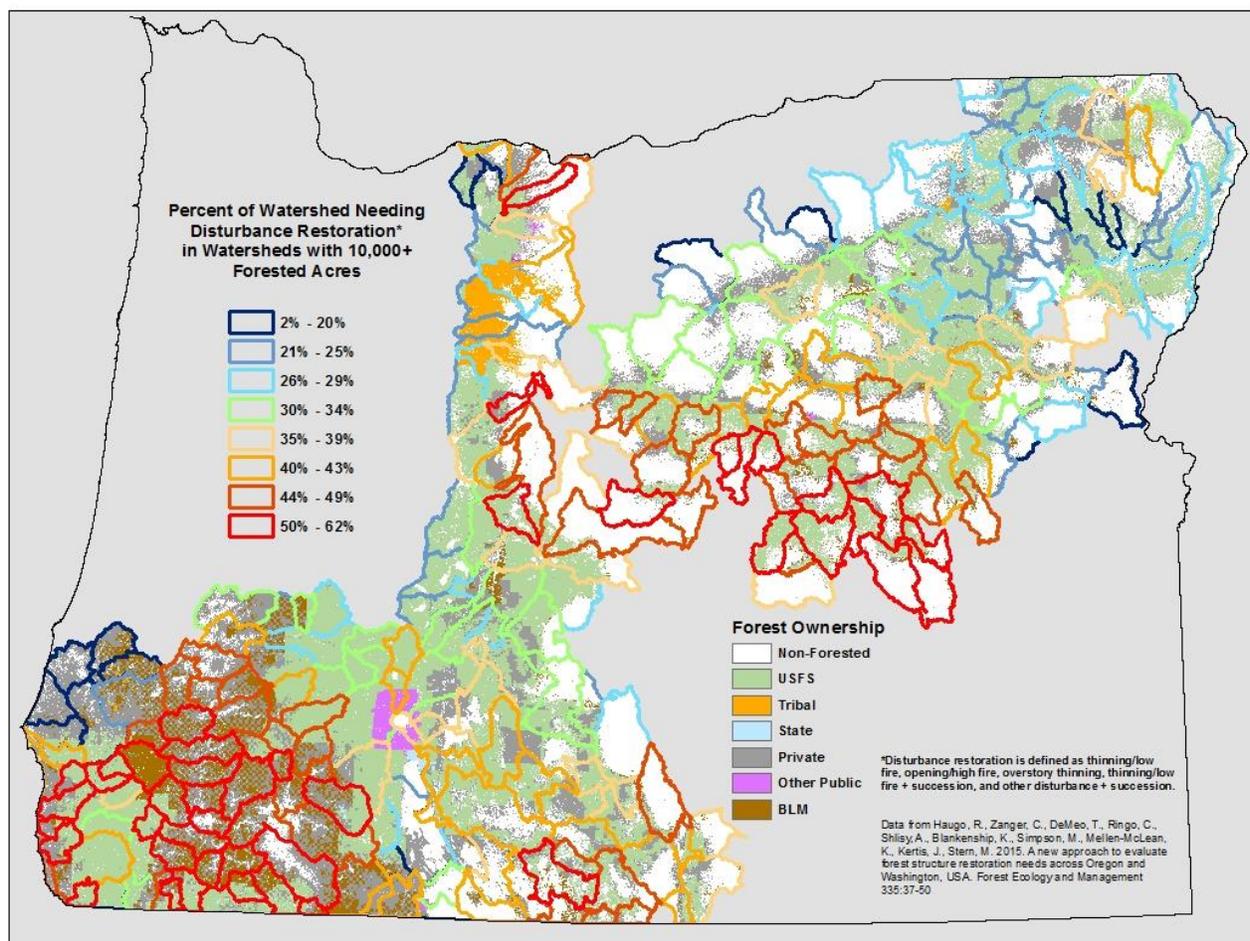
DRY-TYPE FOREST HABITAT

Summary Statement of Priority

The OWEB Board will consider proposals for investment in **dry-type forest habitat** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for dry-type forest habitat guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also support and/or improve watershed functions and processes. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Conservation Strategy and other plans listed on page two and three of this document.**

Focal areas for this Priority are identified in the associated plans as high-priority dry-type forests and the aquatic and terrestrial ecosystems that these habitats support.



¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

Background

Where it occurs – Dry-type forests exist east of the Cascade Mountains and southwest in the Umpqua and Rogue watersheds of the Siskiyou and Klamath Mountains. This forest type spans 14 million acres in Oregon, constitutes roughly half of all forests in the state, and accounts for approximately 25 percent of the state’s land cover. These forests are associated with nine national forests in Oregon and also coincide with land managed by the Bureau of Land Management in southwest Oregon. “Dry-type” is a general term for forests that consist of dry pine forests, dry mixed conifer and moist-cold forests.

Indicator species and/or species of interest supported by this habitat – Dry-type forest habitat is composed of numerous tree species, including ponderosa pine, sugar pine, grand fir, and Douglas-fir. Historically, these forests experienced more frequent low-intensity fires that would burn off the understory and small trees on a 7-15 year cycle, resulting in a diverse and robust mosaic of older, larger aforementioned tree species mixed with areas of younger trees, stands, and forests. Fire suppression practices in the past century have elevated ‘fuel levels’ to a degree that has altered forest species composition and succession, and susceptibility to uncharacteristic large wildfires due to the fuel loads. In addition to the building of fuel levels, the change in forest management practices during the last century has reduced diversity of species and age structures, and increased densities of trees within this forest type.

Dry-type forests are critical to healthy watershed function and process. The aquatic habitat within these forested areas closely linked with health of the dry-type forest. Dry-type forest habitats support over 800 fish and wildlife species, including bird species such as the white-headed woodpecker and northern goshawk, and terrestrial species, such as Rocky Mountain elk and mule and white-tailed deer. Dry-type forests also support native fish such as salmon, coastal coho steelhead, bull trout, and redband trout (see related priorities).

Why it is significant to the state – Dry-type forests cover vast acreages in Oregon, and are at critical risk for uncharacteristically intense wildfires. These forest systems support a diverse range of aquatic and terrestrial species, including federally listed fish and bird species. Properly functioning dry-type forests are also critical to maintaining healthy watershed function and process for the rivers and other water bodies existing within their habitat range. Dry-type forests are iconic in Oregon, of cultural significance to Native American tribes, and have economic importance related to natural resource based economies in rural communities. In addition, these areas support an increasingly important recreation-based economy in many areas throughout Oregon.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Uncharacteristically intense wildfires as a result of fuel buildup to fire suppression and forest management practices;
- Altered fire regimes resulting in forest densification and changed ecological role of fire;
- Loss of forest structure, age, composition, and habitat connectivity; and
- Vulnerability to threats such as uncharacteristic outbreaks of diseases and insects.

Reference plans –

- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
- 2) Restoration of Dry Forests in Eastern Oregon
(<https://www.conservationgateway.org/ConservationPractices/FireLandscapes/FireLearningNetwork/NetworkProducts/Pages/Dry-Forest-Guide-2013.aspx>)

- 3) General Technical Report – The Ecology and Management of Moist Mixed-Conifer Forests in Eastern Oregon and Washington: A Synthesis of the Relevant Biophysical Science and Implications for Future Land Management
(http://www.fs.fed.us/pnw/pubs/pnw_gtr897.pdf)

OAK WOODLAND AND PRAIRIE HABITAT

Summary Statement of Priority

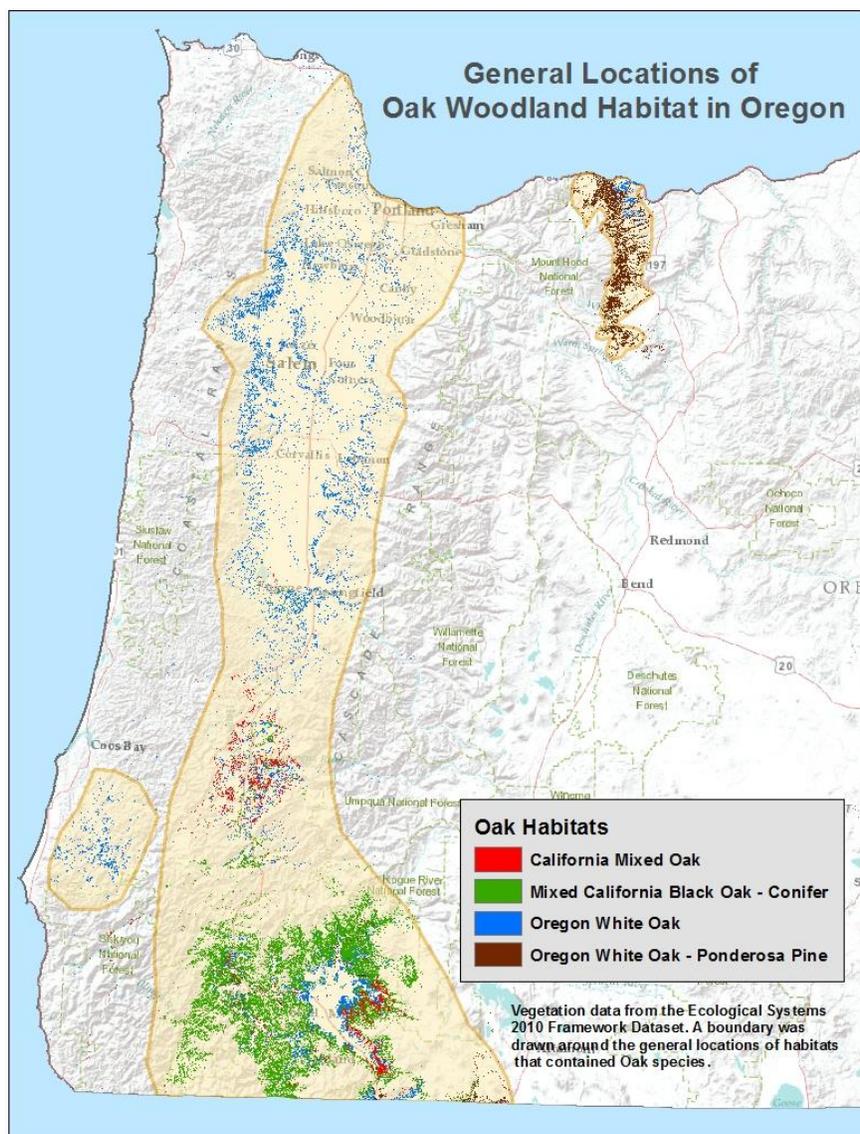
The OWEB Board will consider proposals for investment in **oak woodland and prairie habitats** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for oak woodland and prairie/chaparral habitat guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also will support and/or improve watershed functions and processes. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Conservation Strategy and other plans and strategies listed on page two of this document.**

Focal areas for this Priority are identified in the associated plans as high priorities for oak and associated prairie and chaparral habitats, and the aquatic and terrestrial ecosystems that these habitats support. These areas include oak and associated prairies within the Willamette Valley, the southern Oregon oak and associated chaparral habitat corridor, and oak habitats in the East Cascades.

Background

Where it occurs – Despite a loss of approximately 90% of its historical habitat range since the 1800s, oak and associated prairie and chaparral habitats still exist throughout the state. Three types of oak habitats in Oregon are “oak savannah” (5-30% oak coverage), “oak



¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

woodlands” (30-60% oak coverage), and “oak forests” (greater than 60% oak coverage). These oak habitats primarily occur in three areas of the state: 1) Oak and prairie habitats of the Willamette Valley ecoregion; 2) Oak woodlands of the East Cascades ecoregion and foothills along the Columbia Gorge, including both Hood and Wasco counties and south to White River; and 3) Southern Oregon oak and chaparral habitats of the Klamath, Umpqua and Rogue River ecoregions.

Indicator species and/or species of interest supported by this habitat – The Oregon white oak is the indicator species for oak and associated prairie and chaparral habitats. Species that are supported by these habitats include: streaked horned lark, the Western meadowlark, Lewis’ woodpecker, white-breasted nuthatch, western bluebird, acorn woodpecker, western gray squirrel, Columbian white-tailed deer, Fender’s blue butterfly, Taylor’s checkerspot butterfly, Kincaid’s lupine, and the Willamette daisy, among many other plant species depending on the region. At least seven federally Endangered Species Act (ESA)-listed species are dependent on these habitats.

Oak and associated prairie and chaparral habitats also support aquatic ecosystems that exist within their habitat range. The watershed function and process of these aquatic ecosystems depend on the health of the oak and associated habitats that foster them. These aquatic habitats host inland native fish species, such as salmon, steelhead, bull trout, and redband trout.

Why it is significant to the state – In a national assessment, oak and associated prairie and chaparral habitats are one of the most endangered ecosystems in the U.S. due to land conversions and altered fire regimes. Yet, these habitats are home to roughly 30 bird, terrestrial, and plant species addressed in the Oregon Conservation Strategy. Maintaining the connectivity of oaks and their associated prairie and chaparral habitats is crucial to support species utilization of greater habitat range, but also to facilitating the gradual movement of species to the north from California in response to climate change. Many species dependent on oak habitats may be considered for ESA-listing in the future; thus, an increase in habitat connectivity, complexity and acreage will benefit these vulnerable species. In addition, these habitat types are iconic and culturally important to the Native American tribes.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Habitat loss and fragmentation due to land-use conversion (e.g., residential, timber, agricultural);
- Habitat degradation, including shrub-tree and conifer encroachment, invasive species encroachment, and disease such as sudden oak death syndrome; and
- Impaired habitat persistence, due to loss of fire disturbance regimes, over-grazing, and the subsequent lack of recruitment of young oaks.

Reference plans –

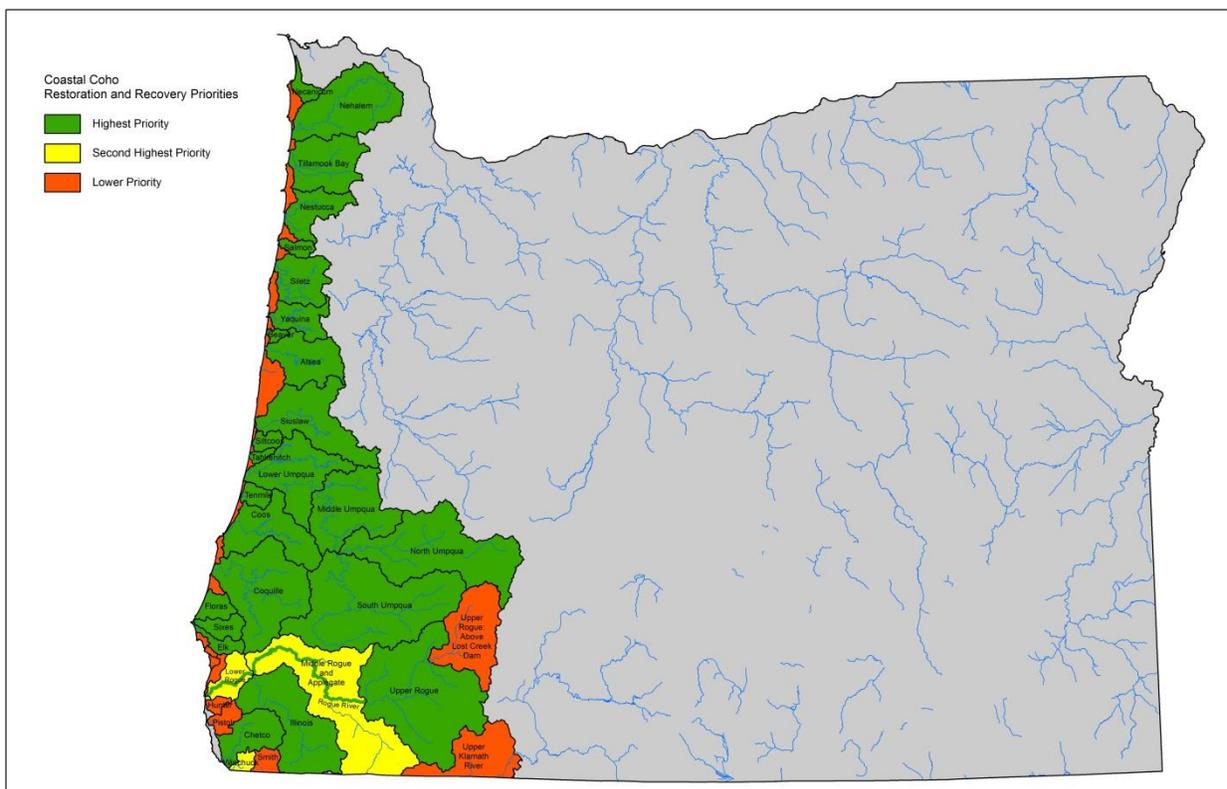
- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
- 2) Recovery Plan for Prairie species of Western Oregon and SW Washington (USFWS 2010)
(<http://www.fws.gov/oregonfwo/Species/PrairieSpecies/>)
- 3) Oregon White Oak Restoration Strategy for National Forest System Lands East of the Cascade Range (USFS 2013)
(http://ecoshare.info/wp-content/uploads/2013/05/Oak_Strategy_draft_3-6-13_FINAL_HQ.pdf)
- 4) Northwest Power and Conservation Council – Willamette Subbasin Plan
(<https://www.nwcouncil.org/fw/subbasinplanning/willamette/plan>)

OREGON COASTAL COHO HABITAT AND POPULATIONS

Summary Statement of Priority

The OWEB Board will consider proposals for investment in **Oregon's coastal coho habitats and populations**, including estuaries, freshwater water bodies, and associated riparian and upland habitats, for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for Oregon's coastal coho habitats and populations guides voluntary actions that address primary limiting factors related to the protection and restoration of the watershed functions and processes that support coho habitat and the health of coho populations. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Coastal Coho Conservation Plan, NOAA Fisheries Southern Oregon Northern California Coast Coho Recovery Plan, and Oregon Department of Fish and Wildlife's limiting factors document, which are listed on page three of this document.**



Note: The GIS data used to create this map comes from both State and Federal conservation and recovery plans.

This priority encompasses habitat needs for coho salmon listed in the Oregon Coast Coho (OCC) evolutionarily significant unit (ESU) and the Southern Oregon Northern California Coast Coho (SONCC) ESU. Focal areas for this Priority are coastal habitats identified as high conservation and restoration priorities for Endangered Species Act (ESA) listed coho salmon. For the purposes of this Priority, OWEB investments would be focused in areas shown in green and yellow on the map on the map. Within these

¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

identified areas, voluntary restoration and conservation actions are especially encouraged in locations where investments will also address identified non-point source water-quality concerns.

Background

Where it occurs – This Priority includes estuaries, freshwater water bodies, and associated riparian and upland habitats that support coho salmon and are connected to the Oregon coast. This priority includes restoration and protection of watershed functions and processes that increase and maintain instream complexity, good water quality, adequate instream flows, and floodplain connectivity, as well as actions that create and/or maintain an appropriate sediment regime throughout the range of the coho salmon.

Indicator species and/or species of interest supported by this habitat – Oregon has two coastal Evolutionarily Significant Units (ESUs) that are listed under the ESA: 1) Oregon Coast Coho (OCC) ESU with 21 independent populations from the Necanicum River in the north and the Sixes River near Cape Blanco in the south, and 2) the Southern Oregon Northern California Coast Coho (SONCCC) ESU from Cape Blanco to the California border with seven independent populations.

The estuarine and freshwater coastal habitats that coho use also support many other native species, for at least some portion of their life cycle. These species include, but are not limited to: Chinook and chum salmon, steelhead, coastal cutthroat trout, Pacific lamprey, Western brook lamprey, sculpins, beavers, river otters, and giant salamanders, as well as hundreds of invertebrate species. Work is underway to further assess and refine the list of estuarine species associated with these habitat areas.

Why it is significant to the state – The presence of robust and sustainable populations of coho salmon are an indicator of properly functioning coastal ecosystems and can provide significant social, cultural, economic and ecological benefits to coastal communities. Because water quality has been significantly degraded and instream habitat impacted in areas along the coast, the populations of these fish have declined, thus requiring a federal ESA listing.

Several significant planning efforts have been underway to focus efforts on coho conservation. Oregon has developed a coho conservation plan (Oregon Coast Coho Conservation Plan), NOAA Fisheries has developed a federal recovery plan for the SONCC ESU that was recently approved, and a recovery plan is currently being developed by NOAA Fisheries for Oregon's OCC salmon populations.

The improvement in conditions and complexity for coastal coho habitat will also lead to improved water quality. Many of Oregon's coastal streams are designated on the federal 303(d) list as "water quality limited," which affects landowners and communities and creates economic impacts. Additionally, recreational and commercial fisheries are also severely impacted by the ESA listing of these fish. Restoring ecosystem function for coastal stream habitats will benefit coho populations, which may help support fisheries over time.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Impaired ecosystem functions that have resulted in decreased quantity and quality of instream complexity and degraded rearing and spawning habitats;
- Lack of habitat connectivity with floodplains;
- Degraded riparian areas;
- Insufficient water quantity/flows during critical flow periods; and
- Degraded water quality (i.e., dissolved oxygen, temperature, bacteria load, sedimentation)

Investments for the priority will focus on addressing primary limiting factors, as described in the reference plans below, with actions such as: 1) in estuaries and mainstem rivers, reconnecting and restoring floodplain, riparian, side-channel, and tidal habitat; and 2) in tributaries, restoring whole

watersheds to address such limiting factors as loss of instream habitat complexity and degradation of riparian areas.

Reference plans –

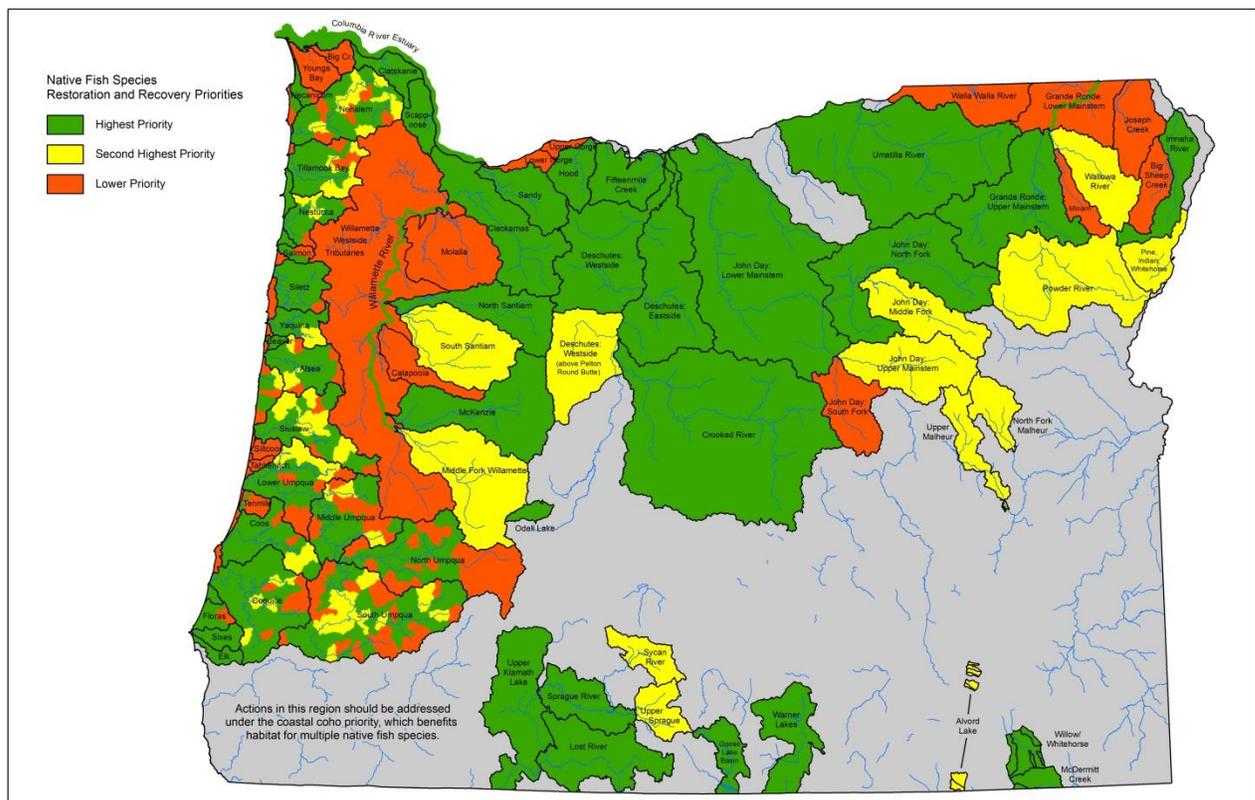
- 1) Oregon Coastal Coho Conservation Plan
(http://www.dfw.state.or.us/fish/CRP/coastal_coho_conservation_plan.asp)
- 2) NOAA Fisheries Southern Oregon Northern California Coast Coho Recovery Plan
(http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/southern_oregon_northern_california_coast/southern_oregon_northern_california_coast_salmon_recovery_domain.html)
- 3) Limiting Factors and Threats to the Recovery of Oregon Coho Populations in the Southern Oregon-Northern California Coast Evolutionarily Significant Unit: Results of Expert Panel Deliberations
(http://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/final/Oregon_SONCC_coho_limiting_factors_Final_Report_Sept_2008.pdf)

INLAND AQUATIC HABITAT FOR NATIVE FISH SPECIES

Summary Statement of Priority

The OWEB Board will consider proposals for investment in initiatives that address habitat conservation and restoration needs for **inland aquatic habitat for native fish species** that are addressed in the following: **1) A federal recovery plan and/or 2) a state conservation plan**. Habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for Inland Aquatic Habitat for Native Fish Species guides voluntary actions that address limiting factors related to the protection and restoration of the watershed functions and processes in this habitat type. **Initiatives under this Priority will identify the primary limiting factors outlined in associated federal and state recovery and conservation plans that the initiative is aiming to address, and will be guided by the habitat and population objectives and conservation approaches set forth in these plans.** (See Table 1 on p. 4 for a list of plans.)



Note: The GIS data used to create this map comes from both State and Federal conservation and recovery plans.

Focal areas for this Priority are defined as those native fish habitats in Oregon that are identified as priorities in associated federal recovery and/or state conservation plans, which are outlined in Table 1. For the purposes of this Priority, OWEB Focused Investment Partnership investments would be focused in areas shown in green and yellow on the map. Within these identified areas, voluntary restoration and

¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

conservation actions are especially encouraged in locations where investments will also address identified non-point source water-quality concerns.

Background

Where it occurs – As defined here, inland aquatic habitats include rivers, streams, floodplains, lakes and tidally influenced waters. These habitats typically contain water year-round. These areas occur around the state and provide essential habitat to many at-risk species, including important spawning and rearing habitat for salmonids.

Oregon's inland aquatic habitats are highly diverse. For example, as described in the Oregon Conservation Strategy, the headwaters of many of Oregon's rivers are located high in the state's various mountainous areas. In contrast, the eastern half of the state contains several playa lakes, formed when runoff from precipitation and mountain snowpack flows into low-lying areas, then evaporates and leaves mineral deposits.

Indicator species and/or species of interest supported by these habitats – Several native fish species have been listed or are candidates for listing under the federal Endangered Species Act (ESA) or are state species of concern, including, but not limited to: Chinook salmon, chum salmon, steelhead, bull trout, some species of sucker, lamprey, and chub. Specific species to be addressed under this Focused Investment Priority are identified, by geography, on page 4.

In certain instances, the limiting factors and habitat needs of the aforementioned native fish species overlap with coastal coho during a least a portion of their life-cycle. However, because the overlap is not complete, this priority focuses on the inland aquatic habitat needs for a broader collection of native fish species. This approach ensures that primary limiting factors can be addressed for a range of native fish species that are of significance to the state.

Why it is significant to the state – Inland aquatic habitat supports an incredible number of Oregon's native fish and wildlife species. The extent of biodiversity in an aquatic habitat is a reflection of the native fish, plants, and other aquatic species (e.g., freshwater mussels, Oregon spotted frogs) present there. All require water, and high-quality aquatic systems provide essential habitat to many at-risk species, including important spawning and rearing habitat for salmonids and other native fishes.

Sustaining aquatic biodiversity is essential to the health of our environment and to the quality of human life. Healthy aquatic ecosystems are imperative for continuing to contribute to Oregon's communities and economy, including fisheries and recreation. Because native fish communities are central to the structure, function, and process within aquatic habitats, they serve as ideal indicator species of the overall health of these habitats.

An excellent example of a successful focused investment effort is the recently de-listed Oregon chub. This fish species, which is endemic to the Willamette Valley, is the first fish species to be removed from the federal ESA due to species recovery. Since 1993, significant conservation efforts, partnerships, and funding have addressed Oregon chub habitat, which contributed to the recovery of the fish and the ESA de-listing in March, 2015.

Key limiting factors and/or threats, with a focus on ecosystem function and process – Proposals must address primary limiting factors for aquatic habitats, as identified in associated federal and state recovery and conservation plans, including:

- Impaired water quality (e.g., temperature and sedimentation), including those factors associated with the loss of riparian and floodplain vegetation;
- Reduced water quantity (e.g., low streamflow and altered hydrology);

- Loss of habitat complexity (e.g., high-quality instream structure and spawning gravel, floodplain connectivity, connected off-channel habitat, presence of pools, and presence of large woody debris);
- Loss of habitat connectivity, including: floodplain connectivity; access to cold-water refugia; and fish-passage barriers that are identified as primary limiting factors for native fish species and as noted by Oregon Department of Fish and Wildlife's statewide fish passage priority list; and
- Spread of invasive species.

Investments for the priority will focus on addressing primary limiting factors, as described in the reference plans below, with actions such as: 1) in mainstem rivers, reconnecting and restoring floodplain, riparian, side-channel, and tidal habitat; and 2) in tributaries, restoring whole watersheds to address such limiting factors as loss of instream habitat complexity and degradation of riparian areas.

Reference plans – See Table 1 on page 4 for species-specific conservation and recovery plans to be addressed under this Priority.

In addition to these plans, Oregon's Native Fish Conservation Policy (NFCP), the state policy for managing native fish, provides guidance to support the implementation of the Oregon Plan for Salmon and Watersheds and Oregon Conservation Strategy. Conservation and recovery plans developed under the NFCP by Oregon Department of Fish and Wildlife and/or in conjunction with federal agencies detail how Oregon proposes to recover ESA-listed native fish species. These plans identify key limiting factors for specific fish species, geographies in which habitat for these species occur, and priority actions that will address limiting factors. While these plans have a species focus, addressing the limiting factors and meeting the goals of each plan supports native fish communities and the ecosystem function of aquatic habitats more generally. Thus, achieving the desired habitat and population objectives within these plans will provide significant ecological, economic and cultural benefits for all Oregonians.

Table 1. Conservation and Recovery Plans for Native Fish Species

(U.S. Fish and Wildlife Service = USFWS; NOAA Fisheries = NMFS; Oregon Department of Fish and Wildlife = ODFW)

Example Conservation and Recovery Plans	Native Fish Species	Associated Basin(s)
USFWS Recovery Plan for the Threatened and Rare Native Fishes of the Warner Basin and Alkali Sub-basin	Warner Sucker, Lahontan cutthroat trout, Hutton tui chub, Foscett speckled dace, Warner Valley redband trout	Closed Lakes Basin
USFWS Revised Draft Recovery Plan for the Coterminous United States Population of Bull Trout	Bull trout <i>Co-benefit species: Redband trout</i>	Deschutes, John Day, Upper Klamath, Lower Columbia, Willamette
NMFS/ODFW Mid-Columbia Oregon Steelhead Recovery Plan	Steelhead <i>Co-benefit species: Chinook salmon, Redband trout</i>	Deschutes, John Day
NMFS Draft ESA Recovery Plan for Northeast Oregon Snake River Spring and Summer Chinook Salmon and Snake River Steelhead Populations	Spring Chinook, Steelhead <i>Co-benefit species: Redband trout</i>	Grande Ronde
ODFW Lower Columbia River Conservation & Recovery Plan for Oregon Populations of Salmon & Steelhead	Spring and Fall Chinook, Chum salmon, Summer and winter steelhead <i>Co-benefit species: Redband trout</i>	Lower Columbia River
USFWS Lamprey Conservation Initiative Plan	Pacific lamprey	Deschutes, John Day, Grande Ronde, Lower Columbia, Umpqua, Rogue, Willamette
USFWS Revised Recovery Plan for the Lost River sucker and Shortnose sucker	Lost River sucker, Shortnose sucker	Upper Klamath
NMFS/ODFW Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead	Spring Chinook, Steelhead	Willamette
USFWS Recovery Plan for the Oregon Chub	Oregon chub	Willamette
ODFW Coastal Multi-Species Conservation and Management Plan (this plan does not assess or address coastal coho, thus differentiating this priority from the Focused Investment Priority for Oregon Coastal Coho Habitat and Populations)	Chinook salmon, Chum salmon Steelhead, Cutthroat trout <i>Co-benefit species: Redband trout</i>	Coastal watersheds from Cape Blanco to the Columbia River (including Umpqua, Tillamook, many others)
USFWS Lahontan Cutthroat Trout Recovery Plan	Lahontan Cutthroat Trout	Closed Lakes Basin

COASTAL ESTUARIES

Summary Statement of Priority

The OWEB Board will consider proposals for investment in Oregon's **coastal estuaries**. The focal area for this Priority is coastal estuaries and associated riparian and upland habitats, which support a multitude of species. Proposals should outline initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale¹.

OWEB's Focused Investment Priority for Oregon's coastal estuaries guides voluntary actions that protect and/or restore estuarine habitat at a scale that ensures watershed functions and processes that support fish and wildlife dependent on this habitat type. **Actions will address the habitat, limiting factors, ecological outcomes, and conservation approaches that yield the greatest productivity across species. The importance of estuaries is noted in several plans, which are listed at the end of this document.**

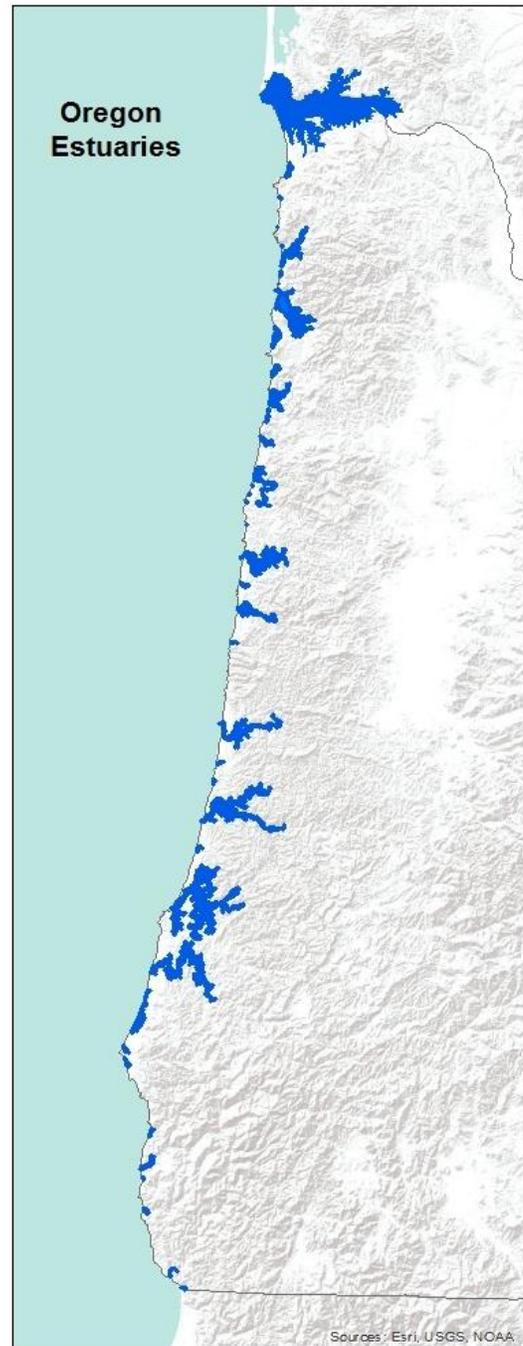
Background

Where it occurs – Oregon's estuaries exist at the confluence of freshwater rivers and the ocean. The extent of estuarine habitat at these confluences can be determined by the range upon which the ocean maintains a tidal influence on these freshwater rivers (see map).

Currently, over 70 percent of Oregon's estuarine wetlands have been lost, while tidal swamp habitat losses stand at roughly 90 percent (for estuaries where applicable data is available). A history of anthropogenic alterations to habitat and natural hydrologic processes, including diking, tide gates, dredging, and channelization, among other impacts, has contributed to these habitat losses and impairments.

There are four main subsystems associated with estuaries, including: marine, bay, slough, and riverine. Estuary habitats experience regular fluctuations in salinity, water levels, sunlight, and oxygen. This priority includes restoration and protection of habitat and watershed function and process associated with each habitat type.

Indicator species and/or species of interest supported by this habitat – Estuaries provide habitat for a multitude of plant and animal species. The unique biophysical conditions found in estuaries as a result of tidal influence and variation in salinity fosters a complex diversity of vegetation and animal species. Such species include salmon and steelhead, crabs and other shellfish, marine mammals, seabirds and migratory birds. It is estimated that the Lower Columbia River estuary alone provides wintering habitat for peak counts of 150,000 waterfowl birds



¹ The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

along the Pacific Flyway. In terms of fish species, estuaries provide critical breeding and nursery areas for rockfish, lingcod, and greenling, as well as rearing grounds for juvenile coho, Chinook, and chum salmon. Estuaries also foster large populations of staghorn sculpin, which are a critical food source for foraging migratory and shorebirds. Roughly 75 percent of Oregon's harvested fish species utilize estuary habitat during some portion or all of their life cycle.

Why it is significant to the state – Estuaries are significant to the state of Oregon for a wide range of reasons. First, in terms of planning efforts, Oregon's Statewide Planning Goal 16, titled "Estuarine Resources", strives: "To recognize and protect the unique environmental, economic, and social values of each estuary and associated wetlands; and to protect, maintain, where appropriate develop, and where appropriate restore the long-term environmental, economic, and social values, diversity, and benefits of Oregon's estuaries." Further, the Lower Columbia River estuary and Tillamook Bay estuaries are each designated as an "estuary of national significance" by the U.S. Environmental Protection Agency (two of 28 National Estuary Programs managed under the Clean Water Act). Many Oregon estuaries have Total Maximum Daily Loads developed for water quality in these habitats, as estuaries play an important role in filtering sediment, nutrients, pathogens, and other contaminants from aquatic environments.

Second, estuaries are a necessary habitat that is integral to the existence and success of various fish and wildlife species. There are numerous species that are adapted to the unique habitat conditions that estuaries provide and are thus dependent on this habitat type. For example, nearly one-third of the west coast's nesting seabird colonies are located off Oregon's south coast. Additionally, the Klamath Bird Observatory maintains a list of 39 "Important Aquatic Bird Sites," with 24 of these sites located along the Oregon coast in and around estuary habitat.

Lastly, estuaries provide critical services for the people of Oregon. For example, estuaries serve to buffer storm wave damage and help stabilize shorelines.

Key limiting factors and/or ecological threats, with a focus on ecosystem function and process –

- Increasing development and land-use conversions;
- Alteration of natural hydrological processes and streamflow, including limited salt- and fresh-water exchange due to such issues as tidegates;
- Water-quality degradation (including increased bacterial loads; decreased dissolved oxygen; and toxic contaminants from industry, agriculture, and urban development);
- Loss of habitat complexity and connectivity degraded tidal areas;
- Invasive aquatic plant and animal species;
- Impacts of climate change (e.g., sea-level rise, increased acidification); and
- Nutrient cycling and sediment transport.

Reference plans –

- 1) Oregon Conservation Strategy
(http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp)
- 2) NOAA Fisheries Columbia River Estuary ESA Recovery Plan Module for Salmon and Steelhead, 2011 (http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/estuary-mod.pdf)
- 3) ODFW Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead, 2010 (http://www.dfw.state.or.us/fish/CRP/lower_columbia_plan.asp)
- 4) Oregon Coastal Multi-Species Conservation and Management Plan, 2014
(http://www.dfw.state.or.us/fish/CRP/coastal_multispecies.asp)

Focused Investment Partnerships: Solicitation Process

Updated April 2015

CAPACITY-BUILDING FUNDING	IMPLEMENTATION FUNDING
May 1-July 1, 2015	May 1-July 1, 2015
Letters of Intent submission period. Due date: July 1, 2015	Phase I application submission period <ul style="list-style-type: none"> • Required pre-application consultation with OWEB staff – Must be completed by May 20, 2015 • Required attachment – completed draft of strategic action plan Due date: July 1, 2015
July 1-August 17, 2015	July 1-August 17, 2015
Staff receives Letters of Intent. Upon receipt, staff will inform applicants of next steps in the process. This stage is not intended to be a pre-screening for applications and will not include any evaluative action.	Staff convenes technical teams designated for each priority area for review of Phase I applications. Subcommittee takes information from staff and technical teams, and invites select partners to submit Phase II applications materials, including work plan and budget. Other applicants not invited can submit if they choose, though it will be noted there is limited funding available.
July 28-29 Board Meeting	July 28-29 Board Meeting
Staff updates Board on the Letters of Intent received July 1.	Staff updates Board on Phase I applications received July 1, and provides an update on the status of the review process, including the May pre-application consultations with staff.
August 17-November 2, 2015	August 17-November 2, 2015
Capacity-Building full application submission period. Due date: November 2, 2015	Application Phase II submission period. Due date: November 2, 2015
November 2, 2015-January 8, 2016	November 2, 2015-January 8, 2016
RPRs review Capacity-Building applications and provide feedback to capacity review team and subcommittee for their consideration.	RPRs review applications and provide feedback to technical review teams and subcommittee for their consideration.
Staff convenes state capacity review team to make recommendations to subcommittee through staff.	Staff convenes technical review teams designated for each priority area to complete a technical review of applications in their area and provide feedback.
Subcommittee reviews feedback from RPRs and recommendations from the state capacity review team. Provides final recommendations for funding to Board based on available funds.	Subcommittee receives applications, technical teams and RPRs feedback, and asks any follow-up questions of RPRs and/or technical teams. Subcommittee interviews all applicants, negotiates budgets, and recommends Implementation grants for funding based on available funds.
January 2016 Board Meeting	January 2016 Board Meeting
Board reviews subcommittee recommendations and selects Capacity-Building programs for funding. There will be an opportunity for public comment at this time.	Board reviews subcommittee recommendations and selects Implementation programs for funding. There will be an opportunity for public comment at this time.