STATE LAND BOARD

October 12, 2021
10:00 am – 12:00 pm
Zoom Video/Audio Meeting
The meeting video will be livestreamed on the
Department of State Lands YouTube Channel

AGENDA

State Land Board Awards Presentation
The State Land Board will present Land Board Awards to:

- Wetland Award: Jackson-Frazier Wetland Long Term Habitat Restoration
- Partnership Award – Team Award: The Oregon Tide Gate Partnership
- Partnership Award – Catalyst Award: Tracie-Lynn Nadeau and Yvonne Vallette

Consent Items

1. Request for approval of the minutes of the August 10, 2021, State Land Board Meeting.

2. Request for approval to initiate due diligence for a potential direct sale of 0.7 acres of filled land on the Astoria waterfront in Clatsop County.

3. Request for approval to initiate due diligence for a potential exchange of land at West Hayden Island in Multnomah County with the Port of Portland.

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**Action Items**

4. Request for approval to initiate due diligence for a potential direct sale of the Cline Butte Tract, six tax lots totaling 400 acres located near Cline Falls Road and Eagle Crest Resort in Deschutes County.

**Informational Items**

5. South Slough National Estuarine Research Reserve Annual Report
7. Common School Fund Annual Report
8. Other

Meeting video will be livestreamed at: https://www.youtube.com/channel/UCQA7FHTWwl-qJkQeYPJ1I

*If you need assistance to participate in this meeting due to a disability, please notify Arin Smith at (503) 986-5224 or arin.n.smith@state.or.us at least two working days prior to the meeting.*

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**Public Testimony** - The State Land Board places great value on information received from the public. The Board typically accepts comments on consent and action agenda items only.

**Providing Public Testimony During Video Meetings** – When the Board meets by video, the public may provide written or spoken testimony, time permitting and at the discretion of the Chair.

- **Providing Written Testimony**: Written testimony may be submitted at landlord.testimony@state.or.us. Testimony received by 10 a.m. the day before the meeting is provided to Land Board members in advance and posted on the meeting website. Testimony received after this deadline may not be provided to the Land Board prior to a vote. Please indicate the agenda item your testimony relates to.
• **Providing Spoken Testimony:** The signup deadline to provide spoken testimony at virtual meetings is 10 a.m. the day before the meeting. Signup information is posted on the Land Board Meetings website. After signing up, you will receive a confirmation email containing additional information.

When signing up to provide testimony for a video meeting, please:

- Include your name, organizational affiliation (if any).
- Indicate which consent or action agenda item your testimony relates to. **Please note:** Testimony on action items is taken during the item’s presentation, before the Land Board votes. Please review the meeting agenda and be present and prepared to provide testimony at the appropriate time.
- Be aware that there may not be time for everyone who signs up to provide testimony.

Please note: The standard time limit is three minutes for each individual; the actual time available for testimony during Land Board meetings is at the discretion of the Chair. The Board cannot accept testimony on topic for which a formal public hearing has been held or a formal comment period has closed, such as rulemaking or permitting public review and comment periods.
MEMORANDUM

Date: October 12, 2021

To: Governor Kate Brown
Secretary of State Shemia Fagan
State Treasurer Tobias Read

From: Vicki Walker
Director

Subject: The 17th Annual State Land Board Awards

Overview

Every year, the State Land Board honors exceptional projects and partners for their contributions to protecting and enhancing Oregon’s treasured natural resources.

Since the State Land Board Awards were established in 2004, more than 35 awards have been presented to recipients whose dedicated efforts have included helping to preserve clean waters, restore habitat, and support native species—the impacts of which are felt throughout the state. The awards are an annual reminder of the significant contributions Oregonians can make when we work together to help support thriving lands and waterways.

Land Board Award Winners

Today, in the 17th year of the State Land Board Awards, we are presenting a Wetland Award and two Partnership Awards to several recipients for their exemplary work and dedication to support the natural resources of the state.

**Wetland Award: Jackson-Frazier Wetland Long Term Habitat Restoration.**
A biodiverse wetland awaits the more than 10,000 visitors who tread the boardwalk of the Jackson-Frazier Wetland northeast of Corvallis every year. Water flows and seeps into the soil, supporting native plants and providing habitat for migratory shorebirds, waterfowl, and songbirds. With ingenuity and thoughtful collaboration, Benton County and a team of partners worked together to move earth, manage invasive species, and restore the movement of water to this 50-acre restoration site, returning the wetland to its natural state. Now, the Jackson-Frazier Wetland serves the surrounding community and performs the
essential functions of a wetland while providing continuous opportunities for learning and recreation.

**Partnership Awards.** This year, the State Land Board is recognizing three Partnership Award nominees—one Team Award and two Catalyst Awards—whose efforts have helped advance sound stewardship of the state’s resources.

**Team Award: The Oregon Tide Gate Partnership.** In the past four years, The Oregon Tide Gate Partnership has coordinated on creative, pragmatic solutions to protect infrastructure, habitat, and salmonids by upgrading tide gate infrastructure in the state. The Partnership has invited diverse individuals and organizations, including the Department of State Lands, to the table, leveraging expertise and perspectives to identify solutions for repairing and replacing Oregon’s aging tide gates. Their efforts have helped streamline the regulatory process, connect landowners with funding and engineering resources, and assist communities with smart planning for future repairs and replacements. A thoughtful partner that models the importance of trust and relationship building in any endeavor, we are proud to recognize The Oregon Tide Gate Partnership.

**Catalyst Award: Tracie-Lynn Nadeau and Yvonne Vallette, U.S. Environmental Protection Agency.** In her role as a lead environmental scientist with the U.S. EPA, Tracie Nadeau has led the charge to develop data-driven solutions to aid and improve the decision making needed to protect the waters of the state. She takes a collaborative approach to work with the Department of State Lands and other regulatory partners, the results of which are legacy tools that are regularly used by DSL staff. Tracie continues to adapt her methods and tools to support DSL, as well as programs in other states, impactful work that will benefit many for years to come.

An aquatic ecologist with the U.S. EPA, Yvonne Vallette has been a dedicated partner of states and Tribes, teaming up with them to develop efficient long-term programs that close gaps in the Clean Water Act and protect wetlands. Over the years, Yvonne has assisted DSL as an advocate, providing technical and financial support for various projects that have shaped DSL’s wetland program into a model for other states. Yvonne’s passion for improving efficiencies, sharing information, and bridging relationships shines through in her continuous work with DSL. We are proud to recognize her commitment.
The State Land Board (Land Board or Board) met in regular session by teleconference on August 10, 2021. The meeting audio and video was livestreamed on the DSL YouTube channel.

Present were:
Kate Brown Governor
Shemia Fagan Secretary of State
Tobias Read State Treasurer

Land Board Assistants
Jason Miner Governor’s Office
Molly Woon Secretary of State’s Office
Ryan Mann State Treasurer’s Office

Department Staff
Vicki Walker Bill Ryan Lani Ahmadian Ted Bright
Arin Smith Jean Straight Ali Ryan Hansen

Department of Justice
Matt DeVore

Governor Brown called the meeting to order at 10:00 a.m. The topics discussed and the results of those discussions are listed below. To view the Land Board (Board) meeting in its entirety, please visit our YouTube page: August 10, 2021 Land Board Meeting

Consent Items

1. Minutes

Treasurer Read made a motion to approve the minutes for the June 8, 2021, Land Board meeting.
Secretary Fagan seconded the motion.

The item was approved at 10:03 a.m.

Action Items

2. Request for approval of a direct release of 2.71 acres of subsurface minerals and geothermal rights located in Salem, Marion County.

Treasurer Read made a motion to approve the action item.
Secretary Fagan seconded the motion.
The item was approved at 10:07 a.m.

3. Request for approval of a direct sale of 15.0 acres of subsurface minerals and geothermal rights located in Salem, Marion County.

Secretary Fagan made a motion to approve the action item. Treasurer Read seconded the motion.

The item was approved at 10:09 a.m.

Informational

4. Other

Director Walker gave an overview of a recent report released by the National Oceanic and Atmospheric Administration (NOAA) highlighting the contributions the South Slough National Estuarine Research Reserve (SSNERR) has made to both local and state economies.

A more detailed report will be presented at the October Land Board meeting.

The meeting was adjourned at 10:13 a.m.

Kate Brown, Governor

Vicki L. Walker, Director
SUBJECT

Request for approval to initiate due diligence for a potential sale of a tract of filled land on the Astoria waterfront in Clatsop County at Township 8 North, Range 9 West, Section 7CA, a portion of Tax Lots 401 and 402 totaling 0.7 acres of state-owned filled lands (DSL file 63360-LS).

ISSUE

Whether the State Land Board should authorize the Department to initiate due diligence for a potential sale of 0.7 acres of state-owned filled land (Appendix A) in a direct land sale.

AUTHORITY

Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.
ORS 273.055; relating to the power to acquire and dispose of real property.
ORS 273.171; relating to the duties and authority of the Director.
ORS274.915; relating to the sale, lease or trade of submersible and submerged lands.
OAR 141-068; relating to the sale, exchange or reservation of new lands.
Real Estate Asset Management Plan (REAMP), adopted by the Land Board; February 2012
SUMMARY

In June 2021, Fortuna Cannery LLC submitted an application to purchase filled land from DSL along the Astoria waterfront at Township 8 North, Range 9 West, Section 7CA. The land requested for purchase is a portion of Tax Lots 401 and 402 in Clatsop County. The filled land is currently leased by Fortuna Cannery LLC and used as a parking area, access point, and small open space for the Cannery Pier Hotel at 10 Basin Street. The Port of Astoria owns the adjacent upland.

Fortuna Cannery LLC owns the tax lots for the requested land, while DSL owns the filled land itself, a result of the Astoria Quitclaim Act (1969). As with most state-owned waterways, DSL owns the submerged and submersible land (beds and banks) of the Columbia River. However, the Astoria Quitclaim Act established tax lots for portions of submerged and submersible land along the Astoria waterfront, giving tax lot owners the right to lease the land. At the time, the land Fortuna Cannery LLC is requesting to purchase was submerged/submersible. According to an ownership study conducted by DSL staff, the land was subsequently filled between July 1969 and September 1971 to add storage and access to the docks. Fortuna Cannery LLC later purchased the improvements on Tax Lot 401 and 402, while the state maintained ownership of the filled lands. The ownership study was a Strength of Claim analysis completed by DSL Ownership Specialist Erin Serra which was prompted by the Fortuna application.

RECOMMENDATION

The Department recommends that the State Land Board authorize the initiation of due diligence for a potential sale of 0.7 acres of filled land in Clatsop County.

APPENDICES

A. Map of the Parcel
State Land Board

Regular Meeting
October 12, 2021
Agenda Item 3

SUBJECT

Request for approval to initiate due diligence for a potential exchange of land at West Hayden Island in Multnomah County with the Port of Portland (DSL file 55904-LE). The land is located at Township 2 North, Range 1 East, Sections 19, 28, 29 and 30, and Township 2 North, Range 1 West, Section 24.

ISSUE

Whether the State Land Board should authorize the Department to initiate due diligence to reach a final determination of DSL’s ownership of filled land at the site and to prepare to exchange land with the Port of Portland.

AUTHORITY

Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.
ORS 273.055; relating to the power to acquire and dispose of real property.
ORS 273.171; relating to the duties and authority of the Director.
ORS 274.915; relating to the sale, lease or trade of submersible and submerged lands.
OAR 141-068; relating to the sale, exchange or reservation of historically filled land.
Real Estate Asset Management Plan (REAMP), adopted by the Land Board; February 2012
SUMMARY

On September 1, 2021, DSL received an application from the Port of Portland to exchange land owned on West Hayden Island. The Port acquired the center portion of the island in 1996. Over the years, portions of the waterfront have been filled or had accretion. Although there have been numerous ownership studies over the years, the ownership of some of the outer edges of West Hayden Island remains unclear.

DSL will be asking David Evans and Associates to review newly found aerials of the property with the intent of finalizing its ownership of the property. The Port would like to consolidate its land on the island and would like to exchange some of its land on the southern side of the island for land on the northern edge of the island. Until a final determination is reached on DSL’s ownership on the island, the acreages involved are uncertain.

Once the ownership has been determined and a plan for the potential exchange of land created, a report will be given to the Land Board before proceeding further.

RECOMMENDATION

The Department recommends that the State Land Board authorize the initiation of due diligence to determine DSL’s ownership at West Hayden Island for a potential exchange of land in Multnomah County.

APPENDICES

A. Map of the Due Diligence Area
This map depicts the approximate location and extent of a Department of State Lands Proprietary authorization for use. This product is for informational purposes only and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.
SUBJECT

Request for approval to initiate due diligence for a potential direct sale of the Cline Butte Tract, six tax lots totaling 400 acres located near Cline Falls Road and Eagle Crest Resort in Deschutes County, Township 15 South, Range 12 East, Section 17, 20, 29 and 30 Tax Lots 5101, 5102, 5103, 5104, 5200, and 5300.

ISSUE

Whether the Land Board should authorize the Department to initiate due diligence for the potential direct sale of the Cline Butte Tract in Deschutes County.

AUTHORITY

- Oregon Constitution, Article VIII, Sections 2 and 5; pertaining to the Common School Fund and land management responsibilities of the State Land Board.
- ORS 273.055; relating to the power to acquire and dispose of real property.
- ORS 273.171; relating to the duties and authority of the Director.
- ORS 273.780; relating to the retention of mineral rights.
- OAR 141-067; relating to the sale, exchange and purchase of state land.
- Real Estate Asset Management Plan (REAMP) adopted by the Land Board; February 2012.

SUMMARY

Central Oregon Land and Cattle Company, LLC (CLCC) has submitted an application to purchase the Cline Butte Tract, six tax lots totaling 400 acres near Cline Falls Road in Central Oregon. The property is adjacent to Eagle Crest Resort. All six tax lots are Common School Fund land and share boundaries with private land currently owned by the applicant (see the property map in Appendix A).

The applicant currently leases all the land they are requesting to buy. A 160-acre lot has been leased since 2005, when the applicant (then doing business as Thornburgh
Resorts, LLC) entered into an open space Special Use Lease agreement with DSL. In 2008, the Department acquired an additional 240 acres as in-lieu lands from the U.S Bureau of Land Management. The acquisition of these acres partially satisfied the federal government’s obligation to provide Oregon with approximately 5,200 acres of federal land owed in-lieu of school lands not granted at statehood.

These newly acquired acres were adjacent to or near the leased acres, and in October 2008 the existing lease was amended to include the additional acreage and update the lease fees.

**Development Background and Applicant’s Concept for Property**
CLCC has been working toward developing a destination resort in this area. At the time of the 2005 lease negotiations, the lessee was drafting a conceptual master plan and conditional use (land use) application to meet Deschutes County’s permitting requirements for a destination resort. The 2005 lease agreement authorized CLCC to explore incorporating the state-owned lands into a destination resort to serve as open space. The conceptual master plan included the original 160-acre DSL-owned parcel along with 1,980 acres of private land owned by the lessee.

CLCC has since submitted a master plan to Deschutes County which details the first phase of developing the destination resort. The master plan does not include the state-owned acres. Though the county has approved the master plan, the approval was appealed to the State Land Use Board of Appeals and subsequently remanded back to Deschutes County for consideration, where it is now pending decision.

Should CLCC receive approval to purchase the 400-acre Cline Butte Tract, they intend to eventually incorporate the state-owned lands into the destination resort.

**Due Diligence Process**
A due diligence review is required prior to the Land Board’s consideration of the sale. Should the State Land Board approve DSL to complete a due diligence review, the Department will evaluate multiple factors, including value and potential use for the property, presence of mineral and energy resources, any cultural resources that may be present; and any endangered, threatened, or sensitive species on the land. The Department will also solicit feedback from adjacent landowners and interested community members during a public comment period. After the due diligence review, if the Director determines the lands should be available for sale, the matter will come back to the Land Board for approval of the method of sale.

**RECOMMENDATION**

The Department recommends that the State Land Board approve DSL to complete a due diligence review for potential direct sale of the Cline Butte Tract.
APPENDICES

A. Map of Property
South Slough National Estuarine Research Reserve

Annual Land Board Report, Fiscal Year 2021 - Present
Presented October 2021
# Table of Contents

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Introduction

The South Slough National Estuarine Research Reserve is a protected natural area located on state-owned land in the Coos estuary on Oregon’s southern coast. South Slough Reserve was designated in 1974 as the first unit of the National Estuarine Research Reserve System (NERRS) and is now among a network of 29 reserves that protect 1.3 million acres of coastal areas across the country for long-term research, education, stewardship, and recreation. Each reserve is managed in partnership by the National Oceanic and Atmospheric Administration (NOAA) and coastal states. In Oregon, The Department of State Lands is South Slough Reserve’s administering agency.

The Oregon Legislature established South Slough Reserve through ORS 273.553. The Reserve’s immediate governing body is the South Slough National Estuarine Research Reserve Management Commission, which is comprised of nine governor-appointed members, including the DSL director, who serves as chair. Through OAR Chapter 142, the Commission has the authority to establish operating policies and make administrative rules managing the Reserve.

The nearly 7,000 acres of natural habitat managed by South Slough Reserve include open water channels, tidal and freshwater wetlands, riparian areas, and forested lands.

In the decades since its designation, South Slough Reserve has become a cornerstone of recreation, education, science, and coastal training on Oregon’s south coast, providing rich opportunities for the local community and visitors alike to learn about and explore estuaries. Reserve lands and waters are used by visiting researchers, teachers and students, and other members of the public who come to the Reserve to hike or paddle, view wildlife, and participate in community classes. The Reserve also has a visitor center with interpretive exhibits and meeting spaces for the public.

Partnerships with Local Tribes

The Reserve recognizes its location on the traditional lands of the Miluk Coos people who have managed this area for abundance since time immemorial. To ensure ongoing and sound stewardship of this special place and protection of its cultural resources, the Reserve relies on regular consultation and partnership with the Confederated Tribes of
the Coos, Lower Umpqua and Siuslaw Indians, Coquille Indian Tribe, and Confederated Tribes of Siletz Indians.

Reserve Programs, Planning, and Priorities

South Slough Reserve serves as a living laboratory and classroom, as well as a monitoring and reference site for coastal research and education. Core programs at the Reserve include research and monitoring, education, stewardship, and coastal training. These programs monitor ecological change over time; provide scientific information for planning, resource management, and decision-making; and manage and maintain the land and facilities. Together, these efforts collaboratively enhance scientific and public understanding of estuaries and contribute to improved estuarine management.

The Reserve’s programming and decision making is guided by two five-year planning documents: the 2017-2021 DSL Strategic Plan and the Reserve’s 2017-2022 NOAA-approved management plan, which outlines the following vision, mission, and overarching goals of the Reserve. Over the next year, staff will be updating the Reserve’s management plan to guide programming and initiatives for the next five years.

Vision. Resources developed at the South Slough Reserve will support the informed management of the Coos estuary and watershed, providing a model for regional, national, and global coastal management.

Mission. To improve the understanding and stewardship of Pacific Northwest estuaries and coastal watersheds.

Overarching Reserve Goals:

1. Advance scientific understanding of the South Slough, Coos estuary, and coastal areas and watersheds;
2. Provide technical assistance for the management of estuaries;
3. Improve understanding of estuaries and coastal areas through innovative programming;
4. Evaluate, manage, restore habitats;
5. Maintain public access to the Reserve facilities and trails, while minimizing environmental impacts; and,

Priority Focus Areas: The Reserve’s management plan also includes a detailed strategic planning framework guided by three coastal management priorities:
Climate change – Increasing understanding of sea level rise, ocean acidification, impacts on ecosystem function, and communication with the community.

Habitat protection – Monitoring habitat change, implementing ridgetop-to-estuary habitat restoration, and increasing public awareness.

Invasive species – Tracing invasive species, monitoring and reducing impacts, and distributing information about invasive species to audiences.
### South Slough Reserve by the Numbers

- **18 staff**
  - 16 full time and two part-time or seasonal employees.

- **6 interns**
  - Research and education interns who joined the Reserve in summer 2021.

- **43 volunteers**
  - Numerous volunteers who assist with stewardship, research, and education, many of whom are trained by the Reserve in special skills.

- **98.3% satisfaction**
  - Overall satisfaction rating given to the Reserve, according to 63 customers surveyed in June, 2020.

- **$7.2M contribution**
  - Amount contributed to the State of Oregon by South Slough Reserve activities, according to a recent economic contribution study conducted by NOAA.

- **$1M grants**
  - The Reserve received approximately $1M in revenue from grants in FY 21.

- **25+ news articles**
  - Positive stories about the Reserve that appeared in online, print, and broadcast news since July 1, 2020.
Land Management

Since its designation in 1974, the Reserve has grown to manage nearly 7,000 acres of waterways, wetlands, and forests. Decisions to acquire new land are made based on whether the addition can help improve services to the community and if the anticipated outcomes meet one or more of the following goals:

- Protect and enhance water quality in the estuary
- Improve habitat through restoration
- Improve research and understanding of coastal issues
- Conserve land for flood reduction and improve surrounding ecological resiliency for landowners
- Provide recreational and educational opportunities
- Protect culturally sensitive sites

Since July 1, 2020, Reserve staff have made progress toward acquiring approximately 1.73 acres at the entrance of the Visitor Center. Staff are working to purchase a 1.17-acre parcel with grant funding from NOAA; the sale is scheduled to close in October 2021. The Friends of South Slough, Inc. are also helping to fund the purchase of an adjacent .56-acre parcel. Together these properties will be used to enhance existing infrastructure at the Visitor Center and provide a welcoming entrance at the Reserve’s primary public access point.

Updating the Reserve Boundary

In 2021, Senate Bill 126, which allowed for the adjustment of the administrative boundary of South Slough Reserve, was passed by the Oregon Legislature with the assistance of Reserve and DSL staff. The bill was later signed into law by Governor Brown on June 1. Prior to Senate Bill 126, ORS 273.553 defined Valino Island as the northern extent of the South Slough National Estuarine Research Reserve. This language prevented the Reserve from adjusting its boundary to include lands it had acquired north of Valino Island, impeding access to federal funding to manage those lands. Now that the statute has been amended, Reserve staff will work with NOAA and the local community in the coming year on a boundary amendment.

Site Improvements

Several projects have been completed since July 2020, improving and enhancing services for the public. Safety and durability upgrades were made when the aged wood of the observation deck at the Visitor Center was replaced with recycled composite decking material. Worn wooden siding on the maintenance building was also replaced with fire resistant composite materials. The maintenance compound was expanded to allow the construction of a new pole barn (to be completed by spring 2022) to securely store the kayak fleet and multi-person tribal style canoes used in the Reserve’s education programs. This expansion has also facilitated the in-progress installation of a RV host
site to provide long-term volunteer opportunities that support Reserve programs and improved security.

In addition to facility updates, several trail enhancement projects were completed, following a comprehensive trail assessment conducted in partnership with the National Park Service. Trail projects included the construction and installation of a custom bridge on the Hidden Creek trail. Additionally, a trail junction was re-routed to replace a stairway with an updated gravel ramp for improved accessibility.

The Reserve also recently received notice of a grant award to complete projects at the Visitor Center over the next three years that will improve ADA accessibility at entrances, create fully accessible gender-neutral restrooms, and redesign and install new interpretive exhibits.

**Public Involvement**

The Reserve has continued to receive substantial community support, allowing it to host numerous interns and benefit from the contributions of dedicated volunteers.

**Volunteer Program**

The Reserve has 43 volunteers, 20 of whom regularly participate in a variety of research projects, such as monitoring European green crabs and collecting lamprey eDNA samples, stewardship work through the Trail Stewards program and habitat restoration, and educational programming. Volunteers are enthusiastic proponents of the Reserve who help to enhance other visitors’ experiences by sharing their enthusiasm and knowledge. They also assist to expand awareness of the Reserve throughout the local region. The Reserve continually invests in volunteer recruitment and training—providing volunteers with handbooks and training—which has increased community support and supplemented staff work. For example, in the 2020-2021 Oregon fiscal year (FY 2021), volunteers were able to contribute 1,893 total hours of their time and their talents to support the mission of the Reserve, a value of $49,877.
“The reason I volunteer so much at the Reserve and help with all these various projects is because I genuinely enjoy doing field work and everyone at South Slough is so amazing and nice. The time I felt the most valued at South Slough was when I first began helping Alice [Yeates] with the Wasson Uplands Restoration project and she relied on my experience performing forest surveys to shape the protocol she was going to use moving forward.

Intern Program

The Reserve hosts student interns who receive training and build their skills in science, education, and natural resources. The internship program also helps extend Reserve capacity to develop and implement programs and deliver community services. Interns are paired with a Reserve mentor who helps direct their study in a specific area of interest.

Since the summer of 2020, the Reserve has hosted 15 high school and college interns. Interns studied the sensitivity of sentinel marsh sites to sea level rise, the ecological importance of North American beavers to creek restoration, K-12 science education, geographic information systems (GIS), technology, water quality monitoring, engagement with Indigenous Tribes, eelgrass restoration, and more.

These internships were made possible through valuable partnerships with the Friends of the South Slough Reserve Inc., NOAA, Oregon Sea Grant, the National Science Foundation, and the Oregon Institute of Marine Biology.

Recreation and Visitors

While the Reserve’s visitor center has been closed since March 2020 due to COVID-19 precautions, adults and children have continued to visit over the past year to walk and hike the trails, kayak and canoe down waterways, and partake in classes. Due to the visitor center closure, staff were not able to count the number of regular visitors; however, members of the public were regularly seen recreating in the Reserve. Additionally, visitors continue to comment on social media about their experiences.
A recent report released by NOAA found visitors help the Reserve make a significant contribution to the local and state economy. During typical years, the Reserve helps bring about 10,000 people to the area. These visitors spend money on food, lodging, and retail, generating an estimated $850,000 for the area and supporting nearly 10 jobs.

Throughout 2020 and 2021, the community outreach events the Reserve usually participates in were cancelled. One event, the Mayfly Festival put on by the Coos Watershed Association, still continued in a virtual format. The Reserve participated, providing content and sharing information about the event via social media and email.

Staff also raise awareness about South Slough Reserve and its recreational and educational offerings by attending community outreach events. This year the team was welcomed back to the Coos Bay Farmer’s Market, where the Reserve has an outreach booth. There, staff distribute trail maps, information about public programs and volunteer opportunities, and answer questions about research and the natural area. This season the booth has played an especially important role in granting Reserve staff the opportunity to engage with the public, given the temporary closure of the Visitor Center and cancelled public events.

Stewardship Program

Continuous work is needed to protect South Slough Reserve and the surrounding watershed in order to preserve the Reserve’s environmental, recreational, and economic values. Reserve staff, volunteers, and visitors act as stewards, helping to maintain the quality of the Reserve by managing threats to the ecosystem and implementing restoration projects.

Maintaining Trails Through Community Involvement

Nearly five miles of trails offer public access to South Slough Reserve’s water channels, wetlands, riparian areas, and forested lands. In May 2021, the Reserve launched Trail Stewards, a volunteer program to connect visitors and volunteers with opportunities to help maintain trails. Trail Stewards assist staff to identify where attention is needed—reporting invasive species, trash dumping, vandalism, fallen trees, and more. They also help pick up litter, pull weeds, and participate in structured events to remove large amounts of invasive vegetation, plant native species, manage plants growing over trails, and more. Currently, there are 11 Trail Stewards signed up who have dedicated more than 100 hours to maintaining the Reserve's trails. The Reserve has also partnered with Trailkeepers of Oregon to host regular trail maintenance days.
Restoring Native, Endangered, and Culturally Significant Species

The Reserve was altered in the past by logging and agricultural activity, which removed native vegetation. Many of the native plants that were cleared provided ecological benefits to the area and were used and valued by Indigenous Americans for food, medicine, ceremonial purposes, and materials for building. Staff, volunteers, and local Tribes are partnering to reintroduce native, endangered, and culturally significant species to the Reserve.

South Slough Reserve has one of the largest known populations of the western lily, a flower that is listed as an endangered species in Oregon and the United States. Initial research in 2017 found the Reserve had 1,166 individual plants, however many were believed to be stressed, with only nine percent blooming. The following year, staff removed vegetation that was blocking sunlight from the area. The Reserve has conducted annual monitoring efforts to assess the effects of this intervention. During the Summer of 2021, staff worked with volunteers and interns to inventory lilies and their surrounding habitat. The total population of lilies has grown to 2,119 plants, an 81.7 percent increase, with 13.4 percent of plants now flowering.

The Reserve has also been working to increase the presence of plants with a cultural significance to local Tribes by working in partnership with the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians (CTCLUSI) and the Coquille Indian Tribe. The Reserve and CTCLUSI are experimenting with establishing a camas meadow on Indian Point and have planted 175 bulbs since November 2020. Many plants developed during the camas’ first flowering season, however yellowing has indicated signs of stress. The research team will continue monitoring this site for the next three seasons to assess the potential for restoration. Additionally, camas, harvest brodiaea, and chocolate lily have all been recently planted around the visitor center, thanks to a donation of bulbs from CTCLUSI.
Addressing Invasive Species

Invasive plants and animals threaten the ecosystem of the Reserve, as well as the South Slough and Coos estuary watershed, crowding out and reducing the diversity of native wildlife and impacting water and soil quality.

Over the past year, Reserve research and stewardship staff, interns, and volunteers have undertaken multiple activities to track invasive plant species, monitor their impacts, raise public awareness about their presence along the Oregon coast, and, when possible, remove them from the Reserve and greater watershed. The Reserve is also developing a South Slough Reserve Invasive Species Management Plan to better guide management efforts.

Recently, actions have focused on removing pampas grass, purple loosestrife, and gorse, all of which spread easily, radically impacting coastal habitat. In January 2021, Reserve staff coordinated with the Coos Forest Protective Association (CFPA) to remove 140 cubic yards of pampas grass from the Reserve, approximately 5,000 plants. The endeavor took approximately 650 person hours. A Reserve public outreach campaign used social and news media outreach to help raise awareness about the impacts of pampas grass among coastal residents, as the plant is often used in landscaping and interior decoration, which can aid the spread of its airborne seeds and increase fire risk. Residents were encouraged to remove the plant and given tips for how to do so. Additionally, approximately 80 purple loosestrife plants and 250 gorse seedlings have been removed from the Reserve since July 2020.

South Slough Reserve also helped drive public conversation around invasive species by participating in National Invasive Species Awareness week. A week-long social media campaign targeted invasive plants often found in landscaping, helping property owners to identify the offending plant, and suggesting suitable native species to “fill the weed-shaped hole” left from plant removal.

Supporting Forest Health and Restoration

Regenerating forest covers approximately 63 percent of the Reserve. This forest was formerly harvested for timber and is characterized by dense, homogenous stands of trees. The hydrology of the Reserve has also been impacted by past activities that altered the streams running into Winchester Creek. The Reserve has restored about 55-acres of wetlands since 1996 and is currently working with a diverse advisory team to finalize
plans to restore the Wasson watershed, a 530-acre area with forests and water channels. Targeted outcomes of the plan include reconnecting the floodplain hydrology; increasing habitat for Coho salmon and other important species; documenting, protecting, and increasing cultural resources; increasing the complexity of forests; and reestablishing native plants. Over the past year, the Reserve has obtained a $64,203 grant from U.S. Fish and Wildlife Service to begin this restoration work. Additionally, the Reserve has collaborated with federal, state, and Tribal experts in forestry, cultural resources, hydrology, and wildlife biology to assess tree stands and identify individualized strategies to support healthy forests.

In 2021, the Oregon Fish and Wildlife Commission reclassified the Marbled Murrelet from threatened to endangered. In response, Reserve staff have been looking for potentially suitable habitat for the Marbled Murrelet during 2021 forest surveys.

Finally, staff have been working with interns and volunteers to establish permanent forest plots to track changes in forest health and fire risk. This work is informing a fire risk assessment for Reserve-managed lands and the development of the South Slough Reserve Fire Management, Resiliency, and Response Plan, to be completed by spring 2022.

Education Program

The South Slough Reserve education programs continue to serve an array of audiences across Oregon. Despite myriad challenges related to the COVID-19 pandemic, the Reserve provided programming to school children, teachers, and adults, and families, both in-person and remotely throughout the year.

Summer Science Camps

During the summers of 2020 and 2021, the Reserve modified traditional summer science camps for children to meet safety guidelines. A total of 78 kids between the ages of 5-18 years participated in 1,298 hours of fun and learning. Most camps were offered in-person, with reduced numbers, physical distancing,
and face coverings. The camps focus on exploration of the natural world, so most activities took place outdoors.

This summer a digital character called Lou the Junior Researcher, created by the Reserve’s seasonal education specialist, joined the Reserve education team. Lou called in to the younger camps via Zoom every morning to give the kids a science challenge for the day. The children were delighted with their digital friend. Camps for older children connected them with research happening in the Reserve to provide hands-on opportunities to engage with Reserve scientists. This summer, high school students helped with the Reserve’s lamprey eDNA project and forest research plots, while the middle school camp explored the watershed through data collection.

“Thanks for another amazing camp. [My son] had the best time and wishes he could have spent more time with all of you. This was a huge highlight of his summer. Thanks for all you do for the kids!

“Thank you for putting on such a wonderful program. My two kids who chose to participate this year loved it. Their little sister who chose not to go now wishes she had. We are looking forward to next summer and all three kids hope to go.

Community Classes

The Reserve also offers community classes for general audiences. Classes were able to resume last fall following strict safety guidelines. Programs were all outdoors and limited to a maximum of six people. Popular in-person classes included Introduction to Crabbing and Estuary Kayaking. Programs were usually full, with a waiting list of participants eager to sign up. Virtual programming was also provided through Facebook Live, YouTube Live and Zoom. Tide of the Toddlers, a popular monthly program for children up to age five, was converted to a virtual platform where children could continue learning about plants and animals of the Reserve.
During FY 2021, South Slough Reserve increased the frequency of community classes offered from four to about ten classes per month to provide more safe, accessible programming for locals and visitors against the backdrop of COVID. Classes were hosted at various locations throughout the area, taking the Reserve’s offerings beyond its boundaries to serve community members where they were located. As a result of these efforts, a total of 657 adults and children were able to engage with more than 50 of the Reserve’s community classes and summer camps.

**Classroom Learning and Field Trips**

The formal education programs for K-12 students and teachers were most impacted by the pandemic. In-person programming was not permitted during the fall and winter of 2020. In response, the education team created an Introduction to Estuaries learning video and remained available as a ready resource for schoolteachers. There were four virtual programs presented to 376 students during this time—three for students enrolled in a course to learn English at Southwestern Oregon Community College, and another program presented through Oregon Connections during Oregon STEM Week. The Oregon STEM Week program engaged fifth through eighth grade students across the state, and even in other states, in lessons about careers at the Reserve.

In-person programs for schools began again in March 2021 and included watershed hikes at the Reserve and visits to local school yards by Reserve staff. These programs continued into the summer months, due to an influx of requests from schools who had received funding for summer programming. Since July 1, 2020, 36 school programs have served 534 students, a total of 1,499 learning hours.

**Training Science Educators**

Trainings for educators who teach science were offered remotely and in hybrid form. A remote winter workshop in partnership with the Oregon Natural Resources Education Program and the Southern Oregon Land Conservancy provided 50 hours of learning to 17 teachers from around the state. During the summer, 10 teachers participated in a hybrid in-person and virtual teacher training, a total of 180 learning hours over three days. Teachers involved in the programs learned about sea level rise, wildfire ecology and eelgrass habitats—lessons on climate change they can take back to the classroom.

During the spring, Reserve staff worked closely with two high school teachers from Lincoln County to create an in-depth lesson about the value of wetland ecosystems for self-led student learning. The lesson included an introductory video in English and Spanish created by a summer Hollings Scholar.
“The experiments we did with forest fires really visually just showed how fires spread and what helps slow them down.

“This was an amazing workshop! The facilitators and teachers were so knowledgeable and willing to help us take the information back to our students. It was wonderful.

Research and Monitoring Program

As part of the National Estuarine Research Reserve System (NERRS), South Slough Reserve serves as a dedicated site for scientific investigations and long-term monitoring that contribute data to enhance worldwide knowledge of estuary systems.

The Research and Monitoring Program at South Slough Reserve is focused on understanding estuarine and forest functions, processes, and ecological communities, as well links between watersheds, estuaries, and nearshore marine environments. The program’s goal is to provide science-based information that improves coastal zone and watershed management. The Reserve monitors and reports on long-term water quality and weather data. Additionally, staff, visiting researchers, and students examine water quality and climate change and work closely with staff from the Reserve’s Stewardship, Education, and Coastal Training programs to conduct applied research around invasive species and restoration of habitats and native species.

Much of this work is the product of invaluable collaborations with research partners. For a full list of partners, please see Appendix A.
Environmental Monitoring

The Reserve is a System-Wide Monitoring Program (SWMP) site, part of a nationally coordinated effort throughout the NERRS to track estuarine conditions within estuaries over time. SWMP monitoring sites measure water quality at five locations and meteorological conditions at a sixth site in the South Slough. Partnerships with the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians and the Coquille Indian Tribe, facilitate water quality monitoring at six additional locations in the Coos estuary. Data are made available to the public, often in real-time.

Since July 2020, multiple projects have used the data, including city and county land-use planners, Tribes, and state partners who are members of the Partnership for Coastal Watersheds (PCW) workgroup, to understand local hydrology. The Reserve is also currently working with University of Oregon researchers to build a hydrodynamic model that simulates the motion of water in the Coos and South Slough estuaries. The model is providing information about the salinity and movement of water through the bay and is currently being expanded to examine the movement of sediment throughout the system. Additionally, a graduate research student is using SWMP data to examine harmful algal blooms.

Climate Change

South Slough Reserve has continued to track the effects of climate change and understand factors that may reduce the rate of change. Five monitoring sites within the South Slough monitor the impacts of sea-level rise on marsh surface elevation change, groundwater elevation and salinity, and the resulting changes to vegetation as part of a NERRS-wide Sentinel Site program. Additionally, SWMP monitoring sites measure and report on changes in water temperature, air temperature, salinity, and pH levels.

The Reserve is currently involved in a collaborative research project with scientists across the Pacific Northwest to study blue carbon. Researchers involved are examining the capacity of estuaries to store carbon as well as the feasibility of funding restoration activities through carbon credits. Research partners include the University of Oregon and Oregon State University. The project is funded through grants from NOAA. Additionally, Research staff are involved in efforts to understand the social impacts of climate change, using flood vulnerability analyses to predict which buildings and public services are at risk from flooding as sea levels rise and storms become increasingly severe.

Invasive Species

Reserve staff have been monitoring invasive crab populations and behaviors, with a special interest in the predatory behavior and impacts of invasive species on coastal
habitats. Since 2002, staff have studied the distribution and recruitment patterns of European green crabs in the Coos estuary with the goal of understanding large-scale trends in abundance as part of a long-term research project led by Dr. Sylvia Yamada of Oregon State University. A report released December 2020 found green crabs are continuing to grow in abundance, with green crabs comprising an alarming 77 percent of crabs caught during an eight-month period. This has spurred additional research initiatives to monitor the impacts of green crabs on fisheries, other species, habitats and food webs, as well as continuing efforts to understand the source of population growth. Three graduate students and three undergraduate interns have used these data in research projects. The monitoring efforts also remove over 1,000 green crabs per year from the South Slough and Coos estuaries.

**Species Restoration**

Research and Stewardship staff are involved in multiple efforts to restore native species to the area. In 2016, the South Slough experienced a dramatic decline in eelgrass. Eelgrass beds are keystone habitats—providing food and shelter to fish, improving water quality, storing carbon, and helping to protect coastal systems and shorelines from storms. Volunteers and interns have assisted Reserve staff with efforts to understand factors contributing to eelgrass decline and mapping remaining eelgrass around the Reserve using drone technology. During the summer of 2020, Reserve staff began experimenting with transplanting eelgrass into plots around Valino Island in the South Slough estuary during different seasons. The areas are monitored quarterly and preliminary trends suggest that eelgrass planted at lower elevations may have higher density and cover.

The Reserve is leading a project funded by the NERRS Science Collaborative that compares the public perception of marsh restoration success with actual ecological success. This will help Reserve Education and Coastal Training Programs improve public outreach by better understanding what people value most about marsh restoration projects.

Staff are also assessing the potential to restore wetlands throughout the Coos estuary. The project identifies least-disturbed wetlands, restored wetlands, and wetlands that could benefit from restoration for use in land-use planning.

Finally, work is being done to protect and restore culturally important species, such as lamprey. The Reserve is leading a four-year project funded by the U.S. Forest Service that trains volunteers to collect water samples using environmental DNA (eDNA) analysis methods and map distributions of Pacific and western brook lamprey in watersheds along the southern coast of Oregon. Partners will use the resulting data to prioritize land for acquisition and restoration and to assess potential lamprey migration barriers.
Coastal Training Program

The Reserve’s Coastal Training Program (CTP) provides training and technical assistance to coastal and marine managers and scientists. Programs offered focus on developing understanding of the role of human activity in coastal environments and risk communication skills. Trainings also help participants identify useful tools and datasets.

During FY 2021, the Coastal Training Program offered five trainings attended by a total of 83 participants. Topics explored included cultural resource protections and tribal artifacts, guidance on how to host virtual meetings and available tools, and training on how to collect eDNA lamprey samples. Trainings were hosted in partnership with Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians; Coquille Indian Tribe; Confederated Tribes of Siletz Indians; Confederated Tribes of Grand Ronde; The Klamath Tribes; Confederated Tribes of Warm Springs; Cow Creek Band of Umpqua Tribe of Indians; the Burns Paiute Tribe; NOAA’s Digital Coast; and other NERR sites, like Padilla Bay.

The Coastal Training Program coordinator also conducted outreach to numerous partners to assess education needs and plan future instruction. These efforts have cumulated in a plan for future remote, in-person, and hybrid trainings.

Additionally, the CTP coordinator is working to develop a fee schedule to cover costs directly associated with trainings. Following discussions with CTP coordinators from other Reserves, the South Slough Reserve CTP coordinator is investigating budget friendly fee options that account for the impacts of COVID-19 on partner budgets, including implementing a sliding scale fee schedule.

Revenue and Spending

State funding for South Slough Reserve comes from the Common School Fund, which provides stable support for Reserve operations, programs, and services provided to Oregonians, as envisioned by the Legislature. This funding provides two critical benefits. First, it enables the Reserve to provide high-quality programming and services to diverse audiences at no cost. Second, the Reserve leverages CSF funding to bring in a significant amount of additional revenue: CSF funds provide match for its annual operations award from NOAA and for various competitive grants each year. For example, in FY 2021, the Reserve leveraged a total of $968,214 in non-CSF funds to support its water quality monitoring program, trail improvement projects, the acquisition of a key property at the entrance to the Visitor Center, and general operations. The Reserve also brings in
revenue every year from facility rentals and lodging, with its fee schedule designed to offset operation and maintenance costs for use of the facilities.

The percentage of funding leveraged by the Reserve varies from year to year depending on project needs, the federal budget, and grant opportunities. In FY 2021, Reserve revenue included $975,337.51 of leveraged funds, which accounted for 41 percent of its total revenue. This was a 1.63 percent increase from FY 2020, but considerably less than previous years. With the closure of Reserve facilities in FY 2021 due to the COVID-19 pandemic, project spending and revenue from rentals was significantly less than normal. Appendix B provides detailed information for Reserve revenue and spending in FY 2021 in comparison to prior years.
Appendix A

Research Partners

Tribal Partners
- Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians
- Coquille Indian Tribe
- Confederated Tribes of Siletz Indians

City and County Partners
- City and county land-use planners
- Coos County

State Partners
- Oregon Department of State Lands
- Oregon Department of Fish and Wildlife
- Oregon Department of Land Conservation and Development
- Oregon Department of Forestry
- Oregon Department of Transportation

Federal Partners
- U.S. Forest Service
- Bureau of Land Management
- National Oceanic and Atmospheric Administration

University Partners
- University of Oregon
- University of Oregon, Oregon Institute of Marine Biology
- University of Oregon, Institute for Policy Research and Engagement
- Oregon State University
- Portland State University
- University of California, Davis

Additional Partners
- Partnership for Coastal Watersheds
- Coos Watershed Association
- Wetlands Conservancy
- PEW Charitable Trusts
- National Estuarine Research Reserve System Science Collaborative
- Tenmile Lakes Basin Partnership
- Wild Rivers Land Trusts
- Pacific Marine and Estuarine Fish Habitat Partnership
Appendix B

Revenue and Spending by Fiscal Year

<table>
<thead>
<tr>
<th>Revenue</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common School Fund</td>
<td>$1,000,000.00</td>
<td>$1,250,000.00</td>
<td>$1,400,000.00</td>
</tr>
<tr>
<td>Leveraged funds*</td>
<td>$959,394.16</td>
<td>$813,611.22</td>
<td>$975,337.51</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$1,959,394.16</td>
<td>$2,063,611.22</td>
<td>$2,375,337.51</td>
</tr>
<tr>
<td>% Leveraged funds</td>
<td>48.96%</td>
<td>39.43%</td>
<td>41.06%</td>
</tr>
</tbody>
</table>

*Leveraged funds include the operations award received from NOAA, competitive grants, funding from The Friends of South Slough, Inc., and fees charged for rentals and permits.

<table>
<thead>
<tr>
<th>Spending</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages</td>
<td>$1,680,797.59</td>
<td>$1,853,322.35</td>
</tr>
<tr>
<td>Services and supplies</td>
<td>$377,981.96</td>
<td>$236,526.17</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td></td>
<td>$141,830.59</td>
</tr>
<tr>
<td>Total Spending</td>
<td>$2,058,779.55</td>
<td>$2,231,679.11</td>
</tr>
</tbody>
</table>
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INTRODUCTION

Established by the Oregon Constitution in 1859, the State Land Board oversees the Common School Fund, which sends tens of millions every year to Oregon’s K-12 public schools. The Land Board has been composed of the Governor, Secretary of State and State Treasurer throughout its history.

The Oregon Department of State Lands (Department) is the Land Board’s administrative agency, carrying out the day-to-day work of managing Common School Fund lands and resources, and protecting wetlands and waters.

The Department’s Aquatic Resources Management Program:

- **Manages the waters dedicated to the Common School Fund at statehood.** These waters include the submerged and submersible lands within the bed and banks of 12 Oregon rivers – all or segments of the John Day, Chetco, Columbia, Coos, Coquille, Klamath, McKenzie, Rogue, Sandy, Snake, Umpqua, and Willamette Rivers – as well as many lakes. Submerged and submersible lands also include tidally influenced bays and estuaries along the Pacific Ocean, and the Territorial Sea (waters and seabed to three miles offshore the Pacific coastline). The Department oversees use of state-owned submerged and submersible land, managing applications and authorizations for waterway leases, easements, boat docks and boat house registrations, public facility licenses, sand and gravel operations, and special uses.

- **Protects the state’s waterways and wetlands through administration of Oregon’s Removal-Fill Law.** The Removal-Fill Law was enacted in 1967 to conserve, restore and protect water resources for their contribution to aquatic life and habitats, fisheries, aquatic-based economies, tourism, public recreation, navigation, water quality, floodwater storage, and other natural resource functions.

This report provides information regarding management of state-owned waterways and fulfills the annual report requirement in the state’s Removal-Fill Law (Oregon Revised Statutes (ORS) 196.885). This report covers Fiscal Year (FY) 2021: July 1, 2021, through June 30, 2021.
SECTION 1: STATE WATERWAYS

STATE-OWNED WATERWAYS
Upon becoming a state, the State of Oregon acquired ownership of all submerged and submersible land underlying navigable waterways, waterways affected by tidal action, and the Territorial Sea (waters and seabed extending three geographical miles seaward from the Pacific coastline). The state also owns the submerged and submersible land underlying meandered lakes within its borders.

Since Statehood, other water bodies have been determined to be navigable, and therefore state-owned, through legislative, judicial, or administrative proceedings. These navigable waters include rivers, lakes, and tidally influenced waters. For further information, including lists of rivers and lakes that have been determined navigable, please visit the Department’s State-Owned Waterways web page.

Uses of a State-Owned Waterway
The people of Oregon own the state’s submerged and submersible land; the Department is responsible for management of these publicly owned lands. The public has rights to use the beds and banks of navigable waterways for boating, fishing, swimming, and any other legal activity.

The following uses of state-owned submerged and submersible lands typically require an authorization from the Department:

- Houseboats
- Boat ramps
- Docks, floats and wharfs
- Marinas and moorages
- Marine industrial facilities
- Bridges
- Utilities and pipeline crossings
- Sand and gravel operations
- Remedial cleanups
- Non-water dependent commercial uses (restaurants, for example)
- Pilings, mooring buoys, voluntary habitat restoration, revetments, attenuations, retaining walls, rip rap, and tide-gates

Authorization types include leases, licenses, easements, registrations, and short-term access agreements. Common authorizations and associated uses include:

- **Lease**: Uses that are generally longer term and are either water or non-water dependent.
- **Public Facilities License**: Publicly owned structures and uses such as boat ramps, docks, fishing and swimming platforms, viewing structures, and navigation aids.
- **Registrations**: Non-commercial uses and smaller structures such as boat docks, float or small boat houses (under 2,500 square feet), or floating
recreational cabins (under 1,500 square feet), pilings, erosion control structures and voluntary habitat restorations.

- **Easements**: Required for long-term or permanent structures and uses on state-owned land. Types of uses include bridge and utility line crossings, erosion control structures and dredge spoils.
- **Remedial Activity**: All environmental remediation and restoration activities proposed on state-owned lands require an authorization. This includes access authorizations for individual or regular sampling and leases and easements for long-term environmental dredging or the placement of a sediment cap.

**STATE-OWNED WATERWAY AUTHORIZATIONS**

The Department manages over 5,000 authorizations for a variety of uses, as defined above, on state-owned submerged and submersible land (Table 1). Prior to the COVID-19 pandemic, applications for use of state-owned submerged and submersible land were accepted only by mail. Electronic applications were not accepted, except for renewals for registration of waterway structures which has been available online since 2017. As the DSL Salem office was closed to the public for the duration of FY 2021, the Department began accepting applications and fees for all types of waterway authorizations electronically, while also continuing to accept applications by mail. The Department converted to electronic files for new and renewing authorizations during FY 2021, improving staff access to files and records. The Department continues to improve electronic application processes to enhance customer service and reduce processing times.

**Table 1. Active Waterway Authorizations by Type**

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>As of June 30, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facility License Waterway (WW)</td>
<td>223</td>
</tr>
<tr>
<td>Easements WW</td>
<td>1,218</td>
</tr>
<tr>
<td>Registration of Waterway Structures</td>
<td>2,930</td>
</tr>
<tr>
<td>Waterway Lease</td>
<td>499</td>
</tr>
<tr>
<td>Sand &amp; Gravel WW</td>
<td>16</td>
</tr>
<tr>
<td>Short Term Access Authorization</td>
<td>96</td>
</tr>
<tr>
<td>Special Use License/Permit</td>
<td>73</td>
</tr>
<tr>
<td>Special Use Lease</td>
<td>17</td>
</tr>
<tr>
<td>Temporary Use Permit WW</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,077</strong></td>
</tr>
</tbody>
</table>

New waterway authorizations are down from the previous fiscal year, but in line with the 5-year average (Table 2). Staff have diligently worked to ensure docks and other structures are authorized and in compliance with state requirements. Staff have also focused on pursuing easements for existing uses that never applied for or received authorization, as well as for new uses.
Table 2. New Waterway Authorizations by Type

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>5-Year Total</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facility License WW</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Easements WW</td>
<td>27</td>
<td>32</td>
<td>20</td>
<td>19</td>
<td>16</td>
<td>114</td>
<td>23</td>
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<tr>
<td>Registration of Waterway Structures</td>
<td>27</td>
<td>13</td>
<td>82</td>
<td>44</td>
<td>15</td>
<td>181</td>
<td>36</td>
</tr>
<tr>
<td>Waterway Lease</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Sand &amp; Gravel WW</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Short Term Access Authorization</td>
<td>30</td>
<td>34</td>
<td>37</td>
<td>38</td>
<td>42</td>
<td>181</td>
<td>36</td>
</tr>
<tr>
<td>Special Use License/Permit</td>
<td>2</td>
<td>0</td>
<td>17</td>
<td>19</td>
<td>13</td>
<td>51</td>
<td>10</td>
</tr>
<tr>
<td>Special Use Lease</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Temporary Use Permit WW</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>93</strong></td>
<td><strong>86</strong></td>
<td><strong>166</strong></td>
<td><strong>127</strong></td>
<td><strong>91</strong></td>
<td><strong>563</strong></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>

Table 3 captures trends for renewal of waterway authorizations. Most notable is the high number of renewals for registration of waterway structures in FY 2021. The Department’s online renewal process, implemented in FY 2017, allows the public to renew and pay for their registration with only a few clicks online. This has improved customer service and reduced Department processing time. The high number of renewals over the past several years continues to demonstrate the effectiveness of the online renewal process.

Table 3. Renewed Waterway Authorizations by Type

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>5-Year Total</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facility License WW</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td>Easements WW</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Registration of Waterway Structures</td>
<td>390</td>
<td>331</td>
<td>557</td>
<td>776</td>
<td>412</td>
<td>2,466</td>
<td>493</td>
</tr>
<tr>
<td>Waterway Lease</td>
<td>55</td>
<td>20</td>
<td>25</td>
<td>15</td>
<td>20</td>
<td>135</td>
<td>27</td>
</tr>
<tr>
<td>Sand &amp; Gravel WW</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Short Term Access Authorization</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Special Use License/Permit</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Special Use Lease</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Temporary Use Permit WW</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>471</strong></td>
<td><strong>373</strong></td>
<td><strong>604</strong></td>
<td><strong>805</strong></td>
<td><strong>438</strong></td>
<td><strong>2,691</strong></td>
<td><strong>538</strong></td>
</tr>
</tbody>
</table>

Revenue for FY 2021 is $3.7 million (Table 4) with Easements and Waterway Leases continuing to provide the highest amount of revenue. Easement revenue fluctuates depending on the number of easements authorized and their associated land values, and the type of fees assessed. For example, in FY 2020 there was a spike in easement revenue, primarily from seven easements ($933,000) in Multnomah County where land values are higher. Easement revenue in FY 2021 was still high relative to FY 2018 and
FY 2019 and included a fee for damages related to a Territorial Sea easement ($250,000) and authorization of a cable easement in Portland ($330,000).

Revenue from Sand and Gravel authorizations is primarily from royalty payments based on the volume of material extracted. Revenue from Sand and Gravel authorizations increased after an unusually low revenue year in FY 2020, which could reflect general trends of increased activity in construction and housing sectors.

A noteworthy increase in revenue for Short Term Access Authorizations is a result of increased environmental remediation and restoration activities proposed on state-owned lands. Though some types of authorizations for restoration projects do not have application fees, environmental remediation and restoration activities being conducted due to an Environmental Protection Agency (EPA) or Oregon Department of Environmental Quality (DEQ) order are subject to application fees.

Table 4. Gross Waterway Revenue Received by the Department

<table>
<thead>
<tr>
<th>Agency Object Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facility License WW</td>
<td>$9,000</td>
<td>$7,125</td>
<td>$4,750</td>
<td>$2,250</td>
</tr>
<tr>
<td>Easements- WW</td>
<td>$177,300</td>
<td>$718,136</td>
<td>$1,323,103</td>
<td>$868,134</td>
</tr>
<tr>
<td>Registration of Waterway Structures</td>
<td>$119,590</td>
<td>$204,320</td>
<td>$235,078</td>
<td>$170,345</td>
</tr>
<tr>
<td>Waterway Lease</td>
<td>$2,182,514</td>
<td>$2,070,827</td>
<td>$2,747,035</td>
<td>$2,248,251</td>
</tr>
<tr>
<td>Sand &amp; Gravel WW</td>
<td>$521,478</td>
<td>$578,205</td>
<td>$275,608</td>
<td>$343,756</td>
</tr>
<tr>
<td>Short Term Access Authorization</td>
<td>$1,000</td>
<td>$1,625</td>
<td>$2,750</td>
<td>$11,250</td>
</tr>
<tr>
<td>Special Use License/Permit</td>
<td>$0</td>
<td>$6,080</td>
<td>$8,194</td>
<td>$9,790</td>
</tr>
<tr>
<td>Special Use Lease</td>
<td>$74,058</td>
<td>$23,094</td>
<td>$45,224</td>
<td>$51,140</td>
</tr>
<tr>
<td><strong>Totals (rounded)</strong></td>
<td><strong>$3,084,940</strong></td>
<td><strong>$3,609,412</strong></td>
<td><strong>$4,641,742</strong></td>
<td><strong>$3,704,917</strong></td>
</tr>
</tbody>
</table>

Table 5 forecasts waterway authorizations scheduled for renewal in the upcoming year.

Table 5. Future Renewing Waterway Authorizations by Type

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Facility License WW</td>
<td>7</td>
</tr>
<tr>
<td>Easements WW</td>
<td>6</td>
</tr>
<tr>
<td>Registration of Waterway Structures</td>
<td>455</td>
</tr>
<tr>
<td>Waterway Lease</td>
<td>33</td>
</tr>
<tr>
<td>Sand &amp; Gravel WW</td>
<td>4</td>
</tr>
<tr>
<td>Short Term Access Authorization</td>
<td>27</td>
</tr>
<tr>
<td>Special Use License/Permit</td>
<td>7</td>
</tr>
<tr>
<td>Special Use Lease</td>
<td>1</td>
</tr>
<tr>
<td>Temporary Use Permit WW</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>540</strong></td>
</tr>
</tbody>
</table>
SUBMERGED LANDS ENHANCEMENT FUND
The Submerged Lands Enhancement Fund makes grants available for projects that enhance, improve, or protect the banks of state-owned waterways. The Department did not fund any projects for FY 2021 due to the COVID-19 pandemic. Department staff heard from partners that field visits would be too difficult given non-essential travel restrictions, childcare obligations, and uncertain budgets. The Department intends to promote funding opportunities for the 2021-2023 biennium in the hopes that any necessary field work, contracting, and project planning by applicants is now possible and will allow for a competitive proposal solicitation.

ABANDONED AND DERELICT VESSELS AND LONG-TERM CAMPING
The Department has witnessed an increase in the frequency of abandoned and derelict vessels and unauthorized long-term camping on state-owned lands in recent years, resulting in increased demand on Department resources. A limited duration Outreach and Compliance Coordinator position was added in July 2020 to work on these issues. In FY 2021, the coordinator worked with government and community partners on vessel removals and camp cleanups. Work is often completed through management agreements, which support the Department in managing state-owned lands experiencing heavy use. The Department spent $97,967 on cleanup activities during FY 2021, including vessel removal and camp cleanups.

In the wake of the COVID-19 pandemic, complaints increased regarding camping on or adjacent to state-owned lands, leaving the Department with a difficult path forward to find solutions to situations involving the unhoused. The Department followed CDC guidance, which discourages the relocation of unhoused individuals to limit the transmission of COVID-19. However, the observed effects on state-owned lands from long-term camping has been significant. Major concerns include the accumulation of trash, debris, and human waste, the potentially devastating damage that can be caused by fires during the dry season, restriction or loss of public access, and illegal activities occurring at camps. To keep up with this growing social dilemma in the Portland metropolitan area, the Department has agreements with METRO Regional Government, Multnomah County Sheriff’s Office, and the Oregon Parks and Recreation Department to continue our partner-based approach in finding a sustainable and compassionate path forward.

Public land is often the last space available to unhoused individuals. Enforcement options are limited due to a lack of local alternative housing options. Currently, the Department is unable to identify alternative spaces for houseless individuals; instead, the Department and its community partners have begun looking into alternative methods to manage the impacts of long-term camping on state-owned lands until alternative housing options are available and accessible. For example, the Department continues to work with an established houseless community at the Sandy River Delta near Portland where, after months of relationship building, residents are safeguarding against fires and bringing garbage to biweekly pickup locations facilitated by Metro Regional Government and the Multnomah County Sheriff’s Office HOPE team. This
collaborative relationship has greatly reduced the impacts of long-term camping on public land and has been pivotal in the Department’s management approach in this location. The Outreach and Compliance Coordinator regularly takes part in coordinated outreach efforts regarding resources and services, and site cleanups, at Sandy River Delta and other areas with houseless communities. Through these efforts, 61 tons of solid and hazardous waste were removed from state-owned lands in FY 2021 in the Portland Metro Area.

There has also been a noticeable increase in the use of abandoned and derelict vessels for shelter. The Department continues to work closely with the Oregon State Marine Board (OSMB) on vessel complaints and was successful in removing 16 vessels in FY 2021, 10 of them in coordination with the OSMB. Vessel removal projects can be time-consuming and take multiple site visits to coordinate due to rapidly changing circumstances, such as the location of the vessel and waterway conditions. To streamline the removal of vessels, the Department has entered into a price agreement with nine different marine contractors. The price agreement will allow the Department to request bids and approve work more quickly, resulting in a more efficient service procurement process and reducing the need for multiple site visits to assess site conditions. The Outreach and Compliance Coordinator has reconvened the Metro Abandoned and Derelict Vessel working group to bring together stakeholders in the area where abandoned and derelict vessels, and use of those vessels for shelter, is most prevalent. This is an open quarterly meeting that provides an opportunity for exchanging information with partners and interested parties, and working together toward solutions.

RULEMAKING
Rules Governing the Establishment of Restrictions on the Public Recreational Use of State-Owned Land
Rulemaking efforts related to public recreational uses on state-owned land seek to protect against: (1) loss of, or damage to property; (2) loss of, or damage to natural resources and the environment; (3) degradation of water quality; and (4) loss of, or damage to riparian vegetation and wildlife habitat.

In August 2019, the Department implemented an emergency closure on the banks of the Columbia River between river miles 102 to 106 and 120 to 121, and along the Oregon Slough between river miles 0 to 2.5 to public recreational use, including campsites, on state-owned land. “Campsite” is defined as any place where any bedding, sleeping bag or other material used for bedding purposes, or any stove is placed, established, or maintained for the purpose of maintaining a temporary place to live, whether such a place incorporates the use of any tent, lean-to, shack, or any other structure. The Department initiated rulemaking to make this closure permanent at the October 2019 Land Board Meeting and held one Rules Advisory Committee (RAC) meeting on May 13, 2020. A public hearing regarding the potential closure was held on June 17, 2020, and had two people in attendance; no public testimony was provided. The State Land Board approved the closure at the August 2020 meeting; the effective
date for the permanent closure was September 21, 2020.

**Rules Governing Special Use Authorizations**
As part of the broader update to Division 125, Special Use Authorizations, the State Land Board approved the initiation of this rulemaking at the February 2021 meeting. The Special Use rules relating to communications facilities on state-owned land will be moved to Division 126 and updated to implement rate study results, create a structure and fees to address co-location of multiple communication services at a site, and incorporate industry best practices. A RAC is convening to assist with the rulemaking process and the rulemaking team has already engaged in Government-to-Government Consultation with the Klamath Tribes and met with the Confederated Tribes of Grand Ronde in May 2021.

**AGREEMENTS FOR MANAGEMENT OF CERTAIN STATE LANDS**
The Department is currently party to the following agreements:

- Inter-Governmental Agreement (IGA) with the Multnomah County Sheriff’s Office – Assistance with monitoring of state-owned waterways in Multnomah County, $10,000 per biennium.
- IGA with Lane County Parks – Management of the North Jetty Property at the mouth of the Siuslaw River in Lane County, $42,000 per Biennium.
- Memorandum of Agreement with Oregon Parks and Recreation Department (OPRD) – Management of State-owned property adjacent to Alfred A. Loeb State Park in Curry County on the Chetco River.
- Inter-Agency Agreement with OPRD – Monitoring and cleaning up property owned by the Department along the Sandy River on or near Dabney State Park and Lewis and Clark State Recreation Site, $27,621 per biennium.
- Memorandum of Understanding (MOU) with U.S Fish and Wildlife Service and Clatsop County – Communication, coordination, and compliance regarding the floating recreational cabins, houseboats, boathouses, docks, or floats located adjacent to lands within the Lewis and Clark National Wildlife Refuge.
- IGA with the Oregon Department of Fish and Wildlife – Management of state-owned lands within Sauvie Island in Multnomah and Columbia Counties.
- MOU with Human Access Project – Restoration and stewardship of DSL lands along the Willamette River.
- IGA with Metro Regional Government – Assistance with cleanup of illegal camps on state-owned lands in the Portland Metro area, $10,000 per fiscal year.
- IGA with the City of Eugene – Assistance with cleanup of illegal camps on state-owned lands in the Eugene area, $15,000 per fiscal year.
- MOU with Willamette Riverkeepers – Assistance with cleanup of illegal camps, as well as the restoration and stewardship of Department owned lands along the Willamette River.
- MOU with SOLVE – Assistance with cleanup of illegal camps.
PORTLAND HARBOR SUPERFUND SITE
The Department continues to engage with public partners and other stakeholders on various aspects of the Portland Harbor Superfund Site on the Willamette River. During FY 2021 the Department engaged in the following activities:

- Processed applications for conducting sediment sampling on state-owned submerged and submersible lands and for other activities directly and indirectly related to response actions and cleanup on submerged and submersible lands.
- Coordinated with public agencies (including EPA, ODOT, DEQ, and the Oregon Health Authority), the Governor’s Office, and others on issues associated with investigation, cleanup, and other issues.
- Refined and developed procedures, guidance, and other materials for authorizing remediation activities on state-owned lands, while planning for future outreach to stakeholders.
- Continued work to clarify the state’s ownership boundaries within the Portland Harbor Superfund Site and supported Department of Justice work related to the non-judicial allocation of Portland Harbor response costs, including reviewing technical information and materials and researching and providing program information.
- Participated in public entity partnership efforts including the Portland Harbor Remedial Design Trust, Willamette Cove Remedial Design, an Institutional Control Implementation and Assurance Plan, an Information Management Plan, and the Portland Harbor Interim Database.
- Entered into a settlement agreement with the EPA as a funding source for the Swan Island Basin Remedial Design.
SECTION 2: REMOVAL-FILL PROGRAM

REMOVAL-FILL PERMITS
Oregon’s Removal-Fill Law (ORS 196.795-990) requires people who plan to remove or fill material in wetlands or waterways to obtain a permit from the Department. This permit is broadly referred to as the “Removal-Fill Permit.” The law applies to all landowners, whether private individuals or public agencies.

The purpose of the law, enacted in 1967, is to ensure protection and the best use of Oregon’s water resources for home, commercial, wildlife habitat, public navigation, fishing and recreational uses.

In most cases, a permit is required if an activity will involve filling or removing 50 cubic yards or more of material in a wetland or waterway. For activities in state-designated Essential Salmonid Habitat, State Scenic Waterways and compensatory mitigation sites, a permit is required for any amount of removal or fill.

There are four types of permits available to conduct work in wetlands and waterways:

Individual Permits (IP): A permit for projects that have more than minimal adverse effects to waterways and wetlands, are more complicated and often involve more than one removal-fill activity, may involve a substantial mitigation obligation, and do not qualify for any of the General Permits or General Authorizations. The processing timeline is up to 120 days.

General Permits (GP): A streamlined permit covering activities substantially similar in nature, recurring or ongoing, and have predictable effects and outcomes. A GP may be established by order or by rule. GPs issued by rule may be on a statewide basis or a geographic basis. GPs issued by order are for an applicant or group of applicants. The processing timeline is up to 40 days for most GPs.

General Authorizations (GA): A streamlined permit for nine specific types of removal-fill activities that have minimal adverse effects on wetlands and waterways. General Authorizations are pre-approved but require a 30-day notice to the Department prior to the removal-fill activity.

Emergency Permits (EP): Authorizations for emergencies that pose a direct threat to human health, safety or substantial property, and where prompt removal-fill action is required to address the threat. Approval is given as quickly as possible in emergency situations. Work must be limited to the minimum necessary to alleviate the threat.

Table 6 shows permit activity in FY 2021, with the Department seeing an increase for all permit types. The increased number of permits issued is somewhat surprising considering the tumultuous fiscal year, but seems to reflect active project development despite the pandemic. The trend of increased GA and GP authorizations continues from last year. Emergency Permits are unique in that they are generally driven by
weather events rather than the economy. Information about authorizations approved in state-designated Essential Salmonid Habitat (ESH) is provided separately in Table 6 as required by ORS 196.885.

Table 6. Removal-Fill Authorizations by Type

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Applications Received</th>
<th>Approved</th>
<th>Denied</th>
<th>Total Decisions</th>
<th>Approved in ESH (of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>193</td>
<td>377</td>
<td>0</td>
<td>377</td>
<td>145</td>
</tr>
<tr>
<td>GA</td>
<td>117</td>
<td>113</td>
<td>0</td>
<td>113</td>
<td>90</td>
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<tr>
<td>GP</td>
<td>51</td>
<td>87</td>
<td>0</td>
<td>87</td>
<td>19</td>
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<tr>
<td>EP</td>
<td>39</td>
<td>38</td>
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<td>38</td>
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<tr>
<td>Totals</td>
<td>400</td>
<td>615</td>
<td>0</td>
<td>615</td>
<td>276</td>
</tr>
</tbody>
</table>

One GP of particular interest is the Bureau of Land Management/U.S. Forest Service general permit, which is issued by order and is represented in Table 6 as one authorization. However, this GP authorizes projects that fall within 11 aquatic restoration activities, with BLM and USFS required to provide DSL with notice of specific projects. In FY 2021 there were 59 projects constructed under that authorization, with 81 notifications of projects in the fiscal year.

ESSENTIAL SALMONID HABITAT (ESH)
The Department’s essential salmonid habitat (ESH) requirements were established by the 1993 Legislative Assembly and fully implemented by the Department in 1996.

Oregon provides greater protection for streams that provide critical habitat for Chinook salmon, steelhead trout, and other sensitive, threatened, or endangered fish species. Projects that remove or add any volume of material in ESH streams typically require a Department of State Lands removal-fill permit; in most non-ESH waters, projects that remove less than 50 cubic yards of material do not require a removal-fill permit.

Using data provided by the Oregon Department of Fish and Wildlife, the Department creates the map that shows all ESH designations for Oregon’s waterways. Through rulemaking that became effective on May 14, 2021, the Department adopted the 2021 ESH map and created a process to update the map as often as yearly through a process that includes a public review and comment period.

Table 6 and Table 7 include the subset of permits issued for work in ESH waters.

AUTHORIZED VOLUMES OF REMOVAL AND FILL
Table 7 shows total volumes (in cubic yards) of material permitted to be removed and filled in waterways and wetlands by authorization type. Figure 1 depicts the location of the authorized removal-fill activities. It is important to note the total volume authorized
each year will always be more than the actual volume removed or filled. Many projects take several years to complete, but the permit is granted for the total amount and kept active each year. There are significant volumes permitted for some activities, particularly maintenance dredging, that occur on an as-needed basis, but are kept active, some of them for decades.

Table 7. Removal-Fill Authorized Volumes (cubic yards) for FY 2021

<table>
<thead>
<tr>
<th>Auth Type</th>
<th>Total Removal Volume</th>
<th>Total Fill Volume</th>
<th>Removal Volume in ESH (of total)</th>
<th>Fill Volume in ESH (of total)</th>
<th>Removal Volume in Wetlands (of total)</th>
<th>Fill Volume in Wetlands (of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>15,817,414</td>
<td>3,568,383</td>
<td>654,479</td>
<td>752,856</td>
<td>12,689,438</td>
<td>1,089,030</td>
</tr>
<tr>
<td>GA</td>
<td>5,813</td>
<td>5,335</td>
<td>3,408</td>
<td>1,991</td>
<td>397</td>
<td>396</td>
</tr>
<tr>
<td>GP</td>
<td>394,168</td>
<td>111,161</td>
<td>338,698</td>
<td>66,217</td>
<td>11,560</td>
<td>21,897</td>
</tr>
<tr>
<td>EP</td>
<td>9,339</td>
<td>9,685</td>
<td>8,690</td>
<td>9,051</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>16,226,733</td>
<td>3,694,563</td>
<td>1,005,275</td>
<td>830,115</td>
<td>12,701,394</td>
<td>1,111,322</td>
</tr>
</tbody>
</table>

Table 8 shows the number of acres of wetlands authorized to be removed from the landscape or gained through creation or restoration. The net gain or loss of acres is a meaningful measurement for wetlands but is not useful for waterways. Wetlands can be removed from the landscape entirely, whereas streams can be improved or degraded, but they generally are not removed from the landscape.

The Department’s goal is no net loss of wetlands — wetland acres gained through creation or restoration (including from mitigation banks) should equal wetland acres lost. In FY 2021 there was a net loss of 13.26 acres of wetland from authorized activities. Losses are compensated for in each removal-fill authorization and often include purchase of mitigation bank credits or payment to the Department through our in-lieu fee programs described in Section 3. Gains from mitigation banks and other Department-funded mitigation projects are recorded in the fiscal year that they are approved. No new banks or in-lieu funded projects were approved in FY 2021. Over the previous five years, wetland gains have outpaced authorized wetland losses mainly due to a few larger voluntary restoration projects and approval of new mitigation banks.

Table 8. Authorized Gains and Losses in Wetlands for FY 2021

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Wetland Acres Gained</th>
<th>Wetland Acres Lost</th>
<th>Net Wetland Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>132.05</td>
<td>157.72</td>
<td>-25.67</td>
</tr>
<tr>
<td>GA</td>
<td>15.00</td>
<td>0.02</td>
<td>14.98</td>
</tr>
<tr>
<td>GP</td>
<td>0.27</td>
<td>2.84</td>
<td>-2.57</td>
</tr>
<tr>
<td>EP</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Totals</td>
<td>147.32</td>
<td>160.58</td>
<td>-13.26</td>
</tr>
</tbody>
</table>
Figure 1. Location of Authorized Removal-Fill Activities for FY 2021
NEW LEGISLATION AND LEGISLATIVE ACTIVITIES

Regulation of Undersea Cables
House Bill 2603, enacted by the 2021 Legislative Assembly, requires owners or operators of undersea cables to obtain financial assurances for the installation and removal of cables placed in Oregon’s Territorial Sea. Those responsible parties must also create a plan for removal of the cable after its use has concluded. These additional requirements will be implemented through the Department’s proprietary authorizations under ORS 274.

This bill also directs the Department of Land Conservation and Development, in coordination with DSL, to conduct a study of the permitting and siting of undersea cables. Results of the study will be reported to the Ocean Policy Advisory Council, which will develop recommendations for amendments to Oregon’s Territorial Sea Plan by September 25, 2023.

Environmental Restoration Weirs
House Bill 2298, enacted by the 2021 Legislative Assembly, directs the Department of Fish and Wildlife to administer a program for authorizing voluntary stream restoration projects and habitat improvement through construction of environmental restoration weirs in any closed basin.

The Department of Fish and Wildlife will adopt program rules for the covered restoration activities; these activities will no longer be regulated by DSL under Oregon’s Removal-Fill Law.

Claims Against Dissolved Business Entities
House Bill 2377, enacted by the 2021 Legislative Assembly, allows claims against insurance assets of dissolved business entities, notwithstanding certain time limitations that otherwise would bar claims. This bill helps support the Department’s efforts in the cleanup of the Portland Harbor Superfund Site by allowing a path forward to hold Potentially Responsible Parties (PRP) financially accountable if insurance policies existed, even if the specific business entity has dissolved.

Agricultural Channel Maintenance
House Bill 2437, enacted by the 2019 Legislative Assembly, directed the Department of State Lands, Oregon Department of Agriculture (ODA) and Oregon Department of Fish and Wildlife to work together to develop an ODA-led process for reviewing removal-fill activities in traditionally maintained agricultural drainage channels that are not designated Essential Salmonid Habitat and are seasonally dry. The agencies have continued work in FY 2021 to develop a memorandum of understanding, which should be completed in Fall 2021, to coordinate on various forms and processes, and to provide technical assistance as requested.

Since the passage of HB 2437, stakeholders identified additional clarification needed to support the intent and success of the newly established process. Several bills providing such clarification were enacted during the 2021 Regular Legislative Session:
• House Bill 2032 allows for the implementation of HB 2437 (2019) on a regional basis, which will allow for capacity building and adaptive management by ODA as the statewide program is implemented.

• House Bill 3185 clarifies the spreading of material from agricultural channel maintenance activities in undisturbed wetlands is prohibited. The Department may need to conduct rulemaking to further define “undisturbed wetland.”

**Partial 404 Assumption**

House Bill 2436, also enacted by the 2019 Legislative Assembly, directed the Department to develop recommendations, including proposed legislation for the 2020 Legislature, to proceed with partial assumption of the federal Clean Water Act 404 dredge and fill program currently administered by the U.S. Army Corp of Engineers (Corps).

Partial 404 assumption as envisioned by the 2019 Legislative Assembly would apply to “development activities” within urban growth boundaries, mining and activities associated with mining, and the creation of mitigation banks. Farming, ranching, and forestry activities are specifically excluded from the list of development activities included in the direction to explore partial 404 assumption (DSL would not assume authority and existing permitting processes would remain in effect for those activities).

DSL’s key accomplishments during FY 2021 and as of the writing of this report include the following:

• Continued collaboration with other state agencies, federal agencies, and Tribes with a role in implementing 404 assumption, including DEQ, Oregon Department of Land Conservation and Development, Oregon Department of Fish and Wildlife, Oregon Department of Geology and Mineral Industries, Corps, Oregon federally recognized Tribes; and the EPA.

• Continued communication with the DSL 404 Assumption Initiative Workgroup. The workgroup is comprised of over 100 members representing state, local and federal agencies, mining, private development, farmers, forestry, irrigators, wetland consultants and mitigation bankers, public utilities, public interest and conservation organizations, and Oregon tribes and tribal organizations.

• Updated the comprehensive 404 assumption webpage with all meeting notes, resources, references, and the GIS map of assumable waters in Oregon.

• Continued participation in a nationwide discussion on 404 assumption via the Association of State Wetland Managers monthly meetings.

• Presented nationwide webinars on 404 assumption via the Association of State Wetland Managers.

The EPA’s rules and policies regarding 404 assumption have not been finalized. It remains unknown whether partial 404 assumption as envisioned by the Oregon Legislature will be allowable. Due to uncertainty at the federal level, the Department was not able to make policy recommendations to the 2020 Oregon Legislature. The
Department did submit and present a report to the House Interim Committee on Agriculture and Land Use during December 2020 Legislative Days.

The report detailed the Department’s efforts to explore partial 404 assumption, including working group feedback, and outlined issues that remain unresolved. The report included resources that would be required to continue the Department’s 404 assumption efforts and to implement a proposed program.

No additional direction was given by the 2021 Legislative Assembly to support the continued efforts of partial 404 assumption.

WETLANDS RESOURCES AND ASSISTANCE FOR COMMUNITIES

Statewide Wetlands Inventory

The Department is responsible for developing, maintaining, and distributing the Statewide Wetlands Inventory (SWI) as a tool to help communities identify and protect wetlands. The SWI currently includes the National Wetlands Inventory developed by the U.S. Fish and Wildlife Service, local wetlands inventories (LWIs) that cover many urban and urbanizing areas in Oregon, and other mapping that indicates potential locations of wetlands and other waters.

The Department has obtained and applied for additional EPA Wetland Program Development grants to add Department-approved wetland mapping to the SWI, including wetland delineations, determinations and compensatory mitigation sites.

Outreach for the initial release of the SWI update and web map began in 2018 and is ongoing. The Department’s Aquatic Resource Planner gave two in-person trainings for multiple jurisdictions in FY 2021 in conjunction with LWI development trainings for individual cities.

Local Wetlands Inventories

Local wetland inventories (LWIs) have much more detailed and accurate mapping than the National Wetlands Inventory. LWIs are used by cities and counties for planning purposes and they provide more accurate wetland location information for the public, landowners, and developers. In FY 2021, the Department provided continued support and draft review for inventories in progress in Dallas, Grants Pass, Hillsboro, Springfield, and Tigard, and approved Pendleton’s LWI. This fiscal year the Department also added 91 newly standardized and digitized LWIs to our web site for free download by planners, consultants, and the public; these will be added to the SWI in the future.

As part of achieving Oregon’s land use planning goals, cities and counties identify wetlands of local significance in an LWI. DSL staff have been leading an effort to develop a new wetland functional assessment method for this purpose for several years with assistance from the Lane Council of Governments. The Department’s Aquatic Resource Planner continues to work with Lane Council of Governments to finalize products for consultants and planners and determine how to best integrate the new
assessment method into state rule.

**Outreach**
Outreach and presentations about the SWI, the process for counties and cities to notify the Department of potential development in or near wetlands (wetland land use notices), regulations, and participation in long-range wetland planning efforts is a significant part of the Aquatic Resource Planner's position.

Much of the outreach with county and city representatives in FY 2021 was related to general notices for local land use actions. In FY 2021 there were 945 general notices received from 29 counties, 36 cities and 9 other federal, state, and non-governmental organizations regarding proposed activities. Notices are reviewed for outreach about the wetland land use notice process and long-range planning recommendation opportunities, as well as by Real Property Program staff for potential concerns on state-owned property. *Please see page 23 for additional information about the wetland land use notification process and FY 2021 data.*

**Wetland Conservation Plans and Advance Aquatic Resource Plans**
Wetland Conservation Plans (WCP) were developed as a method for local governments and communities to make long-range plans for development, mitigation and protection of wetlands identified on LWIs. WCPs are approved by final order of the Director and include local land use planning decisions. To date, west Eugene has the only WCP, which was approved in 1994.

Advance Aquatic Resource Plan (AARP) are similar in many ways to WCPs. Wetlands and waters are identified, functional assessments completed, and decisions are made regarding the best use of each wetland; then the plan is approved by final order of the Director. AARPs differ from WCPs because the plan is not a land use decision; the plan area is determined by the participants, and both the landowners and future developers voluntarily agree, or not, to the conditions of the plan. If the participant chooses to comply with the terms of the AARP, then the removal-fill permitting process is streamlined as outlined in the plan.

Two AARPs have been approved. The first, for 19 selected industrial sites in Linn and Benton Counties, was sponsored by the Oregon Cascades West Consortium and approved in October 2015; the plan expired in April 2021. The Port of The Dalles sponsored an AARP for six industrial sites that was approved in July 2016 and expired in July 2021. Some of the participants within the Oregon Cascades West planning area have shown interest in updating and revising their plan for future reapplication for a new AARP.
SECTION 3: PROGRAM REPORTING FOR THE REMOVAL-FILL LAW

MONITORING
The Department monitors permits for compliance with the type of authorization issued and specific conditions described in the authorization. Monitoring includes focused study of certain authorizations to identify issues and adaptive management needs, and permit-specific monitoring as needed because of potential compliance issues or because they have mitigation requirements.

For FY 2021, staff focused on a statistically valid sampling for the six permit types identified in Table 9. The study was designed to establish a sample size sufficient to be 95% sure that the results are representative within a 5% margin of error. A statistically valid sampling was achieved for all target permit types except emergency permits. The most common reasons for noncompliance issues among the statistically valid sample were failure to construct the project as designed, failure to minimize impacts, failure to limit removal-fill impacts to authorized areas/volumes, and failure to rectify temporary impacts.

Compliance checks were also completed for specific permits for known compliance issues, complaint follow-up, and logistical efficiency with the statistically valid monitoring effort. A total of 157 compliance checks were completed, including 98 in the statistically valid sample.

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Number Monitored</th>
<th>Compliant</th>
<th>Non-compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Permits with Temporary Impacts</td>
<td>13</td>
<td>11 (85%)</td>
<td>2 (15%)</td>
</tr>
<tr>
<td>General Permit for Transportation Related Structures</td>
<td>46</td>
<td>40 (87%)</td>
<td>6 (13%)</td>
</tr>
<tr>
<td>General Permit for Minor Removal-Fill Impacts</td>
<td>6</td>
<td>5 (83%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td>General Authorization for Temporary Impacts to Non-Tidal Wetlands</td>
<td>5</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>General Authorization for Waterway Bank Stabilization</td>
<td>7</td>
<td>7 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Emergency Permits</td>
<td>21</td>
<td>19 (90%)</td>
<td>2 (10%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>98</td>
<td>84 (86%)</td>
<td>14 (14%)</td>
</tr>
</tbody>
</table>

The Department monitors mitigation sites and impact sites that require restoration, both for permitted activities and violations. Due to the time needed to establish mitigation
sites and restore impact sites, including soil stability and plant development, there will always be numerous sites actively being monitored. Currently, the Department is actively monitoring 547 projects (Table 10). The Department’s goal is to keep pace by closing as many files as are opened; however, this will vary from year to year depending on the number of permits or enforcements.

**Table 10. Mitigation Monitoring FY 2021**

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Active</th>
<th>Opened</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland</td>
<td>264</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Stream</td>
<td>283</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>547</strong></td>
<td><strong>42</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

**ENFORCEMENT**

When the Department becomes aware of potential noncompliance issues, the alleged violation is investigated to determine whether a violation has occurred. Table 11 shows the number of permit compliance checks and permitted and unpermitted enforcements opened and closed. Also shown are the subset of those violations specifically occurring in ESH waters. Civil penalties may or may not be assessed or collected in the same year the violation occurred, so civil penalty amounts for a fiscal year are not directly related to the number of enforcement files. The total amount of civil penalties collected will also be affected by the scope of the violations and negotiations during resolution of the violations.

The Department opened 72 enforcement files during the reporting period. Of the almost 864 active permits, including those being monitored, only seven enforcements were opened for projects with a permit. This is likely due, at least in part, to the interaction, coordination, and education made possible through permitting and monitoring. The Department closed 61 enforcement files in FY 2021. Enforcement files are closed either through Consent Agreements and other orders, or when further investigation reveals either no violation occurred or there was insufficient evidence to confirm a violation.

**Table 11. Compliance Checks, Enforcements, Civil Penalties and Final Orders**

<table>
<thead>
<tr>
<th></th>
<th>Number of compliance checks</th>
<th>Enforcement Files Opened</th>
<th>Enforcement Files Closed</th>
<th>Civil Penalties Assessed</th>
<th>Civil Penalties Collected</th>
<th>Final Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitted</td>
<td>249</td>
<td>7</td>
<td>6</td>
<td>$5,000</td>
<td>$6,000</td>
<td>2</td>
</tr>
<tr>
<td>Unpermitted Work</td>
<td>157</td>
<td>65</td>
<td>55</td>
<td>$125,135</td>
<td>$88,605</td>
<td>35</td>
</tr>
<tr>
<td>ESH Permitted</td>
<td>102</td>
<td>3</td>
<td>4</td>
<td>$3,000</td>
<td>$3,000</td>
<td>1</td>
</tr>
<tr>
<td>ESH Un-permitted Work</td>
<td>66</td>
<td>28</td>
<td>22</td>
<td>$47,666</td>
<td>$36,666</td>
<td>19</td>
</tr>
</tbody>
</table>
The BLM/USFS general permit, though only one permit, authorizes many restoration projects statewide. As a result, there are compliance checks unrepresented in Table 11. In FY 2021, staff reviewed five project reports for the BLM/USFS general permit and conducted three on-site project compliance checks.

**Contested Cases**
There were three contested cases requested in FY 2021 related to enforcements. Of these, one is being discussed with the attorney of the requestor, one enforcement was closed by the Department, and one request is still under review.

Four contested case hearings requested in previous fiscal years progressed during FY 2021. One request was withdrawn by the requestor, and one enforcement was settled before going to hearing. The other two requests were heard by the courts and were ruled in DSL’s favor. DSL has issued final orders for both these enforcements.

**WETLAND LAND USE NOTIFICATION PROCESS**
The wetland land use notification process was initiated in 1989 as part of the Oregon Wetlands Conservation Act. All counties and cities are required to notify the Department of certain development activities proposed in wetlands or waters that are mapped on the Statewide Wetlands Inventory. The Department reviews the notice and provides a written response within 30 days to the applicant and local government as to whether the proposed action is likely to require a removal-fill permit and/or a more precise wetland boundary location (wetland delineation). The objective of the notification process is to provide coordination between local (city or county) development approvals and state wetland regulations. Overall, the wetland land use notice process has proven to be an effective “early warning” mechanism for landowners and developers that a state permit may be required in addition to the local approval.

The Department continues to receive more notices each year. The increase can be attributed to the Department’s continuing outreach efforts to local government planners and a growing economy, despite slowdowns due to the COVID-19 pandemic. Table 12 shows the Department responded within 30 days for 1,098 notices but exceeded that time for 82 notices (7%) in FY 2021. The number of notices that took more than a 30-day response time doubled from last year, but the total number of notices increased by 46%. The Department continues to look for ways to increase efficiencies and reduce review times, including revisions to the notice form and automated distribution of notices to staff.

**Table 12. Department Response Time for Wetland Land Use Notices**

<table>
<thead>
<tr>
<th>Response Time</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Days or Less</td>
<td>634</td>
<td>761</td>
<td>1098</td>
</tr>
<tr>
<td>More than 30 Days</td>
<td>121</td>
<td>43</td>
<td>82</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>755</strong></td>
<td><strong>804</strong></td>
<td><strong>1180</strong></td>
</tr>
</tbody>
</table>
JURISDICTIONAL DETERMINATIONS AND DENELEATION REPORT REVIEWS
The Department offers the public a determination of whether wetlands or other waters of the state may be present on a parcel of land and provides reviews of delineation reports. A determination, conducted by the Department without charge, identifies if wetlands or other waters of the state are present on a site and may be subject to state permit requirements. If wetlands and/or waters are present, a delineation and report by a wetland consultant may be needed to accurately locate and map the wetlands and waters (a delineation report). Staff review the delineation reports submitted to the Department. Landowners, developers, and local governments use the approved delineation report and maps to avoid or minimize impacts to waters of the state, or to determine the impacts that will require a state permit. The Department prepared 339 determinations and reviewed 318 delineation reports in FY 2021 (Table 13).

Table 13. Jurisdictional Determinations and Delineation Report Reviews

<table>
<thead>
<tr>
<th>Number of Reviews</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination</td>
<td>320</td>
<td>317</td>
<td>339</td>
</tr>
<tr>
<td>Delineation</td>
<td>319</td>
<td>296</td>
<td>318</td>
</tr>
<tr>
<td>Totals</td>
<td>639</td>
<td>613</td>
<td>657</td>
</tr>
</tbody>
</table>

COMPENSATORY MITIGATION
Oregon Administrative Rule 141-085-0006(3) defines compensatory mitigation as “replacement of water resources that are damaged or destroyed by an authorized activity.”

Applicants have several mitigation options to choose from. They may conduct their own mitigation at the impact site or conduct mitigation nearby by either creating or restoring wetlands, enhancing degraded wetlands, or in certain limited cases, preserving high-value wetlands that are threatened. Some applicants have the option of purchasing wetland credits from a mitigation bank or an in-lieu fee project, or they may pay into the Department’s Removal-Fill Mitigation Fund. The Department promotes mitigation banking because it is ecologically valuable to consolidate mitigation and generally more efficient and cost effective to perform compensatory mitigation on a larger scale.

Mitigation Banking
There were 23 approved mitigation banks in Oregon in FY 2021. Table 14 shows the cumulative sales and balances of these mitigation banks as of June 30, 2021. During the fiscal year, 13 mitigation banks made 67 separate sales totaling 47.56 credits, with an average credit purchase size of 0.71 acre.

One of Oregon’s top-performing mitigation banks sold out in FY 2021. The Evergreen Bank near Philomath sold a total of 84.5 credits in 60 separate sales over a 15-year period. The nearby Mary’s River Bank, started last year by the same sponsor, is
expected to have similar ecological success and mitigation efficiency.

In addition to the wetland banks shown in Table 14, there are two mitigation banks that have non-wetland credit types. The City of Salem operates the Salem Stream Bank, which has stream credits. The bank has had 75% of its credits released and approved for sale, and 5% have been sold, but no sales occurred in FY 2021. There was also a new bank approved in FY 2021 named Linnton Mill, which is located at river mile 5 on the Willamette River. The project will provide credits beginning in FY 2022 for both the removal fill/Federal Clean Water Act 404 programs, in addition to Natural Resource Damage Assessment credits already approved by the Portland Harbor Natural Resource Trustee Council.

Five bank sponsors are currently working on new mitigation bank agreements that have yet to be approved.

Table 14. Mitigation Bank Credit Sales and Balances as of June 30, 2021

<table>
<thead>
<tr>
<th>Mitigation Bank</th>
<th>County</th>
<th>Total possible credits</th>
<th>% of credit released</th>
<th>% sold to date (out of total possible)</th>
<th>Balance of credits remaining (out of total possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butler</td>
<td>Washington</td>
<td>45.60</td>
<td>71</td>
<td>65</td>
<td>16.12</td>
</tr>
<tr>
<td>Claremont</td>
<td>Clatsop</td>
<td>11.62</td>
<td>58</td>
<td>55</td>
<td>5.19</td>
</tr>
<tr>
<td>Coyote Prairie North</td>
<td>Lane</td>
<td>78.68</td>
<td>91</td>
<td>91</td>
<td>7.14</td>
</tr>
<tr>
<td>Evergreen</td>
<td>Benton</td>
<td>84.52</td>
<td>100</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Foster Creek</td>
<td>Clackamas</td>
<td>27.57</td>
<td>95</td>
<td>93</td>
<td>1.90</td>
</tr>
<tr>
<td>Garret Creek</td>
<td>Clackamas</td>
<td>15.49</td>
<td>81</td>
<td>56</td>
<td>6.74</td>
</tr>
<tr>
<td>Long Tom</td>
<td>Lane</td>
<td>61.14</td>
<td>100</td>
<td>83</td>
<td>10.59</td>
</tr>
<tr>
<td>Marion</td>
<td>Marion</td>
<td>34.09</td>
<td>79</td>
<td>88</td>
<td>4.10</td>
</tr>
<tr>
<td>Mary’s River</td>
<td>Benton</td>
<td>71.41</td>
<td>34</td>
<td>20</td>
<td>57.31</td>
</tr>
<tr>
<td>Mid-Valley phase 2</td>
<td>Benton</td>
<td>4.73</td>
<td>90</td>
<td>90</td>
<td>0.49</td>
</tr>
<tr>
<td>Muddy Creek</td>
<td>Benton</td>
<td>60.33</td>
<td>88</td>
<td>82</td>
<td>10.78</td>
</tr>
<tr>
<td>Mud Slough phase 4</td>
<td>Polk</td>
<td>43.80</td>
<td>100</td>
<td>65</td>
<td>15.24</td>
</tr>
<tr>
<td>Oak Creek</td>
<td>Linn</td>
<td>38.98</td>
<td>58</td>
<td>58</td>
<td>16.40</td>
</tr>
<tr>
<td>ODOT Bobcat Marsh</td>
<td>Washington</td>
<td>5.26</td>
<td>100</td>
<td>53</td>
<td>2.46</td>
</tr>
<tr>
<td>ODOT Crooked River</td>
<td>Crook</td>
<td>5.32</td>
<td>90</td>
<td>30</td>
<td>3.75</td>
</tr>
<tr>
<td>ODOT Greenhill</td>
<td>Lane</td>
<td>8.11</td>
<td>60</td>
<td>14</td>
<td>6.97</td>
</tr>
<tr>
<td>ODOT Lost River</td>
<td>Klamath</td>
<td>13.41</td>
<td>80</td>
<td>32</td>
<td>9.1</td>
</tr>
<tr>
<td>ODOT Vernal Pool</td>
<td>Jackson</td>
<td>20.95</td>
<td>83</td>
<td>54</td>
<td>9.64</td>
</tr>
<tr>
<td>One Horse Slough</td>
<td>Linn</td>
<td>66.91</td>
<td>98</td>
<td>95</td>
<td>3.45</td>
</tr>
<tr>
<td>Rogue Valley Vernal Pool</td>
<td>Jackson</td>
<td>24.70</td>
<td>80</td>
<td>51</td>
<td>12.10</td>
</tr>
</tbody>
</table>
South Santiam  |  Linn  |  50.49 |  39 |  12 |  44.66  
Tualatin Valley  |  Washington  |  31.13 |  75 |  75 |  7.77  
Wilbur Estuary  |  Lane  |  44.12 |  75 |  6 |  41.28  
Total Wetland Credits  |  1,033.26 |  |  |  |  293.18  

**Mitigation Bank Program Compliance and Efficiency**

Mitigation banking represents an important efficiency for both the Department and for permit applicants. Mitigation banks can provide greater ecological benefits and are more efficient for Department staff to manage than smaller mitigation sites. The economy of scale with larger mitigation projects adds to the profit margin for the bank sponsor’s business venture and allows lower per credit pricing. Purchase of bank credits is generally the preferred option for applicants because the costs are known up front. Additionally, because the obligation for the mitigation requirement is transferred to the bank sponsor once credits are purchased, the credit purchaser has no further responsibilities to maintain, monitor, report, or remediate their own mitigation project.

Department staff inspect each active mitigation bank annually to evaluate whether expectations have been met, to verify information in the monitoring reports, and to discuss and resolve emerging issues. Staff have also been working with bank sponsors and land trusts to promote the establishment of long-term stewardship plans to ensure the gains of wetland functions and values are sustained. Staff met with several Portland-area entities exploring the possibility of banking for multiple credit types, but none of those entities have yet submitted initial documents for agency review. Staff have also coordinated with the Corps to update and improve mitigation bank templates for more efficient preparation of new mitigation bank documents.

**Compensatory Mitigation – Department In-Lieu Programs**

In-lieu fees are accepted into the Oregon Removal-Fill Mitigation Fund as a form of compensatory mitigation for unavoidable adverse effects on waters of this state. The funds are used by the Department to construct mitigation sites and compensate for lost functions and values. There are two DSL in-lieu fee programs available:

- The Payment In-Lieu (PIL) program allows payment for compensatory mitigation for small impacts (generally less than 0.2 acres) to waters of this state when other methods of providing compensatory wetland mitigation are not available or are inadequate. The Corps does not accept PIL mitigation for their federal 404 permits.

- The In-Lieu Fee (ILF) program was approved by the Corps in 2009 and provides compensatory mitigation for both waters of this state and waters of the United States in some areas, i.e., the credits may be used to satisfy mitigation requirements for both Oregon removal-fill permits and federal 404 permits. Under the ILF program, areas are approved to sell a maximum number of “advanced” credits, but a project must be approved and meet performance requirements before credits are released and the mitigation obligation is fulfilled.
The Department’s in-lieu programs provided 1.54 mitigation credits for 22 permit authorizations. Credits sales for PIL and ILF, and ILF credit sales and balances are shown in Table 15 and Table 16, respectively.

One project in the Umpqua Basin was partially funded through the Oregon Removal-Fill Mitigation Fund in FY 2021, with a payment from the fund of $213,000. The Department is providing payments under a contract with North Douglas Betterment for development of mitigation credits at the proposed Yoncalla Creek Mitigation Bank. In exchange, the Department will receive credits to satisfy the Department’s mitigation obligation in the area. This is the second of three payments; the final payment is expected in FY 2023. The Yoncalla Creek Mitigation Bank project has received construction permits from all regulating agencies, has started construction, and is working through the bank approval process.

The Department has ongoing projects funded in previous years for the areas shown in Table 16. Three of the advance service areas show a negative balance of credits remaining. The Clear Lake project has been constructed in the Lower Columbia area, but the Department has not yet requested a credit release because field visits to confirm gains were restricted by the landowner due to COVID-19. The Department is under contract to purchase credits from the Yoncalla Creek Mitigation Bank to satisfy credits sold in the Umpqua area, as described above. The Kilchis River Preserve has been constructed in the Wilson Trask Nestucca advance credit area and the Department is currently seeking final approval from the Corps.

### Table 15. Deposits into the Oregon Removal-Fill Mitigation Fund in FY 2021

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Permits using the PIL Program</td>
<td>10</td>
</tr>
<tr>
<td>PIL $ Totals</td>
<td>$100,924.52</td>
</tr>
<tr>
<td>PIL Credits Sold</td>
<td>1.056</td>
</tr>
<tr>
<td>Number of Permits using the ILF Program</td>
<td>12</td>
</tr>
<tr>
<td>ILF $ Totals</td>
<td>$36,002.22</td>
</tr>
<tr>
<td>ILF Credits Sold</td>
<td>0.4875</td>
</tr>
<tr>
<td>Mitigation Fund Deposits $ Total</td>
<td>$136,926.74</td>
</tr>
<tr>
<td><strong>Total Mitigation Credits Sold</strong></td>
<td><strong>1.54</strong></td>
</tr>
</tbody>
</table>
Table 16. In-Lieu Credit Sales and Balances as of June 30, 2021

<table>
<thead>
<tr>
<th>Site Name</th>
<th>County</th>
<th>Credits Released</th>
<th>Cumulative Credits Sold</th>
<th>Balance of Credits Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamara Quays</td>
<td>Lincoln</td>
<td>2.16</td>
<td>1.81</td>
<td>0.34</td>
</tr>
<tr>
<td>Half Mile Lane</td>
<td>Washington</td>
<td>13.24</td>
<td>5.10</td>
<td>8.14</td>
</tr>
<tr>
<td>Pixieland</td>
<td>Lincoln</td>
<td>4.02</td>
<td>2.38</td>
<td>1.64</td>
</tr>
<tr>
<td>Lower Columbia advance credit area</td>
<td>Clatsop</td>
<td>0</td>
<td>3.38</td>
<td>-3.38</td>
</tr>
<tr>
<td>Umpqua Interior Foothills advance credit area</td>
<td>Douglas</td>
<td>0</td>
<td>7.52</td>
<td>-7.52</td>
</tr>
<tr>
<td>Wilson Trask Nestucca advance credit area</td>
<td>Tillamook</td>
<td>0</td>
<td>2.37</td>
<td>-2.37</td>
</tr>
</tbody>
</table>
This page intentionally left blank.
Global equities currently overweight as Real Estate and Alternatives portfolios get built out towards their target allocation. Fixed Income and Private Equity right on target

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Benchmark</th>
<th>Market Value</th>
<th>Current Allocation</th>
<th>Target Allocation</th>
<th>Active Weight</th>
<th>Approved Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>MSCI ACWI IMI (Net)</td>
<td>$1,174,730,772</td>
<td>54.4%</td>
<td>45%</td>
<td>9.4%</td>
<td>40% - 50%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>Russell 3000 + 300 bps</td>
<td>$201,916,954</td>
<td>9.3%</td>
<td>10%</td>
<td>-0.7%</td>
<td>8% - 12%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>Bloomberg US Aggregate Bond Index</td>
<td>$522,768,486</td>
<td>24.2%</td>
<td>25%</td>
<td>-0.8%</td>
<td>20% - 30%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>NCREIF ODCE QTR Lag (Net)</td>
<td>$134,800,094</td>
<td>6.2%</td>
<td>10%</td>
<td>-3.8%</td>
<td>0% - 12%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>CPI + 4%</td>
<td>$100,874,484</td>
<td>4.7%</td>
<td>10%</td>
<td>-5.3%</td>
<td>0% - 12%</td>
</tr>
<tr>
<td>Cash</td>
<td>N/A</td>
<td>$26,151,901</td>
<td>1.2%</td>
<td>0%</td>
<td>1.2%</td>
<td>0% - 3%</td>
</tr>
</tbody>
</table>

Target Allocation

| 10-Year Expected Return (Geometric Mean) | 6.6% |
| Projected Standard Deviation            | 13.2%|

Source: State Street, as of June 30, 2021.
Expected Return and Standard Deviation Source: Callan 2018 Capital Market Assumptions.
Common School Fund Performance
(Period ending June 30, 2021)

Investment performance for fiscal year 2021 has been exceptionally strong, on both an absolute and relative basis, driven by strong public equity returns

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund</td>
<td>$2.161B</td>
<td>26.47</td>
<td>9.98</td>
<td>10.05</td>
<td>8.41</td>
</tr>
<tr>
<td>Policy Benchmark</td>
<td>25.34</td>
<td>10.94</td>
<td>11.02</td>
<td>8.72</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.12</td>
<td>-0.96</td>
<td>-0.97</td>
<td>-0.31</td>
<td></td>
</tr>
</tbody>
</table>

Policy Benchmark: From February 1, 2012 to June 30, 2016, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC Universal Index, and 10% Russell 3000+300 bps QTR lag. From July 1, 2016 to December 31, 2017, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC US Aggregate, and 10% Russell 3000+300 bps QTR lag. From January 1, 2018 to current, policy benchmark is dynamically weighted and uses each asset class' value relative to the total market value as its percentage of the total policy benchmark.

Source: State Street, as of June 30, 2021.
Global Equity Performance
(Period ending June 30, 2021)

Exceptionally strong performance for the global stock market benefited by coordinated fiscal and monetary stimulus. Long standing tilts to value and size positively contributed to relative performance, particularly late last year.

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>$1.175B</td>
<td>46.32</td>
<td>13.84</td>
<td>14.18</td>
<td>10.52</td>
</tr>
<tr>
<td>MSCI ACWI IMI (Net)</td>
<td>40.92</td>
<td>14.24</td>
<td>14.55</td>
<td>9.90</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>5.40</td>
<td>-0.40</td>
<td>-0.37</td>
<td>0.62</td>
<td></td>
</tr>
</tbody>
</table>

Source: State Street, as of June 30, 2021.
Fixed Income Performance  
(Period ending June 30, 2021)

Positive, but muted performance as investors carefully watch the Fed for signs of future interest rate hikes. Long standing tilts towards credit helped CSF performance on both an absolute and relative to the benchmark basis.

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Income</td>
<td>$522.768M</td>
<td>1.51</td>
<td>6.18</td>
<td>4.02</td>
<td>4.33</td>
</tr>
<tr>
<td>Bloomberg US Agg Bond Index</td>
<td>-0.33</td>
<td>5.34</td>
<td>3.03</td>
<td>3.52</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.84</td>
<td>0.84</td>
<td>0.99</td>
<td>0.81</td>
<td></td>
</tr>
</tbody>
</table>

Source: State Street, as of June 30, 2021.
Private Equity Performance
(Period ending June 30, 2021)

Strong performance driven by portfolio company operating performance and mark up in valuations. Relative performance always lags public equity benchmarks in bull stock markets as valuation appraisals lag by one quarter.

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Equity</td>
<td>$201.917M</td>
<td>43.27</td>
<td>17.09</td>
<td>16.05</td>
<td>14.20</td>
</tr>
<tr>
<td>Russell 3000 + 300 bps Qtr Lag</td>
<td>67.21</td>
<td>20.59</td>
<td>20.09</td>
<td>17.17</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>-23.94</td>
<td>-3.50</td>
<td>-4.09</td>
<td>-2.97</td>
<td></td>
</tr>
</tbody>
</table>

Source: State Street, as of June 30, 2021.
# Real Estate Performance
(Period ending June 30, 2021)

As the new portfolio allocation builds out, most implementation focus has been on a diversified portfolio of low risk/low return “core” real estate across all main property types (office, logistics, retail, and multi-family)

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>3 Months</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate</td>
<td>$134.800M</td>
<td>1.93</td>
<td>2.35</td>
<td>4.03</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NCREIF ODCE QTR Lag (Net)</td>
<td>1.89</td>
<td>1.47</td>
<td>3.96</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Excess Return</td>
<td>0.04</td>
<td>0.88</td>
<td>0.07</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: State Street, as of June 30, 2021.
**Alternatives Performance**  
(Period ending June 30, 2021)

<table>
<thead>
<tr>
<th></th>
<th>Market Value</th>
<th>3 Months</th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>$100.874M</td>
<td>4.73</td>
<td>8.85</td>
<td>-5.34</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CPI + 4%</td>
<td>3.58</td>
<td>9.59</td>
<td>6.63</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.15</td>
<td>-0.74</td>
<td>-11.97</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Strongest one year performance in the Alternatives Portfolio’s CSF history. Medium term performance still struggling due largely to “value” exposure in the Diversifying Strategies sleeve. Bifurcation of the asset class to come.

Source: State Street, as of June 30, 2021.
Strategic Priorities 2021/2022

A busy stretch for the Common School Fund as numerous transitions and projects take place

• Onboarding Aon as new CSF Investment Consultant as of January 1, 2021
• Developing CSF Policy Updates. Working with both Aon and members of the Oregon Investment Council
• Work with Aon to conduct a new Asset Allocation study per CSF Policy
• Work with the Private Markets teams to refresh their Pacing Studies
• Work with Oregon State Treasury Investment Division Directors and Senior Investment Officers to review portfolio construction and investment manager composition within each Asset Class
Common School Fund NAV
(Period ending June 30, 2021)
## Team

### John Hershey
**Director of Investment**  
**Tenure:** 2008

As the Director of Investments, John works with the Chief Investment Officer to help manage over $100 billion of assets across multiple funds managed by the Oregon State Treasury, including OPERF and the Common School Endowment, amongst others.
- A member of the Investment Division’s senior leadership team which is responsible for setting the overall strategic direction for the Investment Division including the implementation of the various investment portfolios managed by the Oregon State Treasury;
- Responsible for managing the $2.2 billion Common School Endowment, with a particular emphasis on the Fund’s alternative investments;
- Until recently becoming the Director of Investments, was the Director of Alternative Investments with overall responsibility for the $30 billion Alternatives Program inclusive of the Private Equity, Real Estate, Alternatives, and Opportunity Portfolios, which combined represents approximately, 45% of the OPERF portfolio. Duties included Chairing the ATL, an internal investment committee for the Alternatives Program. Continues to serve on the investment committee and attend all private market Committee Meetings (Private Equity, Real Estate, Alternatives, and Opportunity);
- Currently Vice Chair of the Institutional Limited Partners Association (ILPA), a 5,000 person plus trade association representing institutional investors managing in excess of $2 trillion in private assets under management.

**Education:**  
BA University of California, Davis; MBA University of Chicago

### Wil Hiles
**Investment Officer**  
**Tenure:** 2016

As Investment Officer, Wil supports the Public Equity team’s day-to-day activities surrounding OPERF by serving as a key contact for internal groups, external investment managers, the custodian bank, and other third-party providers. Wil also assists in overseeing the Oregon Common School Fund and the Oregon Savings Growth Plan. Duties assigned include:
- Monitors and evaluates current and prospective investment managers;
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns;
- Coordinates new account fundings, terminations, portfolio transitions, and cash raise activity;
- Assist in overseeing proxy voting and commission recapture programs;
- Conducts market research and analysis;
- Serves as internal equity portfolio manager and trader.

**Education:**  
BA in Finance from Linfield College; Master of Science in Finance (MSF) from Pacific University

### Claire Illo
**Investment Analyst**  
**Tenure:** 2020

As Investment Analyst, Claire assists the OPERF Public Equity team with external manager monitoring and research, and leads other research initiatives, such as ESG and climate-focused projects. Claire also assist in overseeing the Oregon Common School Fund and the Oregon Savings Growth Plan. Duties assigned include:
- Participates in quarterly conference calls, and documents quarterly analyses of all equity managers, aids in formulating memos to the Oregon Investment Council with respect to OPERF Public Equity portfolio;
- Performs ad hoc analysis as requested by the Investment Officers; and
- Assists in overseeing proxy voting and commission recapture programs;
- Serves as Public Equity’s representation in the opening process of new equity markets (countries), which Oregon seeks to invest, works with Investment officers

**Education & Certifications:**  
BS in Economics and Business Administration from University of Oregon.