

**Oregon Parks and Recreation Commission  
February 26-27, 2024**

Agenda Item: 10b **Informational**

Public comment allowed: Yes

Topic: Floras Lake State Natural Area Trail Investment Plan

Presented by: Chris Havel

In September 2019, the Oregon State Parks and Recreation Commission approved a no-cost exchange of property with Curry County. Undeveloped OPRD acres adjacent to US Hwy 101 were transferred to the county, and county-owned acres of equivalent value adjacent to nearby Floras Lake were added to the Floras Lake State Natural Area (FLSNA). Two conditions were included in the transfer agreement: that OPRD would 1) consider opportunities for other real estate agreements between the agency and the county, and 2) draft a trail investment plan to improve connectivity and the visitor experience between Boice-Cope County Park and FLSNA. The trails plan, accepted as a final draft by the OPRD Executive Team and out for final public feedback as this brief is being written, is attached for the Commission's information. Specific projects have not been scheduled or funded, though the plan will guide public service work going forward and give OPRD staff a small jump start on a replacement to the countywide state park master plan adopted in 2003, and project expected to start this biennium.

The attached report includes:

Floras Lake Trail Investment Plan

- Park overview
- Facility assessment
- Public engagement
- Project proposals

**Action Requested:** None

**Attachments:** Floras Lake State Natural Area Trail Investment Plan

**Prepared by:** Haley Cox, Park Planner



Floras Lake State Natural Area  
Trail Investment Plan

February 1st, 2024



## ACKNOWLEDGEMENTS

Director - Lisa Sumption  
Deputy Director - Chris Havel

Region Manager - Dennis Comfort  
District Manager - Justin Helberg  
Park Manager - Joe Kenick  
Beach + Trails Ranger - Pete Hockett

Natural Resources Specialist - Noel Bachellor  
Trails Construction Project Manager - Iris Durosier  
Brand Manager - Alexis Grambo  
Sign Program Manager - Kirsten Moore  
Coast Region Program Manager - Tara Mcdowell  
Coast Region Archaeologist - Stacy Scott  
Coast Region Project Manager - David Lihou  
Coast Natural Resources Specialist - Celeste Lebo

Park Improvement Manager - Alan Freudenthal  
Planning + Design Lead - Jenna Marmon  
Long Range Planner - Haley Cox  
Project Designer - Ben Byram  
Current Planner - Nicole Sprecher

Partners at Curry County, Oregon Department of Aviation,  
US Bureau of Land Management, and Kalmiopsis Audubon Society

Members of the Public and Local Community



# Floras Lake State Natural Area Trail Investment Plan

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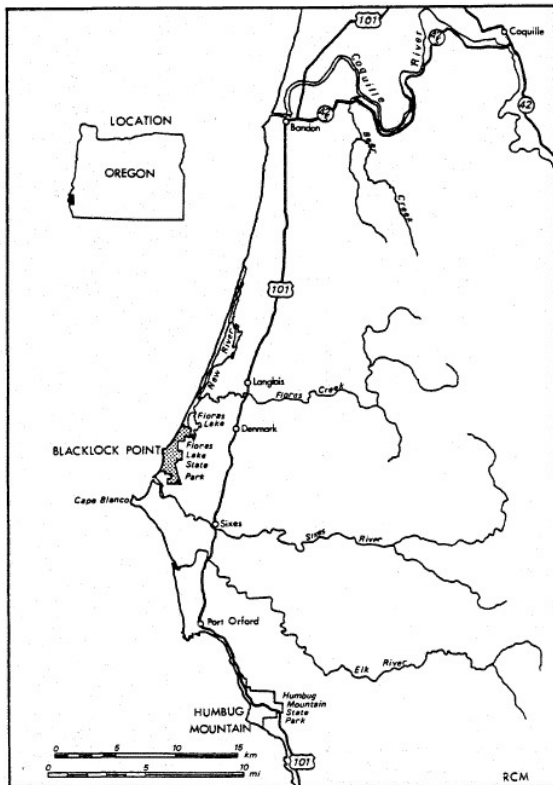


# PARK OVERVIEW



Floras Lake State Natural Area is a unique place along the southern Oregon Coast, located between the small communities of Bandon and Port Orford. Comprising almost 1,500 acres and stretching over a mile inland, this three-mile length of coastline is one of the most rugged and remote in the state.

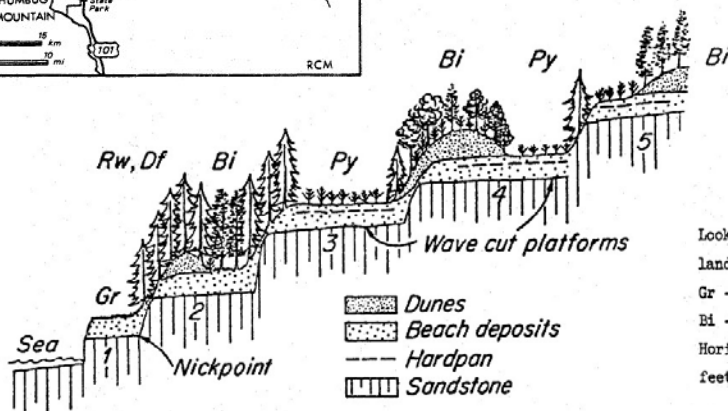
Much of the land was acquired by the State of Oregon in 1943 from the Blacklock Company, which had operated a sandstone quarry on Blacklock Point. Due to its unique geology and associated vegetation, the point and surrounding area was designated as a State Natural Area in 1988. All activities henceforth must be consistent with the approved natural area management plan.



The southern boundary is currently located at the mouth of the Sixes River, and the natural area stretches north to include the rocky headland of Blacklock Point and an imposing wall of sandstone cliffs, which taper down through creek drainages to the shores of Floras Lake.

The natural area is characterized by an ancient sand dune formation, which sits atop an impenetrable soil deposit of iron hardpan and sandstone bedrock, known as “Blacklock soil.” These undulating dunes create an unusual pattern of areas with poor drainage and shallow soils, which stunts tree growth and supports a unique boggy ecosystem known as a “pygmy forest.”

These characteristics are uniquely hospitable to a number of rare and interesting plants, including the endangered Western lily, an endemic plant that grows in



Looking north. Schematic illustration of Staircase, landforms and vegetation.

Gr - grassland, RW, DF - redwood-Douglas fir forest, Bi - bishop pine forest, Py - pygmy forest.

Horizontal distance is 3 miles, vertical distance 600 feet above sea level.

freshwater fens and near bogs--habitats that are found throughout the natural area.

Another key plant community in the natural area is the coastal prairie habitat found on the Blacklock Point headland. Here, seaside daisy, coastal paintbrush, beach strawberry, western buttercup, Pacific reedgrass, lupines, yarrow, black crowberry, and other low-growing shrubs provide important habitat for pollinators.

More common shrubs found throughout the forested and shrubland thickets include salal, hairy manzanita, coast silk-tassel, Pacific wax myrtle, big-leaf western rhododendron, and trapper's tea. Canopy trees in the natural area are mostly lodgepole pine with denser stands of Sitka spruce, western hemlock, and Douglas-fir in areas with more developed soils.

Fauna at Floras Lake include those typically found along the Oregon Coast. Large mammals include black bears, coyotes, deer, and fox. Smaller critters such as beavers, mink, martens, and rabbits make their homes in the dense forest habitat. Notable birds include bald eagles, blue herons, brown pelicans, and marbled murrelets.

Floras Lake State Natural Area features a 12-mile trail system, which is an assortment of old roadbeds and single tracks mainly used by hikers, bikers, and horseback riders. Blacklock Point, Floras Lake, and nearby beaches connected by the Oregon Coast Trail (OCT) are all destinations within the natural area.

The two main access points to the natural area are from Boice Cope County Park to the north and from Cape Blanco State Airport to the south. For OCT thru-hikers, the Bureau of Land Management's (BLM) New River Area of Critical Environmental Concern (ACEC) extends northward for several miles, and Cape Blanco State Park is just across the Sixes River delta to the south.

Oregon Parks and Recreation Department (OPRD) has produced this Trail Investment Plan to identify development projects that will improve the visitor experience of Floras Lake State Natural Area and promote stewardship of the special resources.





## FACILITY INVENTORY AND ASSESSMENT



OPRD staff completed a Facility Inventory and Assessment to inform the Trail Investment Plan in July of 2023. The natural area does not feature typical day-use amenities like benches and tables. As such, the focus of the assessment was on trail conditions and signage.

The trail system at Floras Lake State Natural Area was developed over time by a variety of users, and much of the system is accessible by ATV (use by the public not allowed). A two-mile section of the OCT traverses through the natural area that is not ATV accessible due to several narrow creek crossings and thick vegetation.



From October through May many large trail sections throughout the natural area are flooded. A system of trail alternatives and boardwalks have been developed over time along the Blacklock Point trail to maintain access through the wet season.

One section of the OCT traverses a steep ravine, where trail cribbing is failing, the bridge has been destroyed, and drainage could be improved as the trail passes near a spring. The trail system is otherwise in good condition.



There are a total of four wooden bridges in the natural area, all along the OCT. The main creek crossing was washed downstream by flooding and has been repurposed on site with various remaining parts. The other bridges are all in good condition, but can be slippery when wet.

Wooden wayfinding markers are located at all of the major junctions throughout the natural area, but none include distance information. In many locations, carbonite stakes mark the OCT Route. These are also used by the BLM on the ACEC property between the natural area and Boice Cope Park, and at the OPRD property boundary.



Neither trailhead is located on OPRD property. The Airport Road trailhead is a dirt parking area with a basic directional sign and no overview map or interpretive signage. There is a paved, day-use fee parking area at Boice Cope Park. Signage is provided by Curry County and BLM, which includes minimal information about the State Natural Area. There is also a portable toilet, trash cans, and dog waste bags provided.



# FACILITY OVERVIEW MAP

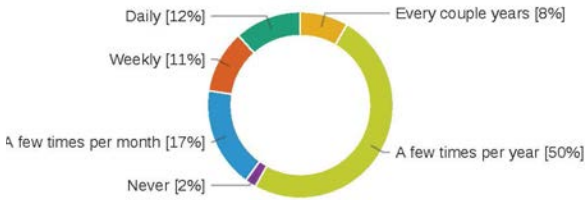




# PUBLIC ENGAGEMENT

## USER SNAPSHOT

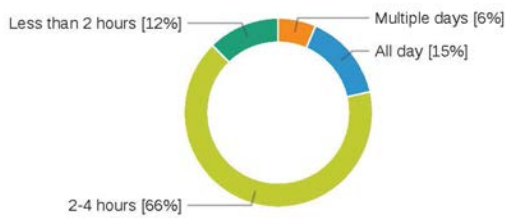
### Park Visitation:



### Travel Distance:



### Length of Stay:



An in-person open house and an online survey were organized by OPRD to learn more about public use of the natural area and to gain input on potential project proposals. Notice of the survey and event were mailed to residents within a five-mile radius of the natural area, and also publicized by regional news outlets. A total of 33 members of the public and 6 OPRD staff attended the Open House on November 1st, 2023, hosted by the Langlois Public Library.

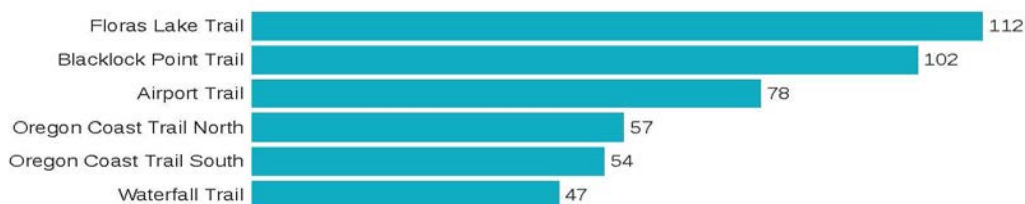
The online survey was available from September 15th to November 10th, 2023, and garnered a total of 184 responses, the majority of whom live less than 30 minutes from the natural area.

Half of respondents visit the natural area a few times per year, while another 40% visit more frequently. The majority of respondents spend 2-4 hours at the natural area, and the most popular activities are hiking, wildlife viewing, dog walking, and photography.

According to the survey, the Floras Lake trail and Blacklock Point Trail are the most used facilities. When asked what elements of the natural area were most valuable to visitors, the top responses were viewpoints, feeling secluded, and the mature forest, interesting plants, and wildlife. Horse access, bike access, and nearby camping were least important to most survey respondents.

A series of questions were designed to gauge feelings about public access at the natural area. There was a slight preference for limiting bike and horse access and not providing a hike-in campsite. Only 21% of respondents disagreed with the statement that existing facilities are adequate, indicating that people enjoy the present primitive quality of the natural area.

## FACILITY USE



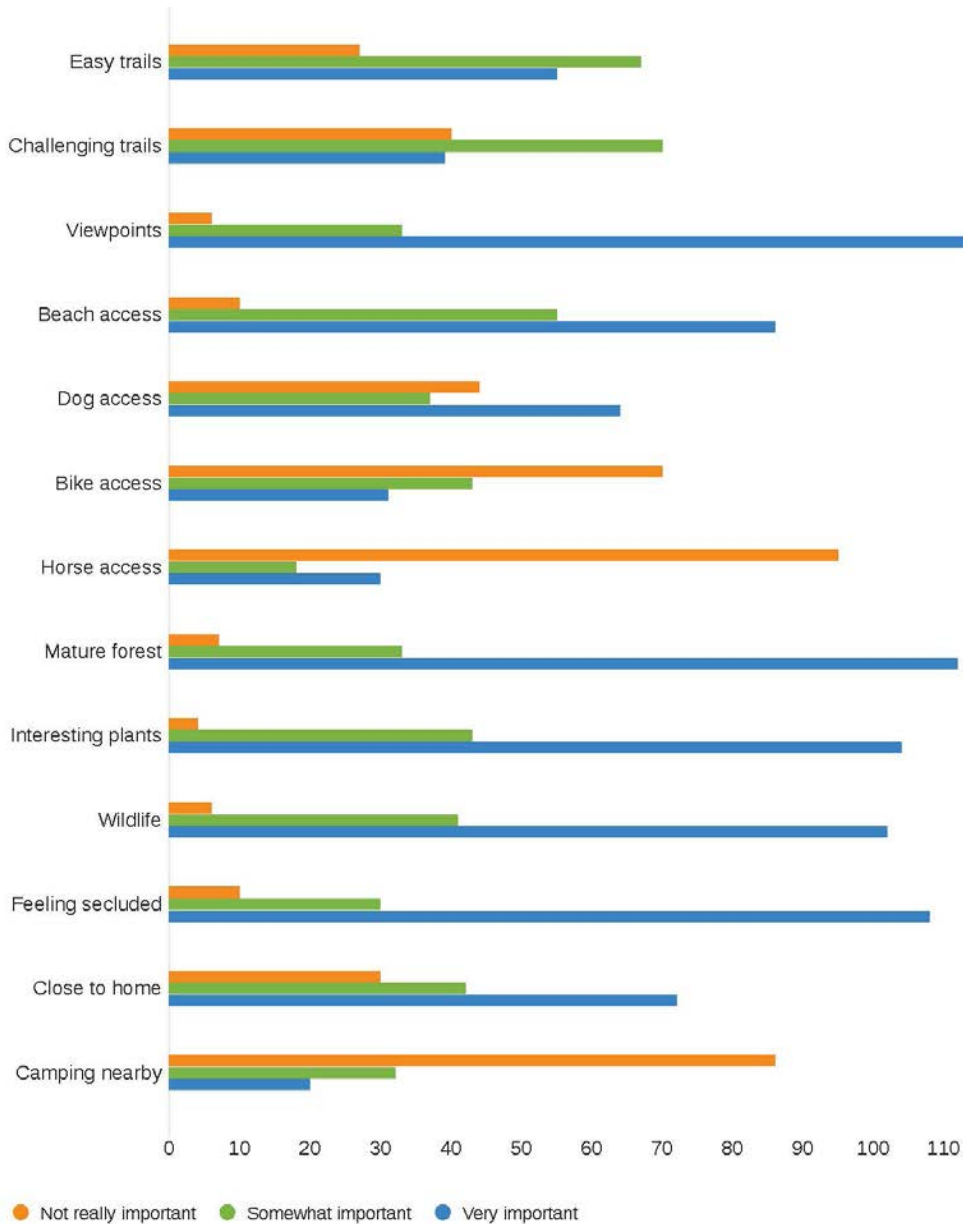
Of the projects proposed to enhance the visitor experience, the most highly ranked were better trail conditions, more trails, and improved wayfinding. Amenities including a hike-in campsite, interpretive display, picnic area, and restroom ranked lowest.

Survey respondents also had an opportunity to share open-ended remarks, many of which indicated that users are satisfied with the natural area in its current state, and prefer to see modest improvements of existing park facilities. Invasive species management was also a priority for many respondents

## USER ACTIVITIES



## NATURAL AREA VALUES





# INVESTMENT PLAN OVERVIEW



Floras Lake State Natural Area is a primitive recreation site with enhanced natural and cultural resource protections. Staff patrol the trails regularly in the summer season and bi-monthly in the winter, with maintenance projects typically scheduled annually in the spring and fall. With increasing usage over time, OPRD expects to invest more resources in infrastructure and maintenance.

This Trail Investment Plan provides conceptual design ideas and high-level cost estimates for the improvement projects identified through the planning process. These include four trail projects, wayfinding and interpretive signage, and a natural resources management program.



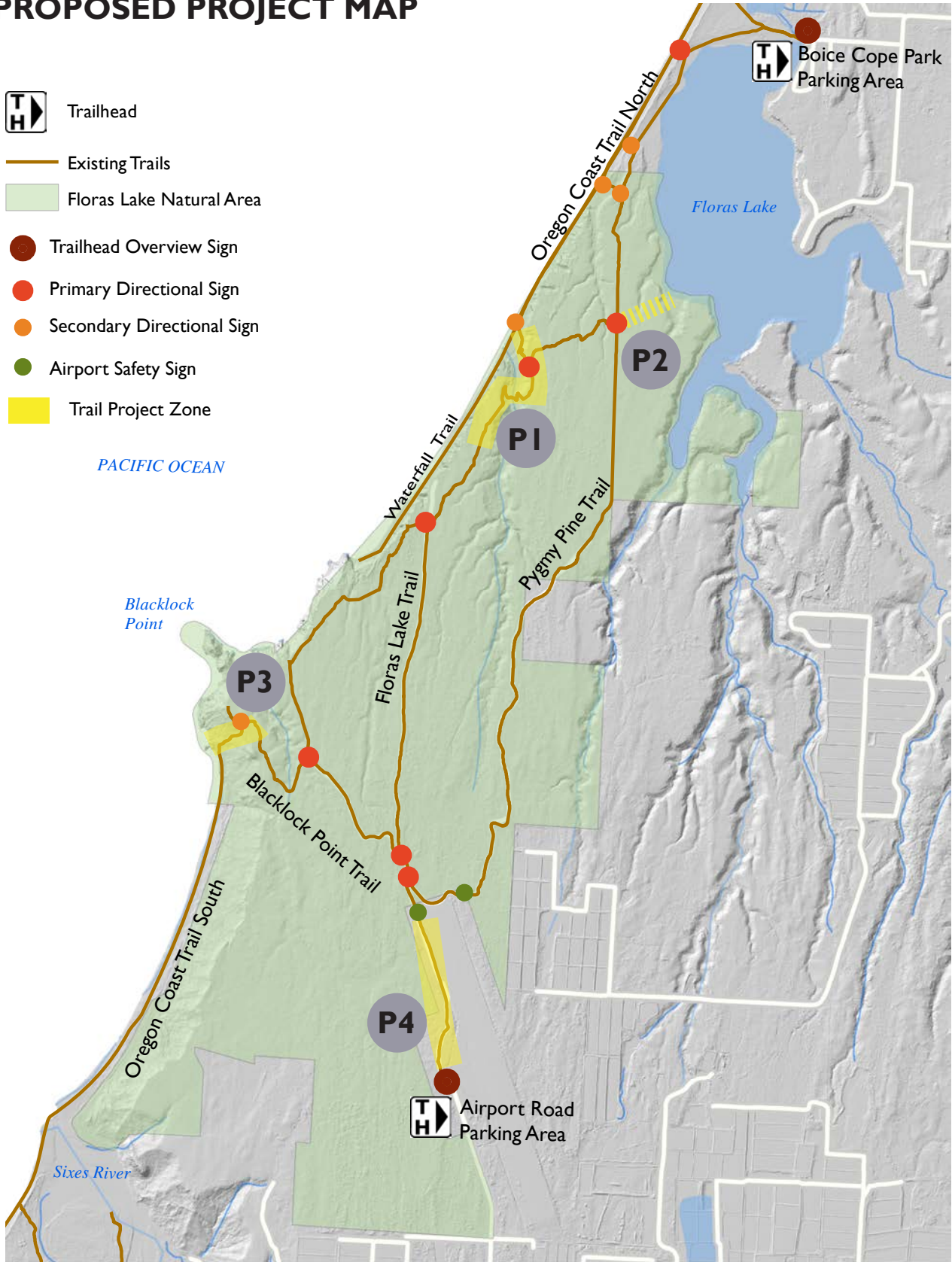
These projects will need additional scoping prior to implementation, when project funding becomes available. Cost estimates include labor that can be performed by OPRD staff if capacity allows, or in many cases is typical for the agency. An overview of project cost estimates is shown below.

The natural resource program costs represent an annual average expense, though projects do not always occur every year and often vary in scope.

Proposal	Design Cost	Installation Cost	Materials Cost	Total Cost	Priority
Trails					
OCT Bridge and Tread Repair	\$ 25,000	\$ 40,000	\$ 80,000	\$ 145,000	High
Lake Viewpoint Trail	\$ 60,000	\$ 35,000	\$ 5,000	\$ 100,000	Medium
Oregon Coast Trail Reroute	\$ 10,000	\$ 15,000	\$ 1,000	\$ 26,000	Medium
Access Trail Reroute	\$ 120,000	\$ 250,000	\$ 450,000	\$ 820,000	Low
Wayfinding					
Trailhead Overview Signage	\$ 500	\$ 500	\$ 2,000	\$ 3,000	Medium
Primary Directional Signage	\$ 100	\$ 100	\$ 1,000	\$ 1,200	Medium
Secondary Directional Signage	\$ 100	\$ 100	\$ 200	\$ 400	Medium
Airport Safety Signage	\$ 100	\$ 100	\$ 200	\$ 400	High
Interpretive Signage	\$ 5,000	\$ 2,000	\$ 3,000	\$ 10,000	Medium
Amenities					
Benches	\$ 500	\$ 1,000	\$ 5,000	\$ 6,500	Low
Picnic Tables	\$ 500	\$ 1,000	\$ 5,000	\$ 6,500	Low
Restroom	\$ 5,000	\$ 50,000	\$ 80,000	\$ 135,000	Low
Bivouac Site	\$ 5,000	\$ 5,000	\$ 10,000	\$ 20,000	Low
Natural Resources					
Gorse Management	\$ 1,000	\$ 2,000	\$ 250	\$ 3,250	High
Mat Grass Management	\$ 500	\$ 2,000	\$ 350	\$ 2,850	High
Western Lily Habitat Management	\$ 500	\$ 2,000	\$ 200	\$ 2,700	High

# PROPOSED PROJECT MAP

-  Trailhead
-  Existing Trails
-  Floras Lake Natural Area
-  Trailhead Overview Sign
-  Primary Directional Sign
-  Secondary Directional Sign
-  Airport Safety Sign
-  Trail Project Zone





# TRAIL PROJECT I - TRAIL BRIDGE AND TREAD REPAIR

The Oregon Coast Trail leaves the beach and traverses through the upland of Floras Lake State Natural Area around Blacklock Point. The last possible beach exit is unmarked, and the trail is steep and narrow. The trail bench should be widened and vegetation cut back significantly.



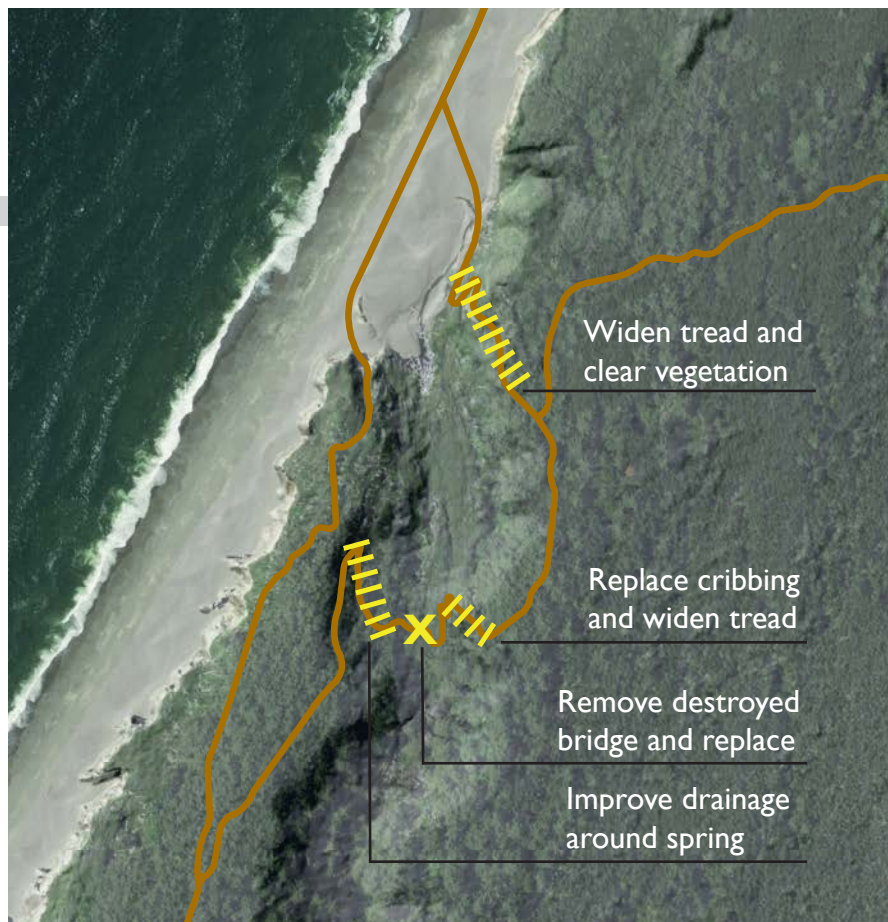
The trail then crosses a major creek drainage and needs work in key locations as it descends into and out of the canyon. Existing trail cribbing needs to be replaced to establish an adequate trail bench. Rolling contours could also be implemented to improve drainage, especially where a spring keeps conditions muddy throughout the year.



At the creek, the bridge was destroyed during a flood. The remnants need to be removed and a new bridge constructed on-site in the main trail route. This project will likely require a survey, wetland delineation, and permitting.

## COST ESTIMATE

Design:	\$25k
Installation:	\$40k
Materials:	\$80k
<b>TOTAL:</b>	<b>\$145k</b>



## TRAIL PROJECT 2 - LAKE VIEWPOINT TRAIL DEVELOPMENT

Public access around Floras Lake is limited to the north end at Boice Cope County Park and on BLM property between the lake and the beach. A new lake viewpoint trail is proposed to provide a unique experience within the natural area.

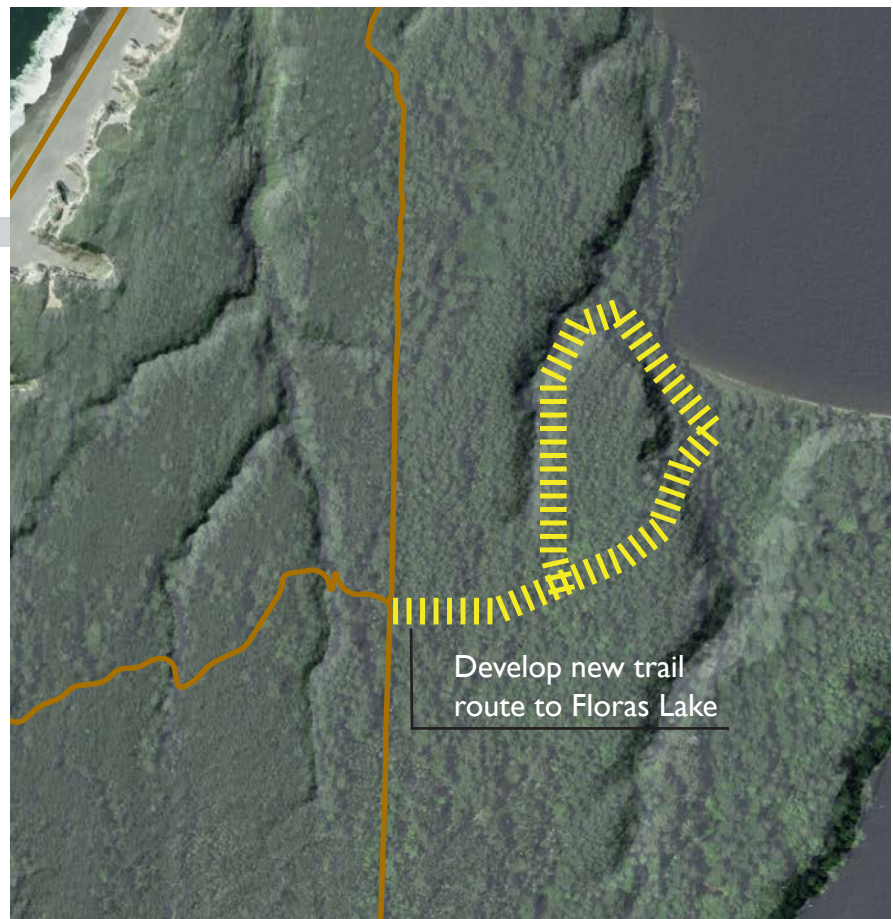
The trail will traverse through a duffy, open forest for a half mile to the west shore of Floras Lake, skirting the bluff and providing views through towering spruce and fir trees in the lush drainage area. The route could create a loop and also include access to a beach along the lake shore.

New trail development will require careful consideration for natural and cultural resources, including a wetland delineation and permitting.



### COST ESTIMATE

Design:	\$60k
Installation:	\$35k
Materials:	\$5k
<b>TOTAL:</b>	<b>\$100k</b>





# TRAIL PROJECT 3 - OREGON COAST TRAIL REROUTE

As the Oregon Coast Trail descends from the upland south of Blacklock Point towards the beach, sections of trail become vulnerable to landslides and have been re-established in the past. In order to protect the trail and sensitive park resources from erosion and degradation, a more robust reroute of this trail section is needed.

This trail reroute will be about 500 feet in length, traversing from the Blacklock Point trail down to the beach. The existing trail will be decommissioned to restore natural habitat.

New trail development will require careful consideration for natural and cultural resources, although permitting may be unnecessary. OPRD can likely complete this project with staff resources.



## COST ESTIMATE

Design:	\$10k
Installation:	\$15k
Materials:	\$1k
<b>TOTAL:</b>	<b>\$26k</b>



## TRAIL PROJECT 4 - ACCESS TRAIL REROUTE

OPRD has an interest in relocating about a half mile section of the main access trail where it departs from the trailhead on State Airport property.

The geology of the natural area is inherently prone to flooding, and for much of the year there is significant standing water on the trails. Given the prevalence of sensitive boggy ecosystem, it would be very difficult to develop the trail reroute entirely out of wetland habitat areas.

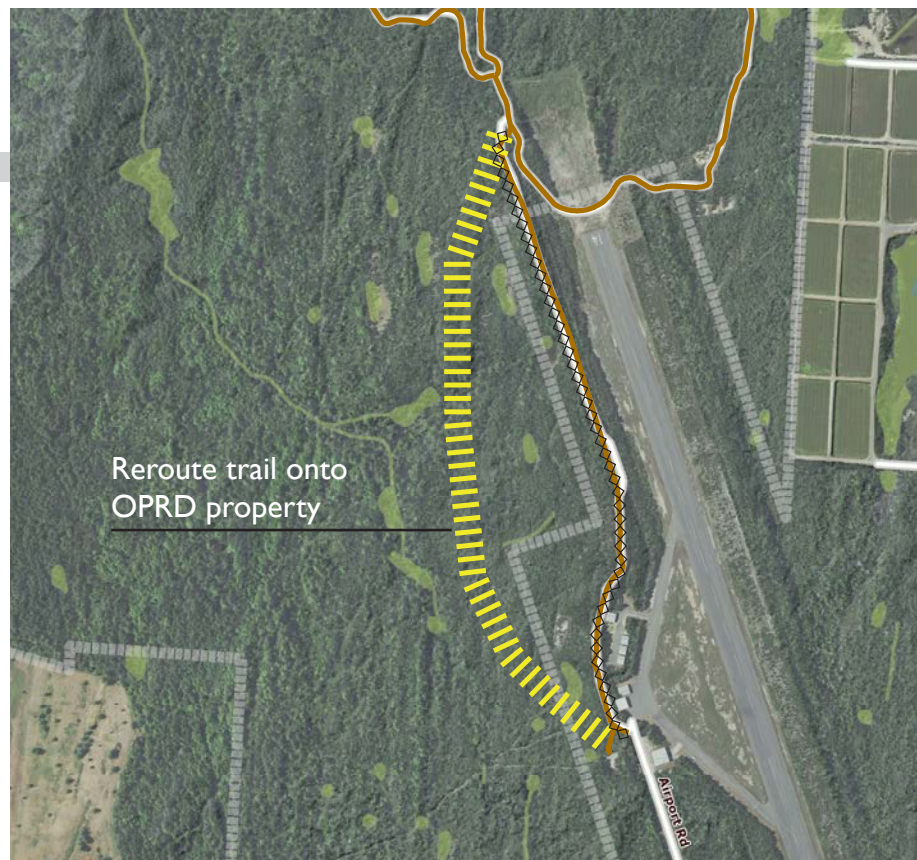
To reduce impacts to designated wetlands, OPRD could further develop a system of boardwalks, which are designed to provide a universally accessible experience of the natural area. Examples can be seen at Silver Falls and East Devil's Lake State Parks.

This project will likely require significant wetland delineation work, survey, and possible mitigation for impacts, which could be completed on-site. Due to the complexity of this project, it would likely be completed by professionals at OPRD's direction.



### COST ESTIMATE

Design:	\$120k
Installation:	\$250k
Materials:	\$450k
<b>TOTAL:</b>	<b>\$820k</b>





# WAYFINDING SIGNAGE

Visitors to Floras Lake Natural Area have few resources to gain information about the trail system conditions or natural area features, in part because the trailheads are not located on OPRD property.

The wayfinding program will ideally provide visitors with overview information at the trailheads, including a map kiosk and interpretive panels. These improvements must be coordinated with agency partners.

Within the natural area, primary and secondary directional signage will be improved to provide more detailed trail information, including the distances to various destinations. There are a total of two park overview signs, seven primary directional signs, and five secondary directional signs proposed.

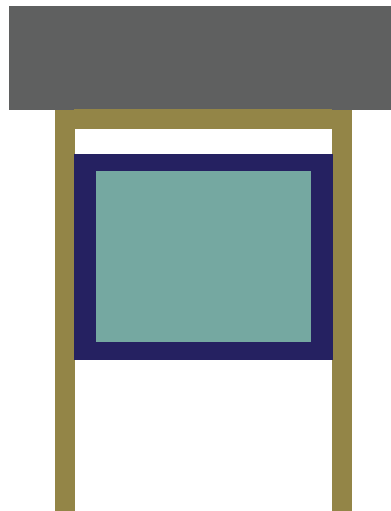
Where the trail traverses near the airport runway, signs will be installed to warn visitors about airport traffic, one on each side of the runway clearing.

While these signs can be produced and installed by OPRD staff, there are still costs associated with the project. Natural and cultural resource impacts must also be considered in areas of disturbance.

## COST ESTIMATE

Design:	\$800
Installation:	\$800
Materials:	\$3.4k
<b>TOTAL:</b>	<b>\$5k</b>

TRAILHEAD  
OVERVIEW  
SIGNAGE



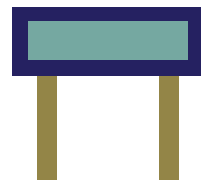
PRIMARY DIRECTIONAL /  
AIRPORT SAFETY  
SIGNAGE



SECONDARY  
DIRECTIONAL  
SIGNAGE



INTERPRETIVE  
SIGNAGE



# INTERPRETIVE SIGNAGE

Floras Lake State Natural Area is a place with unique ecology and significant cultural history. These elements of the park can be shared with visitors in creative ways, illuminating the distinctive qualities of the area, promoting stewardship, and showcasing partnerships.

Interpretive installations are unique to each project site, and OPRD works with professionals on design and production. Installation can be completed by OPRD staff, and should consider potential natural and cultural resource impacts.



## CULTURAL RESOURCE TOPICS

- Native American history
- Sandstone quarry
- State Park formation

## NATURAL RESOURCE TOPICS

- Unique geology
- Rare and endangered plants
- Habitat characteristics for wildlife
- Invasive species removal

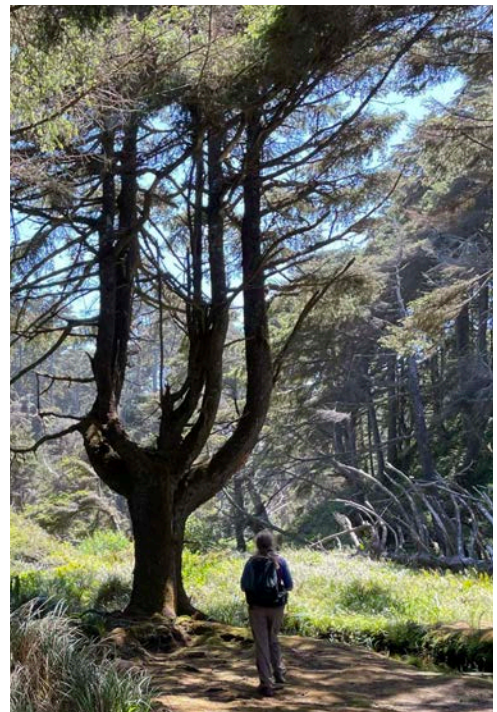


## RECREATION TOPICS

- High water preparedness
- Trail ettiquette
- Safety

## COST ESTIMATE

Design:	\$5k
Installation:	\$2k
Materials:	\$3k
<b>TOTAL:</b>	<b>\$10k</b>





## FUTURE AMENITIES

Floras Lake State Natural Area does not currently feature any day-use amenities, and based on the user survey, there is not a large demand for these improvements. OPRD anticipates that with increasing usage over time, there may be a need to install benches, picnic tables, and restrooms to accommodate a wider range of visitors.

OPRD will need to partner with Curry County and Oregon Department of Aviation in order to improve facilities at the trailheads. For amenities developed within the natural area, careful consideration must be made for natural and cultural resource impacts.

There may be a future need to formalize a bivouac campsite for Oregon Coast Trail hikers within the natural area, but at this time the demand is very low.

### COST ESTIMATE

Design:	\$11k
Installation:	\$57k
Materials:	\$100k
<b>TOTAL:</b>	<b>\$168k</b>





# NATURAL RESOURCES PROGRAM

The Natural Resources Program is designed to preserve important habitat areas through strategic invasive plant removal projects and forest thinning.

Gorse and Mat grass are among the most problematic invasive species along the southern Oregon coast, and they are starting to take hold in Floras Lake State Natural Area. Gorse is an extremely prickly, woody shrub that can grow to over 10 feet high, while Mat grass out-competes native grasses that help stabilize nutrients in the soil.

OPRD staff work with partners, including US Fish and Wildlife Service, US Department of Agriculture, Curry Watershed Council, and volunteer groups to remove these invasives from the natural area when opportunities become available. Mat Grass is removed from trail corridors and open areas near the airport on an annual basis.

Forestry projects in the natural area are focused on cultivating Western Lily habitat, which is typically a more open canopy. These treatments occur at least once every decade on a 30-50 acre project plot.

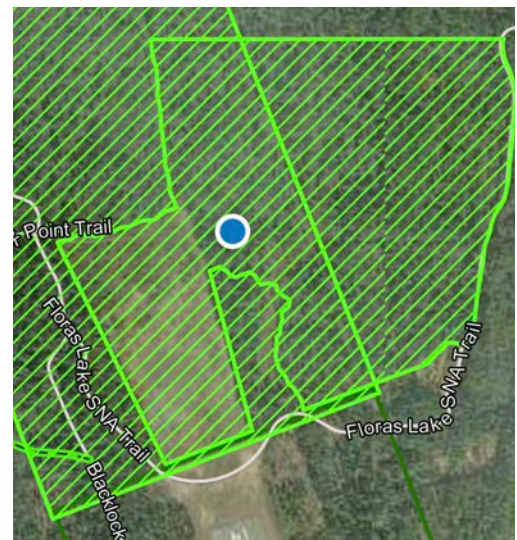


## COST ESTIMATE\*

Design:	\$2k
Implementation:	\$6k
Materials:	\$800

<b>TOTAL:</b>	<b>\$8.8k</b>
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\*Natural Resource Program costs are highly variable between projects and budget cycles, and this estimate is meant to represent an average annual cost for the program goals.



## CONCLUSION



Floras Lake State Natural Area is a truly special place within the park system. The forest, fens, and beaches are unique and splendid, and the place is cherished for inspiring a sense of timeless seclusion.



Invasive species pose a serious threat to the vibrant ecosystem, and as such will be an ongoing priority for OPRD management of the area. Current public use is low, and OPRD will make incremental improvements as necessary to improve the visitor experience, while preserving the natural, primitive aspects of the place.



This plan proposes a suite of projects ranging in size and scope that OPRD can implement with a phased approach over time. The public can also use this plan to engage with OPRD on partnership opportunities as they arise.

Recreation facilities at Floras Lake State Natural Area require dynamic maintenance approaches, and this plan can be revisited to both refine identified concepts and guide new, important projects as needed in the future.

## 2024 TRAIL INVESTMENT PLAN - FLORAS LAKE STATE NATURAL AREA

