



OCEAN SHORE ALTERATION PERMIT

Application Approved with Conditions:



Application Denied:



Date: September 7, 2021

Applicant: Jack Higgins

OPRD File Number: 2973-21

County: Lincoln

Project Location: The project is located at 5330 SW Pacific Coast Highway, Waldport. The subject property is identified on Lincoln County Assessor's map #14-12-2AB as tax lot 900.

OPRD's review included a staff inspection of the site and evaluation of the project against the Ocean Shore Permit Standards, OAR-736-020-0005 through 736-020-0030.

Project Description:

The oceanfront dune at the subject property has suffered from rapid erosion during the 2020-2021 winter season, threatening to damage or destroy the septic system and home on the property. The proposed riprap is part of a larger riprap project involving a total of four properties extending along 180 feet of shoreline. This permit authorizes riprap extending along 40 feet of shoreline, with a height of approximately 13 feet, a width of approximately 25 feet, and a slope of 2H:1V (horizontal:vertical). The project will include a total of approximately 327 cubic yards of armor stone and backing material.

ORS.390.605 (2) defines the "ocean shore" to mean the land lying between extreme low tide of the Pacific Ocean and the statutory vegetation line as described by ORS 390.770 or the line of established upland shore vegetation, whichever is farther inland. In the location of the proposed project the statutory vegetation line is located farther inland.

The project is proposed to be located



Seaward of the statutory vegetation line



Seaward of the line of established upland shore vegetation

and therefore is within OPRD's jurisdiction to make a decision on the application.

Submitted plans: Attached ☒ (See Condition #4)

Not Applicable ☐

Based on the evaluation of the above standards, staff inspections of the site, and consideration of public and agency comments, the Oregon Parks and Recreation Department:



Approves your application
for a shoreline protection structure.



Denies your application.

Permit Conditions:

1. Prior to construction, the Permittee or subsequent owners shall file with the Lincoln County Clerk, a Declaration of Conditions and Restrictions. A form is attached for use in satisfying this condition. The Permittee shall pay any filing and recording costs. Upon recording, certified copies shall be submitted to OPRD as proof of compliance with this permit condition. Failure to provide OPRD with said certified Declaration of Conditions and Restrictions shall nullify this permit and all authorizations contained herein.
2. Use of equipment or vehicles on the beach requires a separate permit from OPRD. Use of public beach access routes, construction of any roads or other temporary access improvements, and timing of inspections shall be subject to conditions of the Equipment Access Permit. Contact Ryan Parker at (541) 270-7995 prior to construction for the necessary permit.
3. The Permittee shall be responsible for obtaining any Lincoln County Department of Public Works permit or approvals for use of the Wakonda Beach public access for project construction. During construction activities, the beach access may not be blocked and shall allow for safe emergency or pedestrian travel onto to the ocean shore. Upon completion of the project, the beach access shall be restored to its pre-existing or better condition.
4. The project shall be constructed in accordance with the submitted plans, specifications, and descriptions, and comply with the location, dimensions, and materials specified in the plans and descriptions. Only hard, durable, fresh angular basalt rock 3-7 feet in diameter from an upland source shall be used as riprap.
5. The project shall include a cover of beach sand of at least 2 feet thick, planted with European and/or native beach grass found in dune habitats, using generally-accepted practices for beach grass planting projects. Permittee shall contact OPRD staff prior to planting, and provide details of the beach grass source and methodology proposed. Alternatively, the Permittee shall provide a copy of a signed agreement with a licensed landscape contractor with experience with beach grass plantings, prior to initiating the planting component of the project.
6. The project shall be completed prior to September 7, 2022. If it appears that, due to unforeseen circumstances, the project cannot be installed by the expiration date, the Permittee or authorized representative may request a permit extension. A time extension may be granted based on approval of a revised construction schedule.
7. Upon completion of the project, the beach shall be cleared of all rock debris, or other debris associated with the riprap construction, and the beach shall be returned to its pre-existing condition.
8. The Permittees shall be responsible for obtaining any required permit approvals from the U.S. Army Corps of Engineers, and Oregon Department of State Lands, if applicable to this project.
9. The Permittee shall be responsible for maintaining the revetment. This includes retrieving and replacing armor stones moved or damaged because of the ocean or any other cause. Failure to maintain the revetment, where such failure causes a public safety hazard or detriment to ocean shore resources, may cause appropriate legal action to be pursued to ensure compliance with this provision.
10. In no event shall the issuance of the permit be construed as a sale, lease, granting of easement or any form of conveyance of the state recreational area, ocean shore or submerged lands.
11. Extreme caution should be exercised during ground-disturbing activities during construction of the riprap. The Permittee shall comply with the provisions of ORS 390.235 through 390.240, ORS 358.905 through 358.955 and OAR 736-051-0060 through 736 051 0090 as these statutes and rules affect the discovery, excavation, salvage, removal and disposition of archaeological resources and the permitting requirements for these activities as they affect archaeological sites on public and private land. If archaeological objects are

encountered during the project, all work must stop immediately, and work may not proceed until an archaeological permit is issued under ORS 390.235

12. This approval does not affect any obligation the Permittees might have to other persons or agencies, local, state or federal.

13. If the Permittee fails to comply with the conditions provided herein and otherwise imposed by OPRD, OPRD shall exercise its authority under Oregon Revised Statutes 390.661 through 390.676; 390.990 through 390.995; and the provisions of OAR 736 020 0200 to cease any further activity by the Permittees on the ocean shore except as directed by OPRD. In such circumstances OPRD may assess a civil penalty according to the provisions of OAR 736-080-0005 through 736-080-0070.

14. The Permittee shall agree to save and hold harmless the State of Oregon, the Oregon Parks and Recreation Commission, and its members, and all officers, agents and employees of the Oregon Parks and Recreation Department, from any claim, suit or action whatsoever for damages to property, or injury or death to any person or persons due to negligence of permittee(s), their officers, agents or employees, and arising out of the performance of any work or project covered by the granting of a permit.

15. In issuing this permit, OPRD makes no representation regarding the quality or adequacy of the permitted revetment design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapter 390 and related regulations.

Trevor Taylor, Central Park Resource Program Manager
Oregon Parks and Recreation Department

cc: Meg Reed, DLCD

Appeal Process

Any person aggrieved or adversely affected by the grant of a permit or the conditions imposed on the permit may file a written request for a hearing with the Parks and Recreation Director. The request must be received within 30 days of the date of the permit. The hearing shall be conducted as a contested case in accordance with ORS 183.415 to 183.430, 183.440 to 183.460 and 183.470



FINDINGS OF FACT STAFF REPORT

Date:	September 7, 2021	Ocean Shores Coordinator:	Jay Sennewald
County:	Lincoln		
OPRD File Numbers:	#2973-21	Applicant:	Higgins
	#2974-21	Applicant:	Berns
	#2975-21	Applicant:	Brawley
	#2976-21	Applicant:	Wiren/Ford
Project Location:	The project is located on the ocean shore fronting the residential properties at 5330, 5318, 5304, and 5290 SW Pacific Coast Highway, Waldport. The properties are identified in Lincoln County Assessor's Map #14-12-2AB as tax lots 900, 800, 500 and 400.		
Brief Project Description:	A riprap revetment project is proposed to be constructed on the ocean shore fronting the above properties, where rapid dune erosion required the issuance of Emergency Permits #2947, 2942, and 2940 in January of 2021. The emergency permits were necessary to prevent the severe damage or destruction of the homes and septic systems on the Higgins, Berns, and Brawley properties. The Wiren/Ford property is adjacent to the north Brawley property line, and also suffered severe erosion and dune loss during the January 2021 erosion event. Each of the property owners have requested individual Ocean Shore Alteration Permits to construct a permanent, continuous permanent riprap structure to protect their properties from continued, chronic dune erosion. The new riprap project would tie-in to an existing riprap structure to the south of, and adjacent to the Higgins property, then continue northward to the north end of the Wiren/Ford property. As proposed, the riprap would extend along approximately 180 feet of shoreline, with a height of 13 feet, a slope of 2H:1V (horizontal to vertical), a width of approximately 25 feet, with a total volume of approximately 1,451 cubic yards of armor stone and backing materials. The Wiren/Ford application further requests an additional improvement in the form of a poured concrete stairway over the top of the new riprap, which would be available for use by neighboring property owners, as a community access improvement within the footprint of the riprap.		

ADMINISTRATIVE RULE STANDARDS AND RELEVANT FACTS

I. GENERAL STANDARDS, OAR 736-020-0010

Project Need – There shall be adequate justification for a project to occur on and alter the ocean shore area.

The project site consists of approximately 180 feet of dune-backed shoreline which includes four individual properties between 175 and 355 feet north of the Wakonda Beach public beach access ramp. All of the properties included in the project are developed with single-family dwellings served by individual on-site septic systems. In early January 2021, rapid dune erosion resulting from a combination of king tides and large storm surf had encroached toward the improvements on the subject properties, severely damaging the septic systems on the Berns and Brawley properties and threatening to damage or destroy the septic system on the Higgins property. At the time, staff determined that these three properties were in a state of “imminent peril” which is defined in OAR 736-20-0002(8) as “*a situation in which property is likely to be severely damaged or destroyed by action of the Pacific Ocean or waters of a bay or river, or by landslide or other natural forces, and where such damage would be likely to occur prior to the time required for approval of an Ocean Shore Permit*”.

On January 12, 2021, OPRD staff authorized emergency measures to install a temporary riprap structure fronting the Higgins, Berns and Brawley properties, in order to prevent the total collapse of their septic systems onto the beach (see OPRD Emergency Permits #2947, 2942, and 2940). At the time of emergency permit authorization, the rapid and continuing dune erosion had exposed and severely damaged the Berns and Brawley septic systems, presenting a public health hazard and necessitating the subsequent relocation of the systems in accordance with Oregon DEQ regulations. At the same time, wave heights in excess of 15 feet with tides in excess of 9-feet were forecasted in the following hours and days. Immediately following emergency permit authorizations, temporary riprap was installed fronting the Higgins, Berns and Brawley properties, while OPRD staff continued to monitor the adjoining Wiren/Ford property to the north for another potential emergency situation.

Under OAR 736-20-0070(3), after an emergency permit authorization, the permittee is required to apply for an ocean shore permit, as specified in ORS 390.650, in order to seek approval to convert the temporary project approved under an emergency permit into a permanent ocean shore alteration. The Higgins, Berns and Brawley applications for a shoreline protection structure are required pursuant to this rule, to convert their emergency permits to allow a permanent riprap structure.

Although the Wiren/Ford property was, and continues to be threatened by the progressive dune erosion that placed the other three properties in imminent peril, it survived the remainder of the winter without the need for emergency riprap. However, the eroded dune fronting this property has not significantly re-built or accumulated new sand since the event, and therefore it remains threatened with potential emergency circumstances during the upcoming 2021-2022 winter season. At the time of this permit evaluation, the emergency riprap is located within 16 and 20 feet of the Higgins and Wiren/Ford septic systems, respectively, and within approximately 25 feet of the Berns and Brawley homes and to their relocated septic systems.

Considering the potential or likelihood for continued, rapid dune erosion at the site and proximity of the erosion in relation to the septic systems and homes on the four properties, the owners have chosen to request riprap permits for a permanent and continuous riprap revetment which structurally ties-in to the existing riprap south of the Higgins property.

The application materials include a Geologic Hazard Assessment prepared by Gary C. Sandstrom, Geologist, LLC (the Sandstrom report), dated June 10, 2021. The report states that erosion from site surveys suggest a rate of erosion at 3 inches per year between 1961 and 2019, with significant erosion since 2019, up to 10 feet or more of recession per year. The Sandstrom report states that unchecked erosion will breach the septic systems and/or undermine foundations of the subject parcels in the short term, and undercut U.S. Highway

101 in the long term. The Sandstrom report provides detailed site-specific information and geologic analysis, and is incorporated into this staff report by reference.

Considering the proximity of the erosional dune scarp to the improvements on the four properties, the dramatic increase in the rate of erosion at the site, and the likelihood of continued erosion through the 2021-2022 winter season, staff finds that shoreline armoring is needed and justified.

The Wiren/Ford request differs from the other riprap applications in that a narrow, poured concrete stairway over the riprap is proposed to provide a safe pedestrian beach access to serve the local community, since the Wakonda Beach access has been severely eroded and no longer provides a safe pedestrian access route to the beach. If the proposed access across the riprap would better serve the local community, and the owner is willing to grant an easement to provide a beach access improvement to serve the neighborhood at a single location, it would provide a more practical and safe beach access than exists at the existing Wakonda Beach public access location. In addition, the provision of this stairway, with appropriate conditions of approval, would likely reduce the demand for multiple, individual beach access stairways on neighboring properties.

A finding of project need follows the review of all other applicable standards and is included in the Findings Summary at the end of this report.

Protection of Public Rights – Public ownership of or use easement rights on the ocean shore shall be adequately protected.

The presence of the riprap will not affect public ownership or easement rights on the ocean shore, because each of the properties reaches to the Mean High Tide line of the Pacific Ocean. The proposed riprap will extend a maximum width of approximately 25 feet from the top of the dune scarp to its toe below beach level, although the tapered north end at the Wiren property will be slightly narrower in width. The project will occupy an estimated 4,248 square feet of natural beach area. This encroachment onto the ocean shore is similar to the existing riprap revetment south of the subject site and to most other revetments between Waldport and Yachats. In evaluating similar riprap projects, OPRD has found this amount of encroachment to be acceptable when the need for the project was considered justified.

Public Laws – The applicant shall comply with federal, state, and local laws and regulations affecting the project.

The Lincoln County Planning and Development Department has certified that the project complies with the Lincoln County Comprehensive Plan and Land Use Code, meaning each of the subject properties are eligible for a shoreline protective structure under Oregon Planning Goal 18, Beaches and Dunes. State of Oregon regulations are being addressed under the review of this permit. Federal regulations could potentially involve a U.S. Army Corps of Engineers permit; however, a Corps permit is usually not required for this type of project. A condition of the permit will require that the Permittee obtain any required permits from the Oregon Department of State Lands and the Army Corps of Engineers, if applicable.

Alterations and Project Modifications – There are no reasonable alternatives to the proposed activity or project modifications that would better protect the public rights, reduce or eliminate the detrimental affects on the ocean shore, or avoid long-term cost to the public.

The Sandstrom report identifies potential alternative non-structural methods of shoreline protection, including foredune enhancement and building/septic system relocation. The existing homes within the project area are located as close to the eastern property line abutting Highway 101 as practical; between 4 and 6 feet. However, requiring the owners to relocate their homes this short distance would not remove the threat of erosion to the improvements on the subject properties where the current annual erosion rate is 10 feet or more per year. In addition, relocation of the improvements to a zero setback from Highway 101 would also require

variances from the Lincoln County minimum setback requirement of 30 feet from Highway 101. It is uncertain if Lincoln County could approve variances for reduced setbacks, so this alternative is not considered feasible.

The Sandstrom report also identifies sand nourishment and sand placement along the erosion scarp as another potential alternative to shoreline armoring, but previous attempts to do so on the Wiren property and on the nearby tax lot 1700 to the south have proven ineffective. Because the property is located in a high energy wave environment along this section of coastline, and considering the estimated current rate of erosion, the placement of sand with vegetative stabilization would not be sufficient to substantially slow or halt erosion. Lastly, non-structural dynamic revetments are typically not recommended for shoreline protection on exposed beach environments due to frequent exposure to wave attack.

The Sandstrom report concludes that unchecked erosion will breach the septic systems and/or undermine foundations of the homes on the subject parcels in the short term. Section 7.2 of the report states that erosion from high tides and wave action will continue to undermine the dune bluff at a rapid rate unless a permanent riprap protective structure is placed.

Considering the above factors, staff finds that the proposed use of riprap as shoreline protection constitutes the most reasonable option for controlling erosion and to provide protection for the upland development at this site.

Public Costs – There are no reasonable special measures which might reduce or eliminate significant public costs. Prior to submission of the application, the applicant shall consider alternatives such as nonstructural solutions, provision for ultimate removal responsibility for structures when no longer needed, reclamation of excavation pits, mitigation of project damages to public interests, or a time limit on project life to allow for changes in public interest.

Alternative shoreline protection methods other than a riprap structure have been discussed above. These alternatives are not considered reasonable measures, as they would likely fail to provide the needed long-term protection for the properties. Public costs include the loss of some upper beach area, heavy equipment activity on the beach during construction, and the visual presence of additional riprap. These costs can be reduced through careful and efficient construction practices, combined with cosmetic treatment of the project with a sand cover that can be planted with beach grass to resemble a natural dune-backed beach environment. There will be no public costs to construct or maintain the structure, as construction, maintenance and repairs are the responsibility of the upland property owners.

Compliance with LCDG Goals – The proposed project shall be evaluated against the applicable criteria included within Statewide Planning Goals administered by the Department of Land Conservation and Development.

The Lincoln County Planning Director has determined that the project complies with the Lincoln County Comprehensive Plan and Land Use Code, which are acknowledged by LCDG as meeting the Statewide Planning Goals including Goal #5: Natural Resources, Scenic and Historic Areas, and Open Spaces; Goal #17: Coastal Shorelands; Goal #18: Beaches and Dunes; and Goal #19, Ocean Resources. Consistency with these goals is further, but indirectly evaluated and addressed in the standards below.

II. SCENIC STANDARDS, OAR 736-020-0015

Projects on the ocean shore shall be designed to minimize damage to the scenic attraction of the ocean shore area.

Natural Features – The project shall retain the scenic attraction of key natural features, for example, beaches, headlands cliffs, sea stacks, streams, tide pools, bedrock formations, fossil beds and ancient forest remains.

The natural features of the beach in the general vicinity will remain intact, and no significant landforms or

natural features such as headlands, cliffs, sea stacks, tide pools, streams, bedrock formations, fossil beds, or ancient forest remains will be affected.

Shoreline Vegetation – The project shall retain or restore existing vegetation on the ocean shore when vital to scenic values.

Severe dune erosion at the site has destroyed previously existing vegetation, which consisted primarily of European beach grass. As a condition of permit approval, the upper portion of the riprap will be required to include a topping of beach sand, then planted with European beach grass. Although this treatment is not vital to scenic values at this location, the establishment of vegetative growth will limit visual impacts to the uppermost shoreline at the site.

View Obstruction – The project shall avoid or minimize obstruction of existing views of the ocean and beaches from adjacent properties.

The project will not affect existing views of the ocean and beach from adjacent properties, because the proposed riprap structure will project no higher than the existing dune/bank elevation. All components of the structure will be located between the top of the eroding dune and beach level.

Compatibility with Surroundings – The project shall blend in with the existing shoreline scenery (type of construction, color, etc.).

Most of the shoreline between Yachats and Waldport can be characterized as a heavily developed, high-density residential and commercially-developed area with numerous riprap revetments, stairways, and other alterations. The proposed riprap at the subject location is similar to those along this stretch of shoreline and does not represent a significant departure from the overall pattern of riprap and other shoreline modifications in place.

As indicated above, the shoreline at the project site is mostly devoid of vegetation due to recent, rapid erosion of the dune fronting the subject properties. However, covering the proposed new riprap revetment with sand and planting beach grass will help the completed project to more closely resemble a natural, dune-backed shoreline.

III. RECREATION USE STANDARDS, OAR 736-020-0020

Recreation Use – The project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

The beach in this area fluctuates in width seasonally and from year to year, and the riprap will occupy some beach area, but it will not significantly affect public recreational use opportunities such as sunbathing, walking, or beachcombing, and therefore will not be a detriment to public recreation.

Recreation Access – The project shall avoid blocking off or obstructing public access routes within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

There are no federally or state listed species at the site which require special protection. The project will need to extend out onto the ocean shore for a short distance, but in this area the beach is most often much wider than the proposed riprap structure. During storm events or winter high tides, wave run-up may reach the riprap structure. During normal conditions, however, the existence of the riprap will not cause an obstruction to north and south public access along the shoreline.

IV. SAFETY STANDARDS, OAR 736-020-0030

The project shall be designed to avoid or minimize safety hazards to the public and shoreline properties. The following safety standards shall be applied, where applicable, to each application for an ocean shore permit.

Structural Safety – The project shall not be a safety hazard to the public due to inadequate structural foundations, lack of bank stability, or the use of weak materials subject to rapid ocean damage.

The proposed riprap includes several elements which are consistent with generally-accepted riprap design, including filter fabric backing material, filter rock/bedding material, and armor stones consisting of hard, durable, fresh angular basalt 3-7 feet in diameter, interlocked with a minimum of 3 points of contact. The base of the structure will be embedded a minimum of 3 feet into hard, erosion resistant material, and the structure will have a slope of 2W:1H (width to height). The proposed design is similar to other recently-constructed riprap structures, intended ensure that that the riprap revetment will be structurally sound under typical ocean shore conditions. If constructed according to the proposed design, the structure should not present a safety hazard or be susceptible to rapid damage under wave attack.

Obstructional Hazards – the project shall minimize obstructions to pedestrians or vehicles going onto or along the ocean shore area.

The riprap will have an approximate width of 25 feet from the top of the bank to its toe, which will be buried below beach level. At this width, the structure will not affect lateral beach access except during times of extreme high water and during winter storm events. During these periods, however, wave run-up is likely to be reaching the riprap on the adjoining properties to the south, and to an existing riprap structure approximately 80 feet to the north, and therefore the proposed riprap will not create a unique obstruction to pedestrians or vehicles traveling along the beach during extreme conditions.

Neighboring Properties – The project shall be designed to avoid or minimize ocean erosion or safety problems for neighboring properties.

According to the Sandstrom report, the riprap revetment will increase the stability of the shoreline and will protect the properties from continued ocean wave erosion. The project design includes the placement of 3-7 foot diameter armor stones, densely interlocked and keyed into a deep toe trench to minimize the potential for their displacement or “plucking” while under wave attack during storm events. To reduce potential for redirection of wave energy toward neighboring properties, the riprap will be constructed at 2H:1V (horizontal to vertical) slope. The riprap would be structurally tied-in to the adjoining property’s riprap at the south end, and the north end of the riprap structure will be curved and tapered into the bluff, in order to minimize end effects and safety problems on the adjacent property.

Property Protection – Beachfront property protection projects shall be designed to accomplish a reasonable degree of increased safety for the on-shore property to be protected.

Lincoln County On-site Waste Management Division officials have indicated to staff that the existing septic systems at the project site, including the systems serving the Brawley and Berns properties, which have been relocated since they were damaged in the January 2021 emergency situation, have significantly lesser setbacks than required under current DEQ standards. Further erosion of the bank may result in damage to the existing and repaired septic systems, and could cause a public health hazard if the damaged systems allow raw sewage to flow onto the beach. In addition, county officials have indicated that there is very limited area to repair the systems should they fail as a result of future erosion events.

As indicated above, the design of the riprap is intended to provide long-term protection of the subject properties from further erosion and to provide shoreline stability. If constructed in conformance with the

proposed design, the riprap should provide a reasonable degree of increased safety for the septic systems, homes and properties which it will protect.

V. NATURAL AND CULTURAL RESOURCE STANDARDS, OAR 736-020-0030

Projects on the ocean shore shall avoid or minimize damage to the following natural resources, habitat, or ocean shore conditions, and where applicable, shall not violate state standards:

Fish and wildlife resources including rare, threatened or endangered species and fish and wildlife habitats.

The Oregon Department of Fish and Wildlife was provided notice of the subject applications for the project. However, there were no reported significant fish and wildlife resources that will be impacted by the proposed project.

Estuarine values and navigation interests.

The project is not adjacent to an estuary, and does not affect navigable water on the ocean.

Historic, cultural and archeological sites.

Notice of the application was provided to the State Historic Preservation Office, to the Confederated Tribes of Siletz, and to the Confederated Tribes of Grand Ronde. There were no reports of historic, cultural, or archeological sites at this location. However, the State Historic Preservation Office has stated that the project lies within an area generally perceived to have a high probability for possessing archaeological sites and/or buried human remains. In the absence of sufficient knowledge to predict the location of cultural resources at the site, extreme caution is recommended during project-related ground disturbing activities. Ocean Shore Alteration Permits for the project will include appropriate conditions to ensure that this standard is met.

Natural areas (vegetation or aquatic features).

There is no existing significant vegetation or aquatic features that will be impacted by the proposed riprap project.

Air and water quality of the ocean shore area.

The project will take place above the ordinary high tide line, and will not cause foreign materials or pollutants to enter the water. Riprap placed at the site will be free of debris or foreign materials. The proposed project would not adversely affect water quality on the ocean shore. Air quality will not be affected, except for a negligible amount of exhaust from the use of heavy equipment during the construction period.

Areas of geologic interest, fossil beds, ancient forest remnants.

None of these features have been identified at the site.

When necessary to protect native plant communities or fish and wildlife habitat on the subject or adjacent properties, only native, non-invasive, plant species shall be used for revegetation.

The site is within a developed residential area, and there are no known protected native plant communities or fish and wildlife habitat on the subject property.

VI. PUBLIC COMMENTS

Notice of the proposed project was posted at the site for 30 days in accordance with ORS 390.650. Individual notification and a copy of the application(s) were mailed to government agencies and individuals on OPRD's ocean shore mailing list.

By the time the public comment period ended, OPRD had received 1 letter from the Oregon Shores Conservation Coalition (OSCC), a non-profit organization which objects to the issuance of the requested permits. The comments from the OSCC express concern that the applications under review fail to demonstrate compliance with the applicable criteria for shoreline protective structures, and further suggest that one or more of the subject properties do not meet the eligibility requirement of Oregon Goal 18, Implementation Requirement 5. OSCC's comments and objections to the requested permits are extensive and broad in nature, and they are incorporated into this report by reference. However, the issues raised which include the desire for policy changes and the long-term implications of piece-meal shoreline armoring are beyond the scope of this project/permit evaluation.

No additional comments were received, and there were no requests for a public hearing during the 30-day public comment period.

VII. FINDINGS SUMMARY

- The subject properties consist of very small lots containing existing homes and septic systems, in a confined setting between Highway 101 and a dune-backed shoreline where storm surf and high tides during the 2020-2021 winter season resulted in rapid erosion of the dunes fronting the subject properties. In January of 2021 OPRD staff issued emergency authorizations to allow temporary placement of riprap fronting the Higgins, Berns, and Brawley properties, where the active erosion caused severe damage to two septic systems and threatened further damage within hours of the emergency determination. Failure to place emergency riprap would have likely resulted in further damage or destruction of the septic systems, spilling raw sewage onto the beach and presenting a public health threat.
- The Wiren/Ford property is similarly situated to the Higgins, Berns and Brawley property in terms of the potential for damage or destruction of its septic system from the hazard of active erosion, although this threat fell short of the "imminent peril" threshold necessary for emergency riprap last winter. Nonetheless, the Wiren/Ford property remains threatened by the same erosional forces affecting the other properties within the project area entering into the 2021-2022 winter season.
- There is insufficient room on each property to relocate buildings and septic systems far enough to avoid the threat of continued erosion, and a non-structural method of shoreline protection (sand placement) attempted on the Wiren/Ford property in the past has proven ineffective. The project geologist has concluded that non-structural alternatives to riprap are unlikely to provide adequate protection of the subject property septic systems and homes from the advancing erosion.
- The Geologic Hazard Assessment which accompanied the subject property applications concludes that unchecked erosion will breach the properties' septic systems and/or undermine building foundations in the short-term and undercut Highway 101 in the long-term. The report recommends the construction of a permanent riprap seawall extending along the subject property frontages, and the proposed project is consistent with the recommendations of the Sandstrom Report.
- Lincoln County has determined that the properties are eligible for shoreline protection, consistent with Statewide Planning Goal 18 provisions that limit eligibility to property where development existed prior to 1977.

- The provision of a small concrete stairway across the riprap on the Wiren/Ford property will provide a safer and more permanent beach access improvement than is currently available at the existing Wakonda Beach public access to the south of the project area.

Based on the above considerations and findings in this report, OPRD finds that there is adequate justification for the project to occur on, and alter the ocean shore area.

The following checklist summarizes whether the application satisfies the general, scenic, recreation, safety and natural and cultural resource standards as defined in OAR 736-020-0010 through 736-020-0030:

Standard	Yes	No	Standard	Yes	No
Project Need	☒	☐	Structural Safety	☒	☐
Protection of Public Rights	☒	☐	Obstructional Hazards	☒	☐
Public Laws	☒	☐	Neighboring Properties	☒	☐
Alteration and Project Modifications	☒	☐	Property Protection	☒	☐
Public Costs	☒	☐	Fish and Wildlife Resources	☒	☐
Compliance with LCDC Goals	☒	☐	Estuarine Values and Navigation Interests	☒	☐
Natural Features	☒	☐	Historic, Cultural and Archeological Sites	☒	☐
Shoreline Vegetation	☒	☐	Natural Areas	☒	☐
View Obstruction	☒	☐	Air and Water Quality of the ocean shore	☒	☐
Compatibility with Surroundings	☒	☐	Areas of Geologic Interest	☒	☐
Recreation Use	☒	☐	Use of Native Plant Species when Necessary	☒	☐
Recreation Access	☒	☐			

VIII. STAFF RECOMMENDATION:

Based on an analysis of the facts and in consideration of the standards evaluated under OAR-736-020-0005 through OAR 736-020-0030, I recommend the following action:

- ☐ Approval
☒ Approval with conditions
☐ Denial

Jay Sennewald
Ocean Shores Coordinator