In the Matter of Removal-Fill Permit  
Application 09819 (RF-26)  
By Ross Island Sand & Gravel Co. 

Short and Plain Statement of the Permitting Decision: The permit application is approved because the Department of State Lands (DSL or the Department) has determined that, when carried out in compliance with all terms and conditions outlined in the permit, the proposed removal-fill activity is consistent with the protection, conservation, and best use of the water resources of this state and will not unreasonably interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing, and recreation. See ORS 196.825.

I. Applicable Law:

a. ORS Chapter 196 governs removal fill permits in Oregon. The Department administers Oregon’s Removal-Fill Law, Oregon Revised Statutes (ORS) 196.795 to ORS 196.990, which protects the state’s wetlands and waterways. See ORS 196.805. Unless an exception applies, a person may not remove material from waters of this state or fill waters of this state without a permit from DSL. ORS 196.810. Waters of this state include the all-natural waterways, tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, the Pacific Ocean that is in the boundaries of this state, and other water bodies. ORS 196.800; Oregon Administrative Rule (OAR) 141-085-0515; OAR 141-093-0100.

b. Specifically, the statutes that govern removal-fill permits in Oregon, including the permit application at issue in this case, generally include the following:

ORS 196.795 (Administration of State Removal or Fill Permits; General Permits);
ORS 196.800 (Definitions);
ORS 196.805 (Policy);
ORS 196.810 (Removal from Bed or Banks of Waters; Permits; Exceptions);
ORS 196.812 (Removal of Large Woody Debris);
ORS 196.815 (Permit Applications; Fees);
ORS 196.816 (Removal of Materials for Purpose of Maintaining Drainage and Protecting Agricultural Land);
ORS 196.817 (Removal or Fill General Permits);
ORS 196.818 (Wetland Delineation Reports; Fees);
ORS 196.820 (Smith Lake, Bybee Lake Prohibition);
ORS 196.825 (Permit Criteria; Consultation with Other Agencies);
ORS 196.830 (Estuarine Resource Replacement; Other Permit Conditions);
ORS 196.835 (Issuance of Permits; Procedure);
ORS 196.845 (Investigations and Surveys of Location); and
ORS 196.850 (Waiver of Permit Requirement; Notice; Review).
c. OAR Chapter 141, Division 85 implement the above statutory scheme and govern removal-fill permits in Oregon. The rules that govern removal-fill permits in Oregon, including the permit application at issue in this case, generally include the following:

**Div. 85 Removal-Fill Authorizations:**
OAR 141-085-0500 (General);
OAR 141-085-0506 (Policy);
OAR 141-085-0510 (Definitions);
OAR 141-085-0515 (Removal-Fill Jurisdiction by Type of Water);
OAR 141-085-0520 (Removal-Fill Jurisdiction by Volume of Material);
OAR 141-085-0525 (Measuring and Calculating Volume of Removal and Fill);
OAR 141-085-0530 (Exemptions for Certain Activities and Structures);
OAR 141-085-0534 (Exemptions for Certain Voluntary Habitat Restoration Activities);
OAR 141-085-0535 (Exemptions Specific to Agricultural Activities);
OAR 141-085-0540 (Types of Authorizations);
OAR 141-085-0545 (Fees; Amounts and Disposition);
OAR 141-085-0550 (Application Requirements for Individual Permits);
OAR 141-085-0555 (Individual Removal-Fill Permit Application Review Process);
OAR 141-085-0560 (Public Review Process for Individual Removal - Fill Permit Applications);
OAR 141-085-0565 (Department Determinations and Considerations in Evaluating Individual Permit Applications);
OAR 141-085-0575 (Permit Appeals);
OAR 141-085-0580 (Discovery in Contested Cases);
OAR 141-085-0585 (Permit Conditions, Permit Expiration Dates and Permit Transfer);
OAR 141-085-0590 (Renewal and Extension of Individual Removal-Fill Permits);
OAR 141-085-0595 (Permit Requirements and Interagency Coordination for Department of Environmental Quality Approved Remedial Action, Corrections Facilities, Solid Waste Land Fills and Energy Facilities);
OAR 141-085-0665 (Expedited Process for Industrial or Traded Sector Sites);
OAR 141-085-0676 (Emergency Authorizations);
OAR 141-085-0680 (Compensatory Mitigation (CM); Applicability and Principal Objectives);
OAR 141-085-0685 (Functions and Values Assessment);
OAR 141-085-0690 (Eligibility Requirements for CM);
OAR 141-085-0692 (Mitigation Accounting);
OAR 141-085-0694 (Special Requirement for CM);
OAR 141-085-0695 (Administrative Protection of CM Sites);
OAR 141-085-0700 (Financial Security for CM Sites);
OAR 141-085-0705 (Requirements for CM Plans);
OAR 141-085-0710 (Monitoring Requirements for CWM);
OAR 141-085-0715 (Mitigation for Temporary Impacts);
OAR 141-085-0720 (Mitigation Banking Purpose, Applicability and Policies);
OAR 141-085-0725 (Process for Establishing Mitigation Banks);
OAR 141-085-0730 (Establishment of Mitigation Credits);
OAR 141-085-0735 (Release, Use and Sale of Mitigation Credits);
II. Findings of Fact and Findings of Ultimate Fact:

1. The Department received an application and issued the first permit for permittee in 1967. Since that time, multiple applications and permits have been issued. The last authorization was based on the complete, written application dated September 30, 2002 for the proposed 2002 Reclamation Plan removal-fill activity.

The latest application was received August 08, 2022, which includes the authorized 2002 Reclamation Plan, Oregon Department of Environmental Quality (DEQ) updated Fill Evaluation Scope of Work, and the new 2022 Adaptive Management Plan (AMP). The proposed AMP will allow the work to be completed more than 15 years sooner than the 2002 Reclamation Plan, increases the shallow water habitat area, and increases the number of large wood structures. Attachment B, AMP Table 2, summarizes the 2002 Reclamation Plan versus the AMP.

This authorization focused on the application received August 08, 2022.

2. The proposed modifications addressed in the August 08, 2022 application do not meet DSL's current guidelines for holding a public review and comment period because DSL does not view these modifications as significant in creating a negative impact. The AMP improves many aspects of the 2002 Reclamation Plan. DSL must be consistent in our practices so the public and permit holders alike can count on DSL to administer Oregon’s removal-fill law transparently and fairly. But DSL must also honor our commitments to stakeholders.

The Department circulated the complete August 08, 2022 application for a 30-day public comment period to parties including, affected local, state, and federal agencies, affected tribal governments, adjacent landowners, and other parties requesting notification. DSL stated public comments should focus on the proposed modifications in the AMP, updated DEQ screening requirements, and/or completion dates.

3. Public comments were received from 109 commentors during the public comment period and 4 after the comment period ended. The Department has reviewed and considered all comments received. All comments were forwarded to the applicant on September 29, 2022. A reorganized version of the public comments was forward to the applicant on October 24, 2022. The applicant was invited to respond to comments identified as relevant to the Removal-Fill Law. The nature of those comments included:

   a. Shorten the completion timeline to 6 years.
   b. Increase the bond to cover the full cost to complete.
c. Add signs to protect the habitat.
d. The new fill location is used extensively and should be roped off to boaters.
e. DSL almost agreed to a modification without an enforceable deadline.
f. Only allow Class A fill.
g. Do not approve AMP until 401 Water Quality Certification is issued.
h. Report fill testing for every batch, not annually.
i. Allow fill source from more locations.
j. New shallow water habitat areas may not be of the same quality and benefits to fish are unknown.
k. How will the area be sustained due to the lack of state ownership and jurisdiction?
l. Will DSL allow more fill if needed to sustain the area?
m. Include benchmarks, enforcement mechanisms, and penalties to ensure the permit deadline is met.
n. Can monitoring be extended?
o. The AMP should include maintenance and monitoring after reclamation is done.
p. Permit should require RISG to allow all agencies access to the lagoon.
q. Consider potential future modifications to the island.
r. What if the Biological Opinion changes?
s. Clarify the relationship between reclamation, long-term upland protection, and erosion.
t. DEQ and DSL should review the closed processing plant area.
u. Change in ownership & permit transfer questions.
v. Expand comment review beyond the proposed AMP changes.
w. DSL should consider the AMP a significant modification.
x. Regulatory agency AMP comments should have been included in the application.
y. Create an outside panel of experts to review the AMP.
z. HABs should be considered.
aa. Ross Island is a valuable natural resource.

4. Applicant provided satisfactory response to comments on December 1, 2022. Agencies also provided responses where appropriate. DSL combined all comments and all responses into a single document.

5. Based on all the information in the agency file in this matter, including the complete application, comments received, applicant response to comments, and the agency’s own investigations, the Department concludes as to the determinations in ORS 196.825(1) and (4), OAR 141-085-0565(3), and OAR 141-093-0115:

   a. The project described in the permit application and as conditioned in the proposed permit, is consistent with the protection, conservation, and best use of the water resources of this state as specified in ORS 196.600 to 196.905;

   b. The project described in the permit application and as conditioned in the proposed permit would not interfere with the paramount policy of this state to preserve the use of its waters for navigation, fishing, and public recreation.

6. Based on all the information in the agency file in this matter, including the complete application, comments received, applicant response to comments, and the agency’s own investigations, the Department concludes, as to the considerations in ORS 196.825(3), OAR 141-085-0565(4), OAR 141-093-0115:

   a. There is an identified public need for the proposed fill or removal and social, economic, or other public benefits likely to result from the proposed fill or removal.
The Ross Island Lagoon is an area open for public navigation and recreation use. The Reclamation plan provides diverse habitat, which will significantly benefit both fish, including listed salmonid species, and wildlife throughout the lagoon as described within the 2002 Reclamation and AMP.

In addition, the AMP provides a completion date for the project, increases shallow water habitat, increase woody structures, and shortens the timeframe for the project’s completion.

b. There is likely an identified economic cost to the public if the proposed fill or removal is not accomplished.

A properly functioning habitat provides public ecosystem services that has economic values. Degradation reduces those values. Leaving the habitat in a degraded state creates economic costs to the public. In terms of DSL’s statutes specifically, public recreation, fishing, and navigation are ecosystem services with economic values that DSL is supposed to protect as part of a public trust. The existing habitat degradation in the lagoon reduces recreational and fishing opportunities.

c. The application describes at least three (3) alternatives considered for the 2002 Reclamation Plan for which the fill or removal is proposed. There are no practicable alternatives with lesser impact to waters of this state. Zero (0) alternative designs were addressed within the August 08, 2022 application, however, RISG proposed several design alternatives over the years before finalizing the plan that was submitted in the 2022 AMP. The AMP alternative designs were not included in the application because the AMP does not meet DSL’s policy for significant changes; therefore, the application would normally not have been circulated for public comment.

d. The application describes zero (0) alternative sites for the proposed removal or fill because the purpose is to protect and enhance the anadromous fish and wildlife habitat within Ross Island’s lagoon. There are no practicable alternative sites with lesser impact to waters of this state.

e. The proposed project conforms to sound policies of conservation because adverse effects to the aquatic resources have been reduced to the extent practicable and the proposed permit contains operating conditions for best management practices to further minimize adverse effects. Interference with public health and safety was identified in the application evaluation and public review processes.

There were public comments stating concern that the project might exacerbate the risk of harmful algal blooms within the lagoon. DSL has not received information or data that indicates the AMP would exacerbate the harmful algal blooms within the lagoon.

f. There is not a conflict with existing public uses of the affected waters or adjacent land uses identified in the application evaluation and public review processes.

g. The proposed permit is conditioned on future local approval as described in the application’s Land Use Compatibility Statement.

h. The proposed fill and removal is not for streambank protection.
i. No permanent adverse effects to aquatic resources are expected, therefore, compensatory mitigation is not required.

III. **Conclusions of Law:**

Based on the factors laid out in ORS Chapter 196 and OAR Chapter 141, Division 85, including ORS 196.825, OAR 141-085-0565, and OAR 141-093-0115, DSL should approve the permit application as conditioned in the proposed permit.

IV. **Proposed Order:**

The Department proposes approving the permit application with conditions and based on the factors laid out in ORS Chapter 196 and OAR Chapter 141, Division 85, including ORS 196.825, OAR 141-085-0565, and OAR 141-093-0130.

As described below, you have the right to request a hearing within 21 days. Prior to the expiration of the 21-day period, this proposed permit decision is not the final agency order on the matter, and the permittee should be aware that the decision could be changed prior to the expiration of the 21-day appeal period—either because the permittee requests a contested case hearing, or as otherwise allowed under the removal fill law. A permittee who begins work under a permit prior to issuance of a final order does so with acceptance of this risk.

V. **Hearing:**

You are entitled to request a hearing based on this Proposed Order as provided by the Oregon Administrative Procedures Act (ORS chapter 183) and the administrative rules implementing the Administrative Procedures Act, OAR Chapter 137, Division 3. See ORS 196.825(7); OAR 141-001-0005; OAR 141-001-0010; OAR 141-085-0575; OAR 141-093-0130.

If you want a hearing, you must file a written request for a hearing with the Department no later than 21 calendar days from the date of the permit decision. See ORS 196.825(7); OAR 141-085-0575; OAR 141-093-0130. If you are a corporation, partnership, limited liability company, unincorporated association, trust, or government body, you must either have an attorney licensed to practice law in Oregon submit a request for a contested case hearing on your behalf or ratify your hearing request within 28 days. See OAR 137-003-0550.

The Department has determined that due to the complexity of removal-fill permitting, a general denial of the matters or a general objection to all permit conditions in the request for a contested case proceeding does not provide sufficient information for a fair and efficient contested case and a more specific request is warranted. OAR 141-085-0575. All requests for a contested case proceeding under this section shall include a specific list of issues for the contested case proceeding. OAR 141-085-0575. The requester may amend their request to include additional issues or clarify existing issues within 15 days of the date that the case is referred to the Office of Administrative Hearings. OAR 141-085-0575.

You may mail a request for a hearing to:
Department of State Lands
Aquatic Resource Management Program
775 Summer Street NE STE 100
Salem, OR 97301.
If you request a hearing, you will be notified of the time and the place of the hearing. See OAR 137-003-0525. You may be represented by legal counsel at the hearing. ORS 183.417; OAR 137-003-0550. Corporations, partnerships, limited liability companies, unincorporated associations, trusts, and government bodies must be represented by an attorney except as provided in OAR 137-003-0555 or as otherwise authorized by law. OAR 137-003-0550. Legal aid organizations may be able to represent you if you have limited financial resources. You will be given information on the procedures, right of representation, and other rights of parties relating to the substance and conduct of the hearing before commencement of the hearing. See ORS 183.413.

VI. Jurisdiction and Authority to Hold a Hearing:

The Department has jurisdiction over the issuance of removal-fill permits pursuant to ORS Chapter 196, and specifically, ORS 196.810. A permit decision constitutes an order in a contested case. See ORS 183.310(2)(a); ORS 196.825(7). If timely requested, a hearing is held as laid out in ORS 183.411 to ORS 183. 471, OAR Chapter 137, Division 3, ORS Chapter 196, and OAR Chapter 141, Division 85. ORS 196.825(7).

VII. Final Order and Defaults:

If a request for a hearing is not received by the Department within this 21-day period, your right to a hearing shall be waived and this Proposed Order shall become the Final Order by default. See ORS 196.825(7); OAR 141-085-0575; OAR 141-093-0130.

If you request a hearing and then either withdraw your hearing request, notify the Department or administrative law judge that you will not appear, or fail to appear at a scheduled hearing, the Department may issue a final order by default. See ORS 183.417.

If the Department issues a final order by default, it designates its file on this matter, including any materials submitted by you that relate to this matter, as the record for purposes of supporting its decision.

If you proceed to a contested case hearing, a Final Order will not be issued until after the hearing concludes. See ORS 183.464; OAR 141-085-0575; OAR 141-093-0130.

VIII. Federal Servicemembers Civil Relief Act:

Active duty servicemembers have a right to stay contested case proceedings under the federal Servicemembers Civil Relief Act. See generally 50 USC 3901 et seq. For more information, contact the Oregon State Bar (800-452-8260), the Oregon Military Department (503-584-3571), or the nearest United States Armed Forces Legal Assistance Office (http://legalassistance.law.af.mil). The Oregon Military Department does not have a toll-free telephone number.
ROSS ISLAND SAND & GRAVEL CO.

IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN REFERENCED APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
6. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within twenty-one (21) calendar days of the date this permit was issued.
7. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project 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 Chapters 196, 390 and related administrative rules.
8. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.
9. Authorization from the U.S. Army Corps of Engineers may also be required.

NOTICE: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940 if you want a transfer of title; public rights to such filled lands are not extinguished by issuance of this permit. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 503-986-5200.

Bethany Harrington, Interim Northern Operations Manager
Aquatic Resource Management
Oregon Department of State Lands

Permit No.: 09819-RF (RF-26)
Modified
Permit Type: Removal/Fill
Waterway: Willamette River
County: Multnomah
Expiration Date: April 30, 2028
Corps No.: 1999-01500
ATTACHMENT A

Permit Holder: Ross Island Sand & Gravel Co.

Project Name: Ross Island Reclamation

Special Conditions for Removal/Fill Permit No. 09819-RF (RF-26)

READ AND BECOME FAMILIAR WITH THE CONDITIONS OF YOUR PERMIT.

The project site may be inspected by the Department of State Lands (DSL) as part of our monitoring program. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. **Responsible Party:** By signature on the application, Randall Steed is acting as the representative of Ross Island Sand & Gravel Co. (RISG). By proceeding under this permit, RISG agrees to comply with and fulfill all terms and conditions of this permit, unless the permit is officially transferred to another party as approved by DSL. In the event information in the application conflicts with these permit conditions, the permit conditions prevail.

2. **Authorization to Conduct Removal and/or Fill:** This permit authorizes the placement of material as described below in T1S R1E Tax Lots 100, 101, and 200, Willamette River, Multnomah County, within the project area as shown in the Ross Island Reclamation Plan (Reclamation Plan), dated September 30, 2002 and the Adaptive Management Plan (AMP) dated August 08, 2022 subject to the terms and conditions of this permit. In the event information in the 2002 Reclamation Plan and AMP conflict, the AMP prevails. In the event information in the application conflicts with the permit conditions, the permit conditions prevail. (See Attachment B for project figures and tables.

   a. Up to 100,000 cubic yards of native or naturally recruited material may be removed from the lagoon during the term of this permit to be used for a planting medium.

   b. Up to 10,000 cubic yards of material may be removed annually for the purpose of maintenance dredging near the processing plant and may be disposed within Ross Island Lagoon as shown on Figure 100 (Attachment B).

   c. For the purposes of this permit, in-water fill is defined as fill placed below ordinary high water (OHW) + 50 feet landward. Where erosion into the lagoon is prohibited by the presence of a berm, the limits of in-water fill area shall be at the toe of the lagoon side of the berm.

   d. Removal within the lagoon for the purpose of sand and gravel mining is prohibited.

   e. Fill evaluation, placement, and documentation methods shall be according to the 2022 Fill Evaluation Scope of Work (Attachment C), unless otherwise approved by DSL with Oregon Department of Environmental Quality (DEQ) support.

3. **Work Period in Jurisdictional Areas:** Any deviations from these restrictions must be coordinated with Oregon Department of Fish & Wildlife (ODFW) and approved in writing by DSL.

   a. In-water placement of fill below the applicable ordinary high water elevation of the Willamette
River and at depths of -40 feet CRD or deeper may occur year round, provided a tremmie tube is employed or material is documented (as required by Permit Condition 2, above) as being well-sorted and of a variety of gradations.

b. All in-water work at depths of shallower than -40 feet CRD shall occur within the ODFW's preferred time windows for the Willamette River, July 1 to October 31.

c. All in-water work at depths of -20 feet CRD or deeper may also occur within ODFW's preferred time windows for the Willamette River, December 1 to January 31.

d. Planting by non-mechanical means (hand, shovel, etc.) may be completed year-round.

4. Changes to the Project or Inconsistent Requirements from Other Permits: It is the permittee’s responsibility to ensure that all state, federal, and local permits are consistent and compatible with the final approved project plans and the project as executed. Any changes made in project design, implementation, and/or operating conditions to comply with conditions imposed by other permits must be approved by DSL prior to implementation.

5. DSL May Halt or Modify: DSL retains the authority to temporarily halt or modify the project or require rectification in case of unforeseen adverse effects to aquatic resources or permit non-compliance.

6. DSL May Modify Conditions Upon Permit Renewal: DSL retains the authority to modify conditions upon renewal, as appropriate, pursuant to the applicable rules in effect at the time of the request for renewal or to protect waters of this state.

7. Permit Compliance. Failure to comply with any condition in this permit may result in an extension of the monitoring period, forfeiture of the financial security, and/or enforcement action.

Pre-Construction

8. Local Government Approval Required Before Beginning Work: Prior to the start of construction, the permittee must obtain all required authorization from the City of Portland.

General Construction Conditions

9. Turbidity Monitoring: RISG shall conduct turbidity monitoring and management according to Oregon Department of Environmental Quality's (DEQ) 401 Water Quality Certification.

10. Erosion Control Methods: The Erosion and Sediment Control Plan shall be implemented as outlined in DEQ's 1200-C permit. Erosion control measures shall be maintained as necessary to ensure their continued effectiveness.

11. Deleterious Materials: Petroleum products, chemicals, or other deleterious materials shall not be allowed to enter the water, except as authorized by the DEQ.

12. DSL May Halt or Modify: The Department retains the authority to halt or modify the authorized activities and/or permit conditions in the event of imminent damage to natural resources. In other cases, if new information becomes available that indicates a need to modify this permit, DSL shall
provide notice of not less than 30 days to RISG of the intent to modify the permit.

13. **Permit Transfer Requirements**: This permit may be transferred to an entity other than Ross Island Sand and Gravel Co. only with the prior written consent of the Department and only if the transferee agrees in writing to fully comply with all permit terms and conditions.

14. **Archaeological Resources**: If any archaeological resources, artifacts, or human remains are encountered during construction, all construction activity must immediately cease. The State Historic Preservation Office must be contacted at 503-986-0674. You may be contacted by a Tribal representative if it is determined by an affected Tribe that the project could affect Tribal cultural or archeological resources.

**Dredging and Placement**

15. **Extent of Dredging**: Maintenance dredging activity shall be limited to the area as shown on Figure 100 (Attachment B), which is copied from the application.

16. **Return Wastewaters Prohibited**: This permit does not authorize the return of wastewater from any operation employed to wash or process materials removed under this permit.

17. **Return of Debris / Refuse / Garbage Prohibited**: For debris management procedures, dredged material placed in the dump scow or barge shall be filtered through a debris grid with a maximum opening size of 12 inches by 12 inches. Debris shall be properly disposed and not returned to waters of the U.S. unless it qualifies for Reclamation material using DEQ approved standards.

18. **Removal-General**:
   a. To the extent practicable, maintenance dredging activity must be staged from an upland or vessel-mounted position. If necessary to achieve the removal, heavy equipment may be staged on or traverse impervious surfaces in the dry below ordinary high water or highest measured tide. In such case, equipment must use water quality best management practices specified in the DEQ-issued Section 401 Water Quality Certification for the project.
   
   b. For vessel-mounted operations, vessels must not be grounded on the bed or banks at any time.
   
   c. Accumulated wood debris within the maintenance dredging footprint may be removed to the extent necessary to achieve the target bathymetry.

19. **Designated Dredged Material Disposal (DMD) Site**: Dredged materials may be used for Reclamation.

20. **Placement of Dredged Materials on Barges**: If dredged materials are placed on barges, all dredged materials shall be placed in barges equipped such that no material shall discharge to waters of this State during loading, transfer, and unloading activity.

21. **Clamshell Equipment / Closed Bucket Operation**: To the extent material characteristics allow, the bucket shall be sealed in the closed position to minimize sediment re-suspension. Move material on the bottom to consolidate it before lifting is prohibited.
22. **Hydraulic Pipeline Dredge Operation:**

   a. To the extent practicable and as material characteristics allow, the working end of the dredge ladder must be kept buried at a target depth of at least 24 inches below the bottom of the waterway. The intake may be raised no more than 3-feet above the bed for the minimum time necessary for purging or flushing. No back-flushing of the pipeline is allowed. No jetting of sediment is allowed unless approved by the Department pursuant to OAR 141-093-0260(3).

   b. The pipeline and any anchors or floats must be removed from the waterway immediately upon completion of the maintenance dredging activity unless another minimum necessary timeframe is approved by the Department. In no case will the pipeline, anchors, floats, or other equipment be permanently placed in waters of this State.

   c. Pressure in the dredge pipeline must be continuously monitored during operation. In the event of a sudden and sustained pressure drop, dredging activity must immediately stop. Any breach of the pipeline must be repaired prior to restarting dredging operation.

23. **Material Transport:** For dredged material transported by vessel or other over-water conveyance:

   a. All dredged materials must be placed in vessels or other conveyances equipped such that no dredged material discharges to waters of this State during loading, transfer and unloading activity for upland placement.

   b. Vessels must be staged such that there is no grounding on the bed or banks at any time.

24. **Fish Impingement or Entrainment:** The authorization holder shall immediately report any fish observed that are impinged or entrained by operations to the ODFW at (503) 657-2000. The permittee shall provide access for ODFW to enter the project site for making fish entrainment observations.

### Buffers

25. **Heron Rookery and Eagle Nest Buffer:**

   a. A 300- and 650-foot buffer from existing heron rookeries and a 300-foot buffer from existing eagle nest(s) shall be established with visible markers in the lagoon and on upland, as appropriate.

   b. The buffer requirements do not apply to eagle nests or heron rookeries that have been abandoned, as determined by the Department. The Department shall waive the buffer requirement in the event that the buffer requirement interferes with the operation of the processing plant, upon written notification from RISG.

   c. From February 1 to July 15, there shall be no disturbance, including barge mooring within 300 feet of an existing eagle nest. There shall be no dredging or filling within 650 feet of an existing heron rookery between February 1 and July 15 without separate written authorization from the Department. The Department may authorize removal or filling between 300 feet and 650 feet from a heron rookery between February 1 and July 15 on a case-by-case basis upon
written request from the permit holder. The Department shall consult with ODFW prior to authorizing such disturbance to determine if additional conditions are required and shall specify those conditions in its written authorization.

**Deadlines for Material Sources**

26. **Settling Pond Dredging Deadline:** RISG shall resume dredging the Ross Island settling pond for Reclamation use in 2024.

27. **Dredging Application Deadline:** RISG shall submit complete applications to DSL and USACE to dredge at least 50,000 cyd of material from outside the lagoon for the Reclamation Plan. The complete application shall be submitted by December 31, 2023. RISG shall respond to any agency request for additional information within 30 calendar days.

28. **Dredge and Import Deadline:** RISG shall dredge and import material from Vancouver Turning Basin or other USACE allowed harvest area for Reclamation use. This work shall begin no later than 2025.

29. **Port of Portland:** RISG shall work with the Port of Portland to obtain their Class A dredge material for Reclamation Plan use.

**Reclamation Work Deadlines**

30. **Reclamation Plan Completion Deadlines:** All removal and fill of material, aquitard layer, and all final contouring shall be completed no later than April 30, 2033. Plant installation, large wood structures, and signs shall be completed no later than October 31, 2034.

31. **Fill Placement Deadlines:** To ensure the project stays on track, RISG shall place fill volumes as listed below. The 3-year fill volumes listed below may increase at the time of permit renewal if the minimum volume of fill material has not been placed, or updated volume remaining calculations indicate additional material is needed to complete the project by the Reclamation Plan Completion Deadlines.

   a. A total of 132,000 cyd or more during these three years: 2023, 2024, and 2025.

   b. A total of 132,000 cyd or more during these three years: 2026, 2027, and 2028.

   c. A total of 132,000 cyd or more during these three years: 2029, 2030, and 2031.

   d. All volume needed to complete Reclamation Plan fill shall be placed, and contouring completed by April 30, 2033.

**Corrective Action Plan**

32. **Fill Placement Corrective Action Plan:** If RISG fails to place material by the deadlines dates listed above, RISG shall submit a Corrective Action Plan to DSL.

   a. The Corrective Action Plan will be submitted by February 15th with the Annual Monitoring Report or within 30 days after DSL requests the plan, whichever comes earlier. DSL will
review the plan and determine if the reason for the deficiency and proposed correction actions are satisfactory to the agency. If not, DSL will open enforcement action.

b. The Corrective Action Plan will clearly address the following.
   i. Why RISG did not achieve the fill placement requirements,
   ii. Include specific details about how RISG will get the project back on track before the next renewal deadline, and
   iii. How RISG will ensure the actions in the Corrective Action Plan will be completed as outlined and on time.

Signage

33. **Signs Required:** Permanent signs must be posted along the Reclamation Area site perimeter.

   a. The signs shall be installed on land where there is no inundation.

   b. The sign language, size, and location shall be reviewed and approved by DSL prior to installation.

Monitoring And Reporting Requirements

34. **RISG Record Maintenance:** Ross Island Sand and Gravel Co. shall maintain records that document compliance with each of the obligations imposed by this permit and shall make such records available to the Department upon request.

35. **Annual Monitoring Report Due Date:** An annual monitoring report shall be submitted to the Department on February 15th of each year until five years following completion of the filling, large wood structure installation, sign installation, and plantings in each annual planting area.

36. **Extension of the Monitoring Period:** The monitoring period may be extended, at the discretion of the Department, for failure to provide monitoring reports, failure of the site to meet performance standards for two consecutive years, or when needed to evaluate re-planting, large wood structure repairs, or other corrective or remedial actions.

37. **Release of Obligation:** Monitoring is required until DSL has officially released the site from further monitoring.

38. **Failure to Submit Monitoring Reports:** Failure to submit the required monitoring report by the due date may result in an extension of the monitoring period, forfeiture of the financial security, and/or enforcement action.

39. **Contents of the Annual Monitoring Report:** The monitoring report shall include the following information every year, unless specifically stated otherwise.

   a. **Survey:** Every two years or following an event that may disrupt the fill materials (such as an earthquake), RISG shall complete a survey of the lagoon and the upland that shows the location(s), elevation(s), and extent of fill activities, and cross section locations. The survey shall also include cross sections that confirm fill slope stability.
b. **Remaining Volume Calculations:** By 2028, RISG shall use the most recent bathymetric survey to calculate the remaining volume. Based on these calculations and at renewal time, DSL may increase the volume of fill required every three years to ensure the project is completed by the Reclamation Plan deadlines.

c. **Fill Placement:** A record of each fill event shall be maintained by RISG as specified in Attachment C. Submit an inventory of all fill materials including generator name, source of material, type of material, date of fill event, associated permit numbers for dredge material fill, quantity (i.e., volume), method of placement, location of placement, and DEQ approvals, as appropriate for in-water fill.

d. **Sediment Caps Analysis:**
   i. Provide surveys or confirmation methods used to document upland cap thickness, if required.
   ii. Provide source, volume, placement date, and placement method for cap material used for fill.

e. **Slope Analysis:** Discuss if the project is meeting the required slopes for each area. If not, explain why and what will be done to ensure slopes are met. Also address if the current slopes are stable.

f. **Potential Fill Sources:** Provide information regarding the anticipated fill for the upcoming year and estimated schedule for placement. Include source, volumes, and schedule for placement. This shall include:
   i. Anticipated imported fill,
   ii. Ross Island generated material,
   iii. Ross Island dredged and imported material,
   iv. Port of Portland material,
   v. Any other potential source of material.

g. **Fill Remaining:**
   i. Provide the volume of material remaining to complete the project.
   ii. Discuss if the project is on-target to meet the Fill Placement Requirement as stated in an earlier permit condition. If not, include a Corrective Action Plan as stated in an earlier permit condition.

h. **Wetland Cross Sections:** As wetlands are created, RISG shall submit a cross section of the fill slopes with a determination of elevation of wetland hydrology. Include an estimate of the number of acres that meet the hydrology criteria for a wetland.

i. **Nests and Rookeries:** Provide a figure showing the location of existing and abandoned bald eagle nests and heron rookeries, with appropriate buffers clearly identified.

j. **Figures:** Clearly show the following.
   i. North arrow and scale bar.
   ii. Location of the "annual planting areas as described in the Reclamation Plan's Table 2 "Idealized Zonation of Plants Based on a Range of Elevation for a Reclaimed Slope within the Ross Island Lagoon" and Figure 9 (this authorization's Attachment B and AMP’s
Appendix B) unless otherwise approved by DSL with square foot area listed and year planted.

iii. Location of area replanted during the monitoring year, with square foot area listed.

iv. Location of invasive species treatment, with square foot area listed.

v. Location of installed large wood structures, with type specified.

vi. Location of repaired or replaced large wood structures.

vii. Location of signs installed.

viii. Location of signs replaced.

ix. Permanent monitoring plot locations that correspond to the data collected.

x. Permanent photo-point locations. Identify each habitat type separately and state the area (square foot or acreage) of each noted. Use the habitats as identified in the attached AMP Table 2. Habitat Comparison by Fill Area.

k. Maintenance: Describe maintenance activities and recommendations to meet performance standards. This includes when and where irrigation occurred; specific invasive species treatment used; number and location of large wood structures placed; number and location of signs installed; and the number, species, and location of any plantings (newly planted/seeded and re-planted/seeded areas).

l. Photos: Photos from established photo monitoring points clearly showing the entire monitoring area, installed large wood structures, and signs.

m. Data Collection: Data collected to support the conclusions related to the status of the site relative to the performance standards listed in this permit (include summary/analysis in the report and raw data in the appendix). Data should be submitted using the DSL Monitoring Vegetation Spreadsheet for or presented in the same format as indicated in DSL’s Routine Monitoring Guidance for Vegetation. Data should be separated by habitat area (see attached AMP Table 2) and by year monitoring started.

n. Turbidity Monitoring: Submit turbidity monitoring data as per DEQ’s water quality certification conditions.

o. On-going Feasibility Study and Remedial Action Reports: As required by DEQ.

p. Other Information: Submit other information necessary or required to document compliance with the performance standards listed in this permit.

40. Establishment of Permanent Monitoring Locations Required: Permanent plot locations must be established during the first annual vegetation monitoring in sufficient number and locations to be representative of the site. The permanent plot locations must be clearly marked on the ground.

41. Wetland Delineation Light: A wetland "delineation light" (as outlined in DSL’s Removal/Fill Guide), to be concurred with by the DSL, will be conducted before the end of the monitoring period, but no later 2039, to determine the final wetland boundaries. The “light delineation” should be completed during spring of a year when precipitation has been near normal, and no irrigation has been in use during the previous two years.
42. **Invasive Species Removal:**

a. **Ivy:** The permit holder shall mechanically remove or, when necessary, spot treat with appropriate herbicide ivy from the base of the trees located on the western portion of Ross Island. Ivy removal shall occur between July 15 and January 31 only. Only an aquatically labeled herbicide may be used in wetlands and waterways.

b. **Reed canary grass:** If more than 20% cover is within the wetland area, the grass growing above the water will be mowed three times during the growing season (the first of June, the middle of July, and the middle of October).

c. **Scot's broom, Himalayan blackberry, and other invasive:** Areas with more than 20% cover will be treated. Reed canary grass and ivy shall be treated as outlined in permit conditions above. All other invasive species shall be treated by removing manually by hand pulling or cutting whenever possible. When necessary, spot spraying of an aquatically labeled herbicide may be used on targeted plants only.
   i) For treatment only (not success criteria): A plant species should automatically be labeled as invasive if it appears on the current Oregon Department of Agriculture noxious weed list, plus known problem species including *Phalaris arundinacea*, *Mentha pulegium*, *Holcus lanatus*, *Anthoxanthum odoratum*.

**Performance Standards**

To be deemed successful, the site shall meet the following performance standards, as determined by DSL. Note: "Riparian/emergent wetland" used in the Reclamation Plan means a combination of upland riparian habitat, shrub-dominated wetlands, and emergent wetlands, and 8-16 of the 22 acres are anticipated to be created wetlands.

43. **Acreage Required:** The island and lagoon shall be filled to the elevations and site constructed as shown in the AMP Figures 1-18 and associated cross sections (AMP Figures 7-12). At the end of the monitoring period, there shall be at a minimum the acreages within each Habitat Area and within each Fill Area as listed the AMP’s Table 2 “Habitat Comparison by Fill Area”, which is included in this authorization’s Attachment B. This includes the Shallow Water Habitat’s three zones (Upper Zone/Enhanced Shallow Water Habitat Bench, Upper Zone/Undeveloped Area, and Lower Zone), Emergent Wetland, Shrub Dominated Wetland, Riparian, Upland Forest.

44. **Planting Locations:** The uplands and wetlands shall be planted as described in the Reclamation Plan's Table 2 “Idealized Zonation of Plants Based on a Range of Elevation for a Reclaimed Slope within the Ross Island Lagoon” and Figure 9 (this authorization’s Attachment B and AMP’s Appendix B) unless otherwise approved by DSL. Annual planting areas shall be created based on the area planted each year and each shall be monitored for 5 years starting one growing season following planting. Planting areas include the following.

a. Upland areas created under the Reclamation Plan and upland areas reclaimed in 2002 that were not already vegetated.

b. Created riparian habitat and wetland habitat.
45. **Large Wood Debris Structures**: Large wood debris and structures shall be placed within each Habitat Area and Fill Area as shown on AMP Table 2 and Figures 13-18 to provide structural complexity and refuge. If approved in writing by DSL, DEQ, and USACE, RISG may implement large wood debris placement as shown in the AMP Appendix E, Figures E1-E3. Large wood structures shall remain in place and stable every year for at least 5 years after their installation.

46. **Slopes**: Slopes shall be no steeper than what is listed on AMP Table 2 within each Habitat Area and Fill Area.

   *Created Emergent Wetlands (+1 to +5 feet RID)*

47. **Invasive Species Cover**: The total absolute percent cover of invasive species shall be no more than 20% after the third year of monitoring. The following are considered invasive species for this permit: Scot's broom, reed canary grass, and Himalayan blackberry.

   *Created Shrub-dominated Wetlands (+4 to +10 feet RID)*

48. **Invasive Species Cover**: The total absolute percent cover of invasive species shall be no more than 20% after the third year of monitoring. The following are considered invasive species for this permit: Scot's broom, reed canary grass, and Himalayan blackberry.

49. **Bare Substrate Cover**: Bare substrate represents no more than 20% cover.

50. **Woody Vegetation**: The density of woody vegetation is at least 1,600 live native plants (shrubs) and/or stems (trees) per acre OR the cover of native woody vegetation on the site is at least 50%. Native species volunteering on the site may be included, dead plants do not count, and the standard must be achieved for 2 years without irrigation.

   *Created Riparian Habitat (+9 to +12+ feet RID)*

51. **Invasive Species Cover**: The total absolute percent cover of invasive species shall be no more than 20% after the third year of monitoring. The following are considered invasive species for this permit: Scot's broom, reed canary grass, and Himalayan blackberry.

   *Upland Forest (> +12 feet RID)*

52. **Invasive Species Cover**: The total absolute percent cover of invasive species shall be no more than 20% after the third year of monitoring. The following are considered invasive species for this permit: Scot's broom, reed canary grass, and Himalayan blackberry.

**Financial Security**

53. **Financial Security Required**: RISG, pursuant to this permit, will post a bond made payable to the Department in the amount of $6,005,654 to ensure that RISG performs according to the conditions of this permit. A copy and an original of the bond using the Department’s form must be submitted to DSL no later than May 31, 2023. Failure to timely submit the bond may result in revocation of the permit.
Failure to keep the bond continuously in effect through the date of full performance of all RISG’s obligations hereunder shall constitute a violation of this permit by RISG, subject to the following provisions. If at any time the Department receives information that the issuer intends either to cancel the bond or to not renew the bond, the Department shall provide RISG with written notice ("Notice") specifying the details of such information and request that RISG take action to ensure that the bond remains in effect. RISG’s failure to take such corrective action and ensure that the bond remains in effect within 30 days (or other mutually agreed upon timeline) after receiving such Notice shall be a breach or default of its performance obligations under this permit (an “Event of Default”). Failure to cure shall not constitute an Event of Default if: (i) corrective action is instituted by RISG within the original 30-day period, (ii) such corrective action is diligently pursued until the breach is cured, and (iii) the breach is corrected within the additional time granted by the Department. Upon occurrence of Event of Default, the Department may claim the full penal sum of the bond, which the surety under the bond shall pay over to Department within twenty (20) days after delivery of written notice to the surety of such breach or default by RISG.

54. **Incremental Release of the Financial Security**: The permit holder shall file a request with the agency for release of portions of this financial security. Portions of the financial security may be released at the discretion of DSL, based on the following schedule. To qualify for a release, all work shall be completed as proposed in the AMP and authorized by DSL, and all permit conditions shall be met.

a. **Dredging and Fill Placement**: The 3-year volumes listed below may increase at the time of renewal if the minimum volume of material has not been placed, or updated volume remaining calculations indicate additional material is needed to complete the project by the Reclamation Plan deadlines.
   i. $680,912 released in 2025 if RISG places 132,000 cyd or more during 2023, 2024, and 2025.
   ii. $680,912 released if RISG places 132,000 cyd or more during 2026, 2027, and 2028.
   iii. $680,912 released if RISG places 132,000 cyd or more during 2029, 2030, and 2031.
   iv. $680,912 released after RISG finishes placing all fill material needed to complete the Reclamation Plan.

b. **Contouring as shown in the AMP**: $482,991 released after RISG completes all contouring work.

c. **Log Structures**: $351,421 released after RISG installs all log structures and they have been successfully monitored without repair or replacement for 5-years.

d. **Monitoring and Administrative Costs**: $95,000 released each year of monitoring if all permit conditions are met.

e. **Remaining Work**: Release full amount after all work has been completed and DSL releases the site from monitoring.
ATTACHMENT B

Permit Holder: Ross Island Sand & Gravel Co.

Project Name: Ross Island Reclamation

Tables, Maps, and Drawings for Removal/Fill Permit No. 09819-RF
### AMP Table 2. Habitat Comparison by Fill Area

<table>
<thead>
<tr>
<th>HABITAT AREA (Slope H:V)</th>
<th>DEPTH (ft. RID Datum)</th>
<th>FILL AREA Acres / Linear Feet (# LWD Structures / total pieces)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area A</td>
<td>Central</td>
</tr>
<tr>
<td><strong>2022 Adaptive Management Plan – To Be Implemented</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow Water Habitat (3:1 or shallower)</td>
<td>+1 to -20</td>
<td>9.3 Ac</td>
<td>2.5 Ac</td>
</tr>
<tr>
<td>Upper Zone / Enhanced Shallow Water Habitat Bench (Area A: 12:1, Area C/D: 3:1)</td>
<td>+1 to -10</td>
<td>5.3 Ac / 1,700 LF (23/92 LWD)</td>
<td>1.3 Ac / 1,700 LF (12/36 LWD)</td>
</tr>
<tr>
<td>Upper Zone/Undeveloped Area (Area A: 3:1, Area C/D: 14:1)</td>
<td>+1 to -10</td>
<td>0.8 Ac/900 LF (4/10 LWD)</td>
<td>0.0 Ac (0 LWD)</td>
</tr>
<tr>
<td>Lower Zone (3:1)</td>
<td>-10 to -20</td>
<td>3.2 Ac</td>
<td>1.2 Ac</td>
</tr>
<tr>
<td><strong>Riparian / Emergent Wetlands</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riparian / Emergent Wetlands (50:1 to 33:1)</td>
<td>+1 to +12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Shrub Dominated Wetland (50:1 to 33:1)</td>
<td>+4 to +10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Riparian (50:1 to 33:1)</td>
<td>+9 to +12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Upland Forest (3:1)</strong></td>
<td>&gt; +12</td>
<td>123 Ac</td>
<td>123 Ac</td>
</tr>
<tr>
<td><strong>2002 Reclamation Plan - Superseded</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow Water Habitat (3:1 or shallower)</td>
<td>+1 to -20</td>
<td>8 Ac</td>
<td>2.5 Ac</td>
</tr>
<tr>
<td>Enhanced Shallow Water Habitat Bench (4:1 to 7:1)</td>
<td>+1 to -10</td>
<td>6 Ac / 2,600 LF (18/72 LWD)</td>
<td>0.0 Ac (0 LWD)</td>
</tr>
<tr>
<td><strong>Riparian / Emergent Wetlands</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergent Wetland (50:1 to 33:1)</td>
<td>+1 to +5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Shrub Dominated Wetland (50:1 to 33:1)</td>
<td>+4 to +10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Riparian (50:1 to 33:1)</td>
<td>+9 to +12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Upland Forest (3:1)</strong></td>
<td>&gt; +12</td>
<td>118 Ac</td>
<td>118 Ac</td>
</tr>
</tbody>
</table>
## 2002 Plan Table 2. Idealized zonation of plants based on a range of elevations for a reclaimed slope within the Ross Island Lagoon

<table>
<thead>
<tr>
<th>Zone 1 (Upland)</th>
<th>12-20+ feet RID</th>
<th>Size</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer macrophyllum</td>
<td>bigleaf maple</td>
<td>2-3 feet</td>
<td>10 feet</td>
</tr>
<tr>
<td>Bromus carinatus</td>
<td>California brome</td>
<td>seed</td>
<td>1 lb/1000 ft²</td>
</tr>
<tr>
<td>Elymus glaucus</td>
<td>blue wildrye</td>
<td>seed</td>
<td>1 lb/1000 ft²</td>
</tr>
<tr>
<td>Holodiscus discolor</td>
<td>oceanspray</td>
<td>1-2 feet</td>
<td>7 feet</td>
</tr>
<tr>
<td>Populus trichocarpa</td>
<td>black cottonwood</td>
<td>2-3 feet</td>
<td>7 feet</td>
</tr>
<tr>
<td>Rhamnus purshiana</td>
<td>cascaria</td>
<td>2-3 feet</td>
<td>10 feet</td>
</tr>
<tr>
<td>Sambucus mexicana</td>
<td>blue elderberry</td>
<td>1-2 feet</td>
<td>7 feet</td>
</tr>
<tr>
<td>Symphoricarpos albus</td>
<td>snowberry</td>
<td>0.5-1 feet</td>
<td>3 feet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone 2 (Riparian/Scrub Shrub Wetland)</th>
<th>9-12 feet RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrostis exerata</td>
<td>spike bentgrass</td>
</tr>
<tr>
<td>Elymus trachycaulus</td>
<td>slender wheatgrass</td>
</tr>
<tr>
<td>Lonicera involucrata</td>
<td>twinberry</td>
</tr>
<tr>
<td>Oemleria cerasiformis</td>
<td>osoberry</td>
</tr>
<tr>
<td>Populus balsamifera trichocarpa</td>
<td>black cottonwood</td>
</tr>
<tr>
<td>Salix scouleriana</td>
<td>Scouler’s willow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone 3 (Scrub Shrub Wetland)</th>
<th>4-10 feet RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrostis exerata</td>
<td>spike bentgrass</td>
</tr>
<tr>
<td>Cornus stolonifera</td>
<td>red-osier dogwood</td>
</tr>
<tr>
<td>Deschampsia cespitosa</td>
<td>tufted hairgrass</td>
</tr>
<tr>
<td>Fraxinus latifolia</td>
<td>Oregon ash</td>
</tr>
<tr>
<td>Salix flavilis</td>
<td>Columbia River willow</td>
</tr>
<tr>
<td>Salix hookeriana</td>
<td>Hooker’s willow</td>
</tr>
<tr>
<td>Salix lucida lasiandra</td>
<td>Pacific willow</td>
</tr>
<tr>
<td>Salix sitchensis</td>
<td>Sitka willow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone 4 (Emergent Wetland)</th>
<th>1-5 feet RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alopecurus geniculatus</td>
<td>Water foxtail</td>
</tr>
<tr>
<td>Bidens cernua</td>
<td>nodding beggar’s ticks</td>
</tr>
<tr>
<td>Bidens frondosa</td>
<td>tall beggar’s ticks</td>
</tr>
<tr>
<td>Carex aperta</td>
<td>Columbia sedge</td>
</tr>
<tr>
<td>Cyperus aristatus</td>
<td>awned flatsedge</td>
</tr>
<tr>
<td>Eleocharis ovata</td>
<td>ovate spikerush</td>
</tr>
<tr>
<td>Gratiola ebracteata</td>
<td>bractless hedge-hyssop</td>
</tr>
<tr>
<td>Gratiola neglecta</td>
<td>common hedge-hyssop</td>
</tr>
<tr>
<td>Juncus bufonius</td>
<td>toadrush</td>
</tr>
<tr>
<td>Juncus oxymeris</td>
<td>pointed rush</td>
</tr>
<tr>
<td>Leersia oryzoides</td>
<td>rice cutgrass</td>
</tr>
<tr>
<td>Limosella aquatica</td>
<td>mudwort</td>
</tr>
<tr>
<td>Lindernia dubia</td>
<td>false-pimpernel</td>
</tr>
<tr>
<td>Ludwigia palustris</td>
<td>water-purslane</td>
</tr>
<tr>
<td>Ludwigia peploides</td>
<td>jussiaea</td>
</tr>
<tr>
<td>Lythrum portula</td>
<td>peplis</td>
</tr>
<tr>
<td>Polygonum hydropiperoides</td>
<td>waterpepper</td>
</tr>
<tr>
<td>Rotala ramosier</td>
<td>toothcup</td>
</tr>
<tr>
<td>Sagittaria latifolia</td>
<td>wapato</td>
</tr>
<tr>
<td>Scirpus tabernaemontani</td>
<td>softstem bulrush</td>
</tr>
<tr>
<td>Scirpus cyperinus</td>
<td>woolly sedge</td>
</tr>
<tr>
<td>Verbena hastata</td>
<td>simpler’s joy</td>
</tr>
</tbody>
</table>
FIGURE 1
Ross Island Location

Imagery Date: 7/20/2018
© 2020 Google

All elevations are in Ross Island datum

2020 Adaptive Management Plan
Ross Island Sand & Gravel Co.
Date: February 2020
Attachment C

Permit Holder: Ross Island Sand & Gravel Co.

Project Name: Ross Island Reclamation

2022 Fill Evaluation Scope of Work for Removal/Fill Permit No. 09819-RF

This attachment is copied from 8/8/2022 Application, Attachment 1 but excludes the Appendix A DEQ FAQ sheet.
ROSS ISLAND SAND AND GRAVEL
FILL EVALUATION SCOPE OF WORK
(May 2022)

I. OBJECTIVES

A. Work performed under this Fill Evaluation Scope of Work (SOW) shall be completed to meet the goals of the reclamation plan as described in DSL Permit (RF-26 / 9819-RF). The Reclamation Plan specifies that fill placed in the lagoon must not pose an unacceptable short or long-term risk to human health and the environment. The objectives of the tasks described in this SOW are:

1. To confirm, on an annual basis, that fill determined not to require management (Class A), has been adequately evaluated and appropriately managed.

2. To confirm that fill is not hazardous waste.

II. FILL CATEGORIES – IN-WATER FILL

For the purposes of this SOW, in-water criteria will apply to all fill placed in Ross Island Lagoon below the ordinary high water line or above the ordinary high water line but within 50-feet landward of it, where overland flow (erosion) into the lagoon is possible. Upland criteria will apply to fill placed above this boundary, or within 50 feet of the ordinary high water line in areas where erosion to the lagoon is prevented by existing topography or construction of a berm.

Fill destined for placement in Ross Island Lagoon must meet the criteria established for qualifying as Class “A” Fill based on the presence of hazardous substances as defined below:

1. Class “A” Fill - Material with concentrations of hazardous substances less than the applicable screening levels (see Ross Island Fill Evaluation Fact Sheet, Table 1 (DEQ 2022)), or for which toxicity and/or bioaccumulation testing demonstrate no toxicity and concentrations of bioaccumulative hazardous substances in tissue are below Acceptable Tissue Levels (ALTs) (DEQ, 2022). Material must be tested using analytical methods with method detection limits low enough to allow comparison to the applicable screening levels. Recommended analytical methods and sample quantitation limits are provided in Ross Island Fill Evaluation Fact Sheet, Table 3. This material will not pose an unacceptable risk to human health and the environment and will require no management after placement.
A. CLASS “A” FILL DETERMINATION

The following information must be documented to support a finding that the proposed fill material will not pose an unacceptable risk to human health or the environment:

1. The source area from which the fill is obtained must be described. This description shall include at a minimum:

   a) Area and depth over which fill will be removed and estimated fill volume. A map depicting the site and surrounding areas should be provided.
   b) Nature of the material; e.g., general consistency, particle size, heterogeneity.
   c) Historical activities at the site and any surrounding areas (a minimum of .25 miles up and downstream) that may have impacted the site.
   d) Data indicating the concentration range of naturally occurring metals at the site.
   e) Any existing chemical or physical sampling data for the site.

If the information provided above is sufficient to determine those hazardous substances are not present above the concentrations for Class A materials, an “inerts” determination can be made at this point and further testing is not necessary. Under this scenario, approval from DEQ prior to placement is not required; however, DEQ must be notified a minimum of 30 days prior to the planned placement in Ross Island Lagoon and the basis for the determination must be documented for future submittal in the Annual Monitoring and Maintenance Reports, described in Item IV of this SOW.

2. Chemical analyses for substances likely to be present in the potential fill material must be provided. Testing protocols are described in DEQ’s Ross Island Fill Evaluation Fact Sheet (DEQ, 2022). If testing indicates that concentrations of hazardous substances in the proposed fill are less than the applicable screening levels, or for which subsequent toxicity and bioaccumulation testing demonstrate no toxicity and tissue concentrations of bioaccumulative hazardous substances below ATLs (DEQ, 2022), the fill can be placed in Ross Island Lagoon. Under this scenario, approval from DEQ prior to placement is not required; however, DEQ must be notified a minimum of 30 days prior to the planned placement in Ross Island Lagoon and the basis for the determination must be documented for future
submittal in the Annual Monitoring and Maintenance Reports, described in Item IV of this SOW. General fill placement locations must also be documented.

III. FILL CATEGORIES – UPLAND FILL

Fill destined for placement upland on Ross or Hardtack Island will generally fall into four (4) categories based on the presence of hazardous substances (Table 4).

1. Class “A” Fill - Material with concentrations of hazardous substances that fall below the lowest applicable screening level considering ecological terrestrial exposure, human direct contact, and potential leaching to ground or surface water at concentration that exceed aquatic screening levels (Ross Island Fill Evaluation Fact Sheet, Table 2). The leachate evaluation can be based on total concentrations or leachate tests. This material will not pose an unacceptable risk to human health or the environment and will require no management after placement.

2. Class “B” Fill – Material meeting the criteria for Class “A” fill described above, with the exception that the screening criteria for petroleum hydrocarbons is exceeded by no more than ten (10) times the screening concentrations. This material must be landfarmed after placement with the goal of reducing petroleum concentrations to below screening levels. Once landfarming is complete, this material must be covered with a minimum of two (2) feet of clean soil. Note that disposal of imported fill under this criterion requires a Solid Waste Landfill Permit.

3. Class “C” Fill – Material with concentrations of hazardous substances no more than five (5) times the direct contact screening levels for human or ecological receptors and meeting the leachate screening concentrations. This material may pose an unacceptable risk to human health or the environment and will require capping with a minimum of three (3) feet of clean soil and associate long-term management of the cap. Note that disposal of this material requires a Solid Waste Landfill Permit.

4. Class “D” Fill – material with concentrations of hazardous substances greater than five (5) times direct contact screening levels, exceeding leachate screening concentrations, exhibiting
a sheen, or containing radioactive compounds. This fill contains hazardous substances at a level or in a form that cannot safely be managed on Ross or Hardtack Islands.

A. **CLASS “A” FILL DETERMINATION** The following information must be documented to support a finding that the proposed fill material will not pose an unacceptable risk to human health or the environment without capping:

1. The source area from which the fill is obtained must be described. This description shall include at a minimum:
   
   a) Area and depth over which fill will be removed and estimated fill volume. A map depicting the site and surrounding areas should be provided.
   
   b) Nature of the material; e.g., general consistency, particle size, heterogeneity.
   
   c) Historical activities at the site and any surrounding areas that may have impacted the site.
   
   d) Data indicating the concentration range of naturally occurring metals at the site.
   
   e) Any existing chemical or physical sampling data for the site.

If the information provided above is sufficient to determine those hazardous substances will not be present above the concentrations for Class A material, an “inerts” determination can be made at this point and further testing is not necessary. Under this scenario approval from DEQ prior to placement on Ross or Hardtack Island is not required. However, the basis for the clean fill determination must be documented for future submittal in the Annual Monitoring and Maintenance Reports, described in Item IV of this SOW.

2. Chemical analyses for substances likely to be present in the potential fill material must be provided. Testing protocols are described in DEQ’s Ross Island Fill Evaluation Fact Sheet (DEQ, 2022). If testing indicates that concentrations of hazardous substances in the proposed fill are less than screening levels, the fill can be placed upland on Ross or Hardtack Island. Under this scenario, approval from DEQ prior to placement is not required. However, the basis for the clean fill determination must be documented for future submittal in the Annual Monitoring and Maintenance Reports, described in Item IV of this SOW.
B. CLASS “B” FILL DETERMINATION

Note that disposal of imported fill meeting this criterion requires a Solid Waste Landfill Permit. The following information must be documented to support a finding that the proposed fill material will not pose an unacceptable risk to human health or the environment if landfarmed and covered with a minimum of two (2) feet of clean fill:

1. The source area from which the fill is obtained must be described. This description shall include at a minimum:
   
a) Area and depth over which fill will be removed and estimated fill volume. A map depicting the site and surrounding areas should be provided.
   b) Nature of the material; e.g., general consistency, particle size, heterogeneity.
   c) Historical activities at the site and any surrounding areas that may have impacted the site.
   d) Data indicating the concentration range of naturally occurring metals at the site.
   e) Any existing chemical or physical sampling data for the site.

2. Chemical analyses for substances likely to be present in the potential fill material must be provided. Testing protocols are described in DEQ’s Ross Island Fill Evaluation Fact Sheet (DEQ, 2022). If testing indicates that, except for petroleum hydrocarbons, concentrations of hazardous substances in the proposed fill are less than screening levels; and total petroleum hydrocarbons (TPH) are less 1,000 ppm, the fill can be placed upland on Ross or Hardtack Island. This material must be landfarmed and resampled, with the goal of reducing petroleum concentrations to less than 100 ppm. Additional fill must not be placed over material that has not yet attained the 100 ppm TPH goal. Under this scenario, approval from DEQ prior to placement is not required; however, DEQ must be notified a minimum of 30 days prior to the planned placement. Also, the basis for the Class “B” fill determination must be documented for future submittal in the Annual Monitoring and Maintenance Reports, described in Item IV of this SOW.

3. Documentation of cap placement. Once landfarming is complete and no more than six (6) months following receipt of analytical results confirming treatment goals were achieved, the fill must be covered with a minimum of two (2) feet of clean soil. The source and nature of the cap material and the associated
C. CLASS "C" FILL DETERMINATION

Notes that disposal of this material requires a Solid Waste Landfill Permit. Any material with concentrations of hazardous substances no more than five (5) times the direct contact screening levels, but meeting leachate screening criteria, are only acceptable for upland placement in conjunction with capping, monitoring, and management. The following submittals will be required for evaluation of the suitability of placement of the material upland on Ross or Hardtack Island with a cap and associated long-term maintenance:

1. The source area from which the fill is obtained must be described. This description shall include at a minimum:
   a) Area and depth over which fill will be removed and estimated fill volume. A map depicting the site and surrounding areas.
   b) Historical activities at the site and any surrounding areas that should be provided.
   c) Nature of the material; e.g., general consistency, particle size, heterogeneity may have impacted the site.
   d) Data indicating the concentration range of naturally occurring metals at the site.
   e) Any existing chemical or physical sampling data for the site.

2. Chemical analyses for substances likely to be present in the potential fill material must be provided. Testing protocols are described in DEQ's Ross Island Fill Evaluation Fact Sheet (DEQ, 2022). If contaminants are detected in a form or at a concentration that would characterize the material as Class "D" Fill as described in Item III.D of this SOW, the material cannot be placed upland on Ross or Hardtack Island.

3. A work plan describing the planned placement of the contaminated material must be submitted for DEQ review a minimum of 3 months prior to the date of placement. The work plan should include identification of the location that the material will be placed, method of placement, source of cap material, placement method and timing for cap, thickness of cap (and supporting basis), method for documenting that cap design has
been achieved, and long-term maintenance that will be implemented. DEQ will make the work plan available for public review and hold a public meeting to accept comments on the proposal as warranted. DEQ approval of the work plan is required prior to proceeding with the planned activity.

4. A report documenting the placement of the contaminated fill and associated cap shall be submitted to DEQ within 30 days of completion of the capping and receipt of any associated analytical results. Long-term maintenance and associated report submittal will be completed as defined in the work plan. Periodic reports documenting monitoring results will be submitted to DEQ for review according to the schedule agreed to in the work plan.

D. CLASS “D” FILL

The following materials cannot be placed upland on Ross or Hardtack Island: (a) material with concentrations exceeding five (5) times the ecological or human health screening levels except for petroleum, (b) Material with petroleum concentrations exceeding 1,000 ppm, (c) material exceeding leachate screening criteria, (d) Material exhibiting a sheen, (e) material exhibiting radiological properties, or (f) hazardous wastes.

IV. ANNUAL MONITORING AND MAINTENANCE REPORTS

On an annual basis, Ross Island Sand and Gravel shall submit Annual Monitoring and Maintenance Reports that document fill activities for the prior year and project anticipated fill activities for the upcoming year. Annual Monitoring and Maintenance Reports shall be submitted to DEQ by August 31	extsuperscript{st} of each year and the following information shall be included:

A. Source, volume, fill date, fill category, and general placement location for all fill. All information used to determine fill category including sampling results and associated lab reports.
B. Surveys or confirmation methods used to document upland cap thickness, if required.
C. Source, volume, placement date, and placement method for cap material used for upland fill.
D. Anticipated fill sources, including volumes, for the upcoming year and estimated schedule for placement.

V. SUPPORTING DOCUMENTS

The following documents should be prepared in conjunction with any planned
sampling activities:

A. **SAMPLING AND ANALYSIS PLAN**

   **Objective:** To adequately document all sampling and analysis procedures.

   **Scope:** In preparation of the SAP, the following guidance documents shall be utilized: *Data Quality Objectives Process for Superfund, EPA 540-R-93-071*, September, 1993; *Test Methods for Evaluating Solid Waste, SW-846*; and *A Compendium of Superfund Field Operations Methods, EPA/540/P-87/001* (OSWER Directive 9355.0-14), December, 1987. The SAP shall address all topics listed in Environmental Cleanup Division Policy #760.000, Quality Assurance Policy.

   **Procedures:** The work plan shall include a sampling and analysis plan (SAP). The SAP shall include quality assurance and quality control (QA/QC) procedures for both field and lab procedures. The SAP shall be sufficiently detailed to function as a manual for field staff.

B. **HEALTH AND SAFETY PLAN (HASP)**

   **Objective:** To establish policies and procedures to protect workers and the public from the potential hazards posed by a hazardous materials site.

   **Scope:** The HASP portion of the work plan shall comply with 29 CFR 1910.120 and OAR Chapter 437, Division 2.

   **Procedures:** The HASP shall include a description of risks related to RI activities, protective clothing and equipment, training, monitoring procedures, decontamination procedures and emergency response actions.

C. **MAPS**

   The work plan shall include a map or maps of the facility which clearly shows site topography, on-site structures, waste disposal areas and proposed sampling locations.

**Appendix A**
DEQ Fact Sheet – Ross Island Fill Evaluation, 2022
Table 1, Table 2, and Table 3 are in the DEQ Fact Sheet (Appendix A).

### Table 4. Basis for Fill Class Determination (Upland)

<table>
<thead>
<tr>
<th>Fill Class</th>
<th>Screening</th>
<th>Testing</th>
<th>Management Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct contact</td>
<td>Leaching</td>
<td>TPH</td>
</tr>
<tr>
<td>Class “A” Fill</td>
<td>SC&lt;SLV(d)</td>
<td>SC &lt; SLV(I)</td>
<td>SC&lt;SLV(d)</td>
</tr>
<tr>
<td>Class “B” Fill</td>
<td>SC≤SLV(d)</td>
<td>SC &lt; SLV(I)</td>
<td>SC≤10xSLV(d)</td>
</tr>
<tr>
<td>Class “C” Fill</td>
<td>SC ≤ 5xSLV(d)</td>
<td>SC &lt; SLV(I)</td>
<td>SC&lt;5xSLV(d)</td>
</tr>
<tr>
<td>Class “D” Fill</td>
<td>SC &gt; 5xSLV(d)</td>
<td>SC &gt; SLV(I)</td>
<td>SC &gt; 10xSLV(d)</td>
</tr>
</tbody>
</table>

1 Or knowledge based on historical site use.
2 With the exception of TPH

SC = Soil chemistry result  
SLV(d) = Lowest screening level value considering direct contact – human, ecological  
SLV(I) = Screening level value considering leaching to groundwater or surface water.