

1 descriptions and declarations of covenant for the previously authorized mitigation (consisting of
 2 three separate covenants) excluded from the Bank site are included in **Exhibit A**.

3
 4
 5
 6 **Table 1 – Proposed Bank Activities/Areas**

Bank Activity/Area	Area (acres)
Wetland and Upland Preservation	60.29
Wetland and Upland Enhancement	2.61
Buffer	13.35
Previously Authorized Mitigation Area	5.58
Storm Drain Easement	0.13
Total	81.96

7
 8
 9 **D. Bank Overview.** The Long Beach Peninsula likely formed as a consequence of climate
 10 warming after the last ice age. Retreating glaciers caused the ocean to rise about 200 feet,
 11 forming new bars and beaches. The peninsula began as a bay-mouth bar formed from Columbia
 12 River sand, which now extends northward 28 miles from the mouth of the river. As the
 13 peninsula widened, successive numbers of dune ridges and swales formed from blowing sand.
 14 At the same time land was accreting to the west, vegetation stabilized the older ridges and
 15 swales. On the Long Beach Peninsula, human activities are primarily located in upland areas.
 16 Recreation, communities, towns, and tourism are more common along the beaches, and
 17 residential and agricultural areas are generally located on dune ridges.

18
 19 The proposed Bank is on two parcels located within a mature interdunal wetland system
 20 extending along the length of the Long Beach Peninsula. The Washington Department of
 21 Natural Resources has listed this wetland a Natural Heritage Wetland. The Bank site is located
 22 in a wide wetland swale with multiple dune ridges and wetlands to the east and west. This area
 23 is within the largest portion of the peninsula characterized by a relatively low density of
 24 development. It is located between the communities of Long Beach to the south and Ocean Park
 25 to the north. This area also has the highest density of lakes and wetlands, with at least four sets
 26 of dune ridges and swales running parallel in a north-south orientation.

27
 28 The site is within the Loomis Lake drainage basin that outlets primarily to the Pacific Ocean near
 29 the community of Ocean Park. However, due to the flat nature of the long interior swales within
 30 areas in the peninsula, it is possible for water to flow southerly at times toward the South Main
 31 drainage or easterly through ditches to the Giles Slough drainage into Willapa Bay. Due to a
 32 combination of drainage-district improvements, agricultural drainage for cranberry production,
 33 road and drainage projects, including flood control projects, the interior wetlands and lakes of the
 34 peninsula are often hydrologically connected.

35
 36 The proposed Bank has been formerly used for timber production and is zoned as Rural
 37 Agricultural. The Bank area is not considered to be Agricultural Lands of Long-term

1 Commercial Significance (Washington Administrative Code 173-700-303(2)). The property has
2 been selectively logged within the last 25 years. There are no structures, driveways, roads, or
3 recreational trails on the site. Access roads lead from SR 103 to the small residential area
4 adjacent to the western Bank boundary, and a gravel road extends from the residential area south
5 along the western boundary. There has been illegal garbage dumping along the gravel road that
6 includes appliances, televisions, campers, and vehicle bodies.

7
8 The Bank site is generally flat with a closed, depressional, 2.59-acre Category II wetland in the
9 western portion of the site surrounded by forest uplands. Vegetation within this wetland and
10 associated upland consists of a mature conifer and deciduous forest with an understory of shrubs
11 and herbaceous species. The remainder of the site consists of the large Category I wetland that
12 extends nearly the length of the Long Beach Peninsula. The dune ridge and interdunal
13 topography has created hydroperiods that range from saturated to permanently inundated and
14 vegetative classes that include forested, scrub-shrub, emergent, aquatic bed, and bog areas
15 (**Figure A-6, Hydroperiods**). There are no streams on the Bank site.

16
17 The proposed Bank design will provide a wetland mitigation bank for impacts to depressional
18 wetlands within the service area by preserving the western wetland, the onsite portion of the
19 Category I wetland, and high quality forested uplands. Activities associated with the Bank
20 design include enhancement of onsite wetlands and uplands and control of invasive species.
21 (**Figure B-1, Bank Site Design**).

22
23 The primary ecological goals of the Long Beach Mitigation Bank are as follows:

- 24 1. Provide a wetland mitigation bank for impacts to freshwater wetlands within the service
25 area of the Long Beach Peninsula by preserving high quality wetlands and uplands within
26 the Loomis Lake drainage system.
- 27 2. Enhance onsite wetlands and uplands.
- 28 3. Through preservation of critical wetlands and uplands, provide perpetual water quality,
29 hydrologic, and habitat functions for an important lacustrine and depressional wetland
30 system located centrally within the Long Beach Peninsula service area.

31
32
33 Ecological performance standards related to vegetation, control of invasive species, garbage, and
34 site protection are addressed in Appendix C of this Instrument.

35
36
37 **E. Interagency Review Team.** Whereas, in consideration of the establishment and maintenance
38 of the Bank, the Interagency Review Team (IRT) is willing to award credits in accordance with
39 the procedures outlined in this Instrument. These credits will be made available to serve as
40 compensatory mitigation pursuant to applicable Federal and Washington State laws and
41 regulations. The Corps and Ecology serve as Co-Chairs of the IRT. The IRT is the group of
42 Federal, State, Tribal, and local agencies that has reviewed, and will advise the Co-Chairs
43 regarding, the establishment and management of the Bank pursuant to the provisions of the
44 Instrument.

1 NOW, THEREFORE, the Parties agree to the following:
2

3 II. LEGAL AUTHORITIES

4
5 **A. Authorities.** The establishment, use, operation, and maintenance of the Bank shall be
6 carried out in accordance with the following principal authorities.
7

8 1. Federal:

- 9 a. Clean Water Act (33 USC §§ 1251 et seq.)
- 10 b. Rivers and Harbors Act of 1899 (33 USC § 403)
- 11 c. Regulatory Programs of the Corps of Engineers, Final Rule (33 CFR Parts 320 -332)
- 12 d. U.S. Army Corps of Engineers Regulatory Guidance Letter 05-1, *Guidance on Use of*
13 *Financial Assurances, and Suggested Language for Special Conditions for*
14 *Department of the Army Permits Requiring Performance Bonds*, U.S. Army Corps of
15 Engineers, February 14, 2005
- 16 e. Guidelines for the Specification of Disposal Sites for Dredged and Fill Material
17 (“404(b)(1) Guidelines,” 40 CFR Part 230)
- 18 f. National Environmental Policy Act (42 USC §§ 4321 et seq.)
- 19 g. Council on Environmental Quality Procedures for Implementing the National
20 Environmental Policy Act (40 CFR Parts 1500-1508)
- 21 h. Executive Order 11990 (Protection of Wetlands)
- 22 i. Executive Order 11988 (Protection of Floodplains)
- 23 j. Executive Order 13112 (Invasive Species)
- 24 k. Fish and Wildlife Coordination Act (16 USC §§ 661 et seq.)
- 25 l. Fish and Wildlife Service Mitigation Policy (46 FR 7644-7663, 1981)
- 26 m. Endangered Species Act (16 USC §§ 1531 et seq.)
- 27 n. Magnuson-Stevens Fishery Conservation and Management Act (16 USC §§ 1801 et
28 seq.)
- 29 o. National Historic Preservation Act, as amended (16 USC § 470)

30 31 2. State of Washington:

- 32 a. Washington Water Pollution Control Act, (RCW 90.48 et seq.)
- 33 b. Washington State Rule on Wetland Mitigation Banking (WAC 173-700, Wetland
34 Mitigation Banks)
- 35 c. State of Washington Wetlands Mitigation Banking Statute (RCW 90.84)
- 36 d. Washington State Environmental Policy Act (“SEPA” RCW 43.21C and WAC 197-
37 11)
- 38 e. Growth Management Act (RCW 36.70A)
- 39 f. Washington State Hydraulic Code (RCW 77.55, WAC 220-110, Hydraulic Project
40 Approval)
- 41 g. Washington State Shoreline Management Act (RCW 90.58, WAC 173-200 as
42 amended)
- 43 h. Washington State Salmon Recovery Act (RCW 77.85)
- 44 i. Washington State Aquatic Resources Act (RCW 79.90, RCW 90.74)
- 45 j. Executive Orders 89-10 and 90-04, Protection of Wetlands
46

1 III. ESTABLISHMENT OF THE BANK

2
3 **A. Permits.** The Sponsor shall obtain all appropriate environmental documentation, permits,
4 and other authorizations needed to establish and maintain the Bank, prior to the award of any
5 mitigation credits. Compliance with this Instrument does not fulfill the requirement, or
6 substitute, for such authorization.
7

8 **B. Bank Establishment.** The Sponsor agrees to establish the Bank as described in Appendix
9 B and to satisfactorily accomplish all performance standards reflected in Appendix C. In
10 recognition thereof, credits will be awarded to the Sponsor in accordance with the procedures and
11 schedules prescribed in the Appendices, particularly in Appendices C and D. In establishing the
12 Bank, deviations from the prescribed bank development plan and design, including deviations
13 from any performance standards, may only be made with the prior approval of the Corps and
14 Ecology, following consultation with the IRT. To propose deviations to the bank development
15 plan, the Sponsor shall submit a written request to the Corps and Ecology. Documentation of
16 implemented deviations shall be made consistent with Article VI.B.2. of this Instrument. The
17 Establishment Period of the Bank is defined in Article IV.K.
18

19 **C. Financial Assurance Requirements.** The Sponsor agrees to provide the following
20 financial assurances for the work described in this Instrument:
21

22 **1.** The Sponsor shall furnish a Letter of Credit to provide financial assurance underlying
23 the establishment and initial functionality of the Bank. This Letter of Credit must be initiated by
24 the Sponsor, in a form and content approved by the Corps and Ecology, and shall conform to the
25 requirements of Appendix H, before any construction or implementation activities may be
26 conducted on-site as part of the establishment period of the Bank as defined in Article IV.K., and
27 prior to the award of any Bank credits. Any construction or implementation activities conducted
28 on-site prior to the inception of the establishment period must cease as of the effective date of this
29 Instrument pursuant to Article VI.B.1., until an approved Letter of Credit is initiated. The Corps
30 and Ecology will notify the Sponsor that construction and implementation activities are
31 authorized to commence by granting the initial award of credits in recognition of meeting all
32 performance standards under Objective 1, pursuant to Appendix D.

33 **a.** The Corps and Ecology must specifically approve all terms and conditions of the
34 Letter of Credit, as well as the identity of the financial institution issuing and underwriting the
35 Letter of Credit.

36 **i.** Only federally-insured institutions rated investment grade or higher may issue
37 the Letter of Credit. The Sponsor shall provide the Corps and Ecology with a credit rating that
38 indicates the financial institution has the required rating as of the date of first issuance of the
39 Letter of Credit. This credit rating shall be from a recognized commercial rating service as
40 specified in the Office of Federal Procurement Policy Pamphlet No. 7, available through the
41 website of the Office of Management and Budget, Executive Office of the President. Provided
42 the required credit rating is held, approval of the financial institution selected by the Sponsor
43 shall not be unreasonably withheld. If the Corps or Ecology determines that the credit rating of
44 the financial institution issuing the Letter of Credit has subsequently failed to adhere to these
45 requirements, the Corps or Ecology may direct the Sponsor to provide an acceptable substitute
46 Letter of Credit within 30 days. If an acceptable substitute is not provided within the prescribed
47 period, the Corps or Ecology may immediately draw on the Letter of Credit up to its full value

1 without any further notice to the Sponsor. If notice of non-renewal as delineated in section
2 H.1.B. of Appendix H has been provided, and the Sponsor does not furnish an acceptable
3 replacement Letter of Credit or other approved financial assurance at least 30 days before the
4 Letter of Credit's expiration, the Corps and Ecology may immediately draw on the existing Letter
5 of Credit up to its full value without any notice to the Sponsor. If a replacement financial
6 assurance is required, no further credits will be awarded from the Bank without an effective
7 Letter of Credit or other approved financial assurance.

8 ii. If the financial assurance applicable to the Bank shall expire by its own terms
9 prior to rescission or cancelation pursuant to the terms of Article III.C.1.f., the Sponsor must
10 reinitiate an acceptable financial assurance so that there is no interval in which there is no
11 approved financial assurance in effect. No further credits will be awarded for the Bank while the
12 Bank lacks an effective financial assurance instrument.

13
14 b. The Corps and/or Ecology, acting independently or in concert, may direct
15 disbursement from the credit funds account on a Letter of Credit under the following
16 circumstances: upon abandonment of Bank establishment efforts; upon any failure stemming
17 from any cause to achieve any of the Bank objectives or performance standards as reflected in
18 Appendix C, including, but not limited to, deficient design, ineffective establishment,
19 deterioration of functionality or performance, or financial limitations of the Sponsor; or upon the
20 Sponsor's failure to maintain in force, or to promptly reinitiate, renew or extend, the Letter of
21 Credit as required by this Article III.C.1 and Appendix H. The Corps and/or Ecology shall
22 provide specific and express written direction for corrective action to the Sponsor in accordance
23 with Article IV.H. of this Instrument and Appendix F, Section F.4. no less than ninety (90)
24 calendar days prior to accessing funds pursuant to a Letter of Credit, unless accessing the Letter
25 of Credit funds pursuant to Appendix H, Section H.1.B. If, within ninety (90) days of delivery of
26 notice of the demand for corrective action, the Sponsor has initiated compliance efforts and the
27 Corps and Ecology have determined, in their sole discretion, that substantial progress has been
28 made toward completion of corrective action, the Corps and Ecology will defer accessing the
29 Letter of Credit. The Corps and Ecology need not provide the prior notice to the Sponsor
30 prescribed in this Article III.C.1.: (a) when accessing the Letter of Credit funds account due to
31 failure to maintain the necessary credit rating; or (b) in the event that notice of non-renewal has
32 been provided under Article III.C.1.a.i. and section H.1.B. of Appendix H.

33
34 c. Following consultation with the IRT, the Corps and/or Ecology may access the
35 funds guaranteed by the Letter of Credit to ensure accomplishment of the Sponsor's obligations
36 relating to any of the following objectives or features of the Bank: construction, establishment,
37 monitoring, maintenance, or remedial action activities reflected in, or directly supporting
38 accomplishment of, the Objectives and Performance Standards reflected in Appendix C, Section
39 C.2. The Sponsor expressly waives any and all opportunity to challenge, delay, or require
40 substantiation for any direction by the Corps or Ecology accessing and disbursing the funds
41 guaranteed by the Letter of Credit. The Corps and/or Ecology may elect, following consultation
42 with the IRT, to accomplish all of the objectives and performance standards reflected in
43 Appendix C, Section C.2. and for which the Sponsor has assumed responsibility under Article
44 III.B. of this Instrument. In lieu of accomplishing all objectives and performance standards
45 prescribed in Appendix C, the Corps and/or Ecology, in their sole discretion, following
46 consultation with the IRT, may accomplish only that component or those components of the

1 objectives and performance standards that are deemed reasonably necessary to achieve a project
2 that is stable, self-sustaining, and provides a level of general benefit to the aquatic resources of
3 the watershed that the Corps and/or Ecology deem appropriate under the circumstances.
4 Accomplishment of corrective or remedial actions determined to be necessary in order to achieve
5 the Sponsor's obligations under the objectives and performance standards will be achieved by a
6 Third Party Designee designated by the Corps and/or Ecology. Eligible Third Party Designees
7 may include, but are not limited to, non-profit entities, state or local agencies, tribal components,
8 or private mitigation providers. Such corrective or remedial action to accomplish specified
9 Sponsor responsibilities under the objectives and performance standards shall be achieved in
10 accordance with a plan developed by the Third Party Designee and approved by the Corps and
11 Ecology as conforming to the provisions of this Instrument.

12
13 d. Any Letter of Credit shall take the general form of an agreement on the part of
14 the issuing financial institution to honor the engagement reflected therein as directed by one or
15 both of the beneficiaries in the event that the Corps and/or Ecology determine, in their sole and
16 exclusive discretion, that the principal has failed to fulfill any of the obligations established in
17 this Instrument. A Letter of Credit shall be furnished to guarantee the establishment activities of
18 the Bank, in the following amount:

19 (i): \$15,320
20

21 e. Upon certification by the IRT that the following performance standards, as
22 prescribed in Appendix C and Table D-2 of Appendix D have been achieved, the Corps and
23 Ecology will authorize in writing that the required amount of the Letter of Credit be modified as
24 follows:

25 (i) Following achievement of performance standards 2a, 3a, 4a, and 4b, the
26 required Letter of Credit amount will be \$14,120;

27 (ii) Following achievement of all Year 3 performance standards, the required
28 Letter of Credit amount will be \$7,640;

29 (iii) Following achievement of all Year 5 performance standards, the required
30 Letter of Credit will be \$4,020.

31
32
33 f. Upon satisfaction of all objectives and performance standards required in
34 Appendix C, and upon a determination by the Corps and Ecology that the Sponsor has satisfied
35 the additional requirements reflected in Article IV.K. of this Instrument for termination of the
36 establishment period of the Bank, the Corps and Ecology will waive their right to payment under,
37 and authorize rescission or cancellation of, the financial assurance instrument.

38
39 g. Notwithstanding the fact that the financial assurance may have been accessed, or
40 that payment upon that financial assurance may have been required, and full or partial remedial
41 or corrective action may have been taken by the Third Party Designee, unless this Instrument is
42 terminated pursuant to Article IV.J. or VI.B. the Sponsor shall remain responsible for the timely
43 and effective achievement of all the objectives and performance standards mandated in Appendix
44 C.
45

1 h. Alternatively, the Sponsor may request, and the Corps and Ecology may
2 approve, a substitute financial assurance instrument for the financial assurance required under
3 this Instrument. The form and content of any financial assurance instrument must be specifically
4 approved before a substitution is utilized in satisfaction of the financial assurance obligations
5 during the establishment period of the Bank. The Corps and Ecology must specifically approve
6 the identity of the financial institution issuing and underwriting the financial assurance
7 instrument. The provisions of the substitute financial assurance instrument must conform to each
8 of the material requirements of this Article III.C.1., as well as Appendix H, within this
9 Instrument. Additionally, the substitute financial assurance instrument must extend for the full
10 period of time that the financial assurance it replaces must extend, and may be terminated
11 pursuant to this Article III.C.1. and Appendix H. The replacement financial assurance instrument
12 must be instituted so that there is no portion of the establishment period, following initiation of
13 construction or other implementation activities on-site, during which there is no financial
14 assurance in effect. No further credits will be awarded while the Bank lacks an effective
15 financial assurance instrument.

16
17 **2. Long-Term Management and Maintenance Endowment Fund:** The Sponsor shall
18 institute an endowment fund, established and maintained through an escrow account, to fund
19 management and maintenance actions as defined in Article IV.M.1. of this Instrument and
20 Appendix G, Section G.2, following the termination of the establishment period of the Bank.
21 This Long-Term Management and Maintenance (LTMM) Endowment Fund shall be
22 incrementally funded throughout the establishment period of the Bank, with the funds disbursed
23 to a Long-Term Steward upon the Sponsor's relinquishment of responsibility for long-term
24 management and maintenance of the Bank. The Sponsor agrees to continue to deposit funds in
25 the LTMM Endowment Fund escrow account, pursuant to Article III.C.2.a. of this Instrument,
26 until the LTMM Endowment Fund is fully funded in accordance with Article III.C.2.b. of this
27 Instrument.

28
29 a. The LTMM Endowment Fund escrow account shall be funded throughout the
30 establishment period of the Bank by depositing a designated sum corresponding to each sale or
31 transfer of mitigation credits, or use of credits by the Sponsor as compensatory mitigation for its
32 own activities causing adverse impacts to the aquatic environment. This designated sum shall be
33 \$3,358 per credit sold, used, or transferred. Deposits to the LTMM Endowment Fund must be
34 completed within 30 days of the sale, use, or transfer transaction. The Corps and Ecology must
35 specifically approve the identity of the institution in which the escrow account is established, as
36 well as the form of that account. Approval of the identity of the financial institution at which the
37 escrow account is established, and the form of the investment account, shall not be unreasonably
38 withheld.

39
40 b. The LTMM Fund shall be considered to be fully funded when the total value of
41 the escrow account, including the principal amounts deposited and earnings, has accumulated to a
42 total of \$36,667.

43
44 c. The Sponsor shall enter into an escrow agreement with both the Corps and
45 Ecology conforming to the requirements of Appendix H, Section H.2. The escrow agreement for
46 the LTMM Endowment Fund shall be signed prior to the release of any credits from the Bank,

1 and before any construction or implementation activities may be conducted on-site during the
2 establishment period of the bank, as defined in Article IV.K.

3
4 d. Upon receipt of written instructions signed by the Sponsor, Corps, and Ecology,
5 the LTMM Endowment Fund escrow account shall be terminated and all funds disbursed
6 pursuant to the instructions of the Corps and Ecology.

7
8 **D. Real Estate Provisions.** All real property to be included within the Bank is presently
9 owned in fee simple by the Sponsor. The Sponsor shall burden the title to the Bank real property
10 through the grant of a conservation easement, pursuant to the provisions of Appendix G, Section
11 G.1. The conservation easement must be approved, initiated, and recorded pursuant to Appendix
12 G, Section G.1., prior to the award of any Bank credits and before any construction or
13 implementation activities may be conducted on-site during the establishment period of the Bank,
14 as defined in Article IV.K. Any construction or implementation activities conducted on-site prior
15 to the inception of the establishment period must cease as of the effective date of this Instrument
16 pursuant to Article VI.B.1., until an approved conservation easement is recorded. The Corps and
17 Ecology will notify the Sponsor that construction and implementation activities are authorized to
18 commence by granting the initial award of credits in recognition of meeting all performance
19 standards under Objective 1, pursuant to Appendix D.

20 21 22 **IV. OPERATION OF THE BANK**

23
24 **A. Service Area.** The Bank is approved to provide compensatory mitigation for impacts to
25 the Waters of the United States and waters of the State, including wetlands, within the Service
26 Area. A detailed description and maps of the Service Area are included in Appendix E.

27
28 1. The service area includes projects with palustrine and lacustrine wetland impacts on
29 the coastal plain of the Long Beach Peninsula that drain to Willapa Bay or the Pacific Ocean or
30 have no outlet (**Figure E-1, Service Area**). Sites not included in the service area are estuarine
31 wetlands, wetlands in the Columbia River watershed, and the wetlands on the southern
32 headlands. The southern boundary of the service area extends to the base of the headlands,
33 incorporating only those areas that are within the rolling or level coastal plain of the peninsula.
34 Therefore, the entire service area is a landscape of current or historic interdunal formations. The
35 Bank may be used to compensate for an impact that occurs within the Service Area if specifically
36 approved by the regulatory agency(ies) that have jurisdiction over that impact, pursuant to the
37 procedures and criteria prescribed in Appendix E.

38
39 2. In exceptional situations, the Bank may be used to compensate for an impact that
40 occurs outside of the Service Area if specifically approved by the regulatory agency(ies) having
41 jurisdiction over that impact and by the Corps and Ecology, following consultation with the IRT,
42 pursuant to the procedures and criteria prescribed in Appendix E. If the Corps and/or Ecology
43 determine that the Sponsor has sold, used, or transferred credits at any time to provide
44 compensatory mitigation for aquatic resource impacts outside of the Service Area without prior
45 approval, the Corps and/or Ecology, in consultation with the IRT, may direct that the sale, use, or
46 other transfer of credits immediately cease, and will determine, in consultation with the IRT, the

1 Sponsor, and the appropriate regulatory authority, what remedial actions are necessary to correct
2 the situation and will direct their performance prior to the award of any additional mitigation
3 credits. Notwithstanding the fact that ceasing sale, use, or other transfer of credits may have
4 been required, unless this Instrument is terminated pursuant to Article IV.J. or VI.B., the Sponsor
5 shall remain responsible for the timely and effective achievement of all the Objectives and
6 Performance Standards mandated in Appendix C.

7
8 **B. Access to the Bank Site.** The Sponsor will allow, or otherwise provide for, access to the
9 Bank site by members of the IRT or their agents or designees, as reasonably necessary for the
10 purpose of inspection, compliance monitoring, and remediation consistent with the terms and
11 conditions of this Instrument and the Appendices, throughout the periods of Bank establishment,
12 operation, and long-term management and maintenance. Inspecting parties shall provide the
13 Sponsor at least 48 hours prior notice of a scheduled inspection, and shall not unreasonably
14 disrupt or disturb activities on the property.

15
16 **C. Availability of Mitigation Credits.**

17
18 **1. Availability and Sale, Transfer, or Use of Credits.** Subject to the documentation
19 and scheduling provisions of Appendix D, Section D.1., the Sponsor may submit to the IRT
20 written evidence that particular performance standards have been achieved. If the Corps and
21 Ecology, after consulting with the IRT and the Sponsor, concur that certain performance
22 standards have been achieved in full, the Corps and Ecology will respond in writing to the
23 Sponsor that the credits associated with those performance standards are available for sale,
24 transfer, or use by the Sponsor as compensatory mitigation for its own activities causing adverse
25 impacts to the aquatic environment. Each instance of sale or any other transfer of credits to a
26 third party shall be reflected in a credit transaction agreement retained by the Sponsor and made
27 available for Corps and/or Ecology review, if requested. Each such credit transaction agreement
28 must include the name, address, and telephone number of the purchaser or transferee. Each
29 credit transaction agreement that is associated with a permit must also indicate the permit
30 number of the impacting project, the number of credits involved in the transaction, and must
31 expressly specify that the Sponsor, and its successors and assigns, assume legal responsibility for
32 accomplishment and maintenance of the transferee's compensatory mitigation requirements
33 associated with the impacting project, upon completion of the credit transaction. Each credit
34 transaction agreement that is associated with a permit shall be recorded with the county auditor
35 where the Bank site is located. A copy of the recorded transaction agreement shall be provided
36 to the Corps and Ecology.

37
38 **2. Availability of Credits in the Event Financial Assurances are Accessed.** In the
39 event the Corps and/or Ecology, acting pursuant to Articles III.C.1.a. and III.C.1.b. of this
40 Instrument, accesses the financial assurances established pursuant to Article III.C.1. of this
41 Instrument and accomplishes any objectives, performance standards, or features of the Bank, the
42 Corps and Ecology, in consultation with the IRT, may award credits for sale, use, or transfer by
43 the Sponsor, in a quantity reflecting the objectives and performance standards achieved as a
44 result of such remedial action.

1 **D. Credit Deficit or Fraudulent Transactions.** If the Corps and/or Ecology determine at any
2 point that the Bank is operating without prior written approval at a deficit, or has engaged in
3 fraudulent transactions in the sale, use, or other transfer of credits, the Corps and/or Ecology will
4 cease award of, and will direct the Sponsor to immediately cease sale, use, or other transfer of
5 credits. The Corps and/or Ecology will determine, in consultation with the IRT and the Sponsor,
6 what remedial actions are necessary to correct the situation and will direct their performance
7 prior to the award of any additional mitigation credits.
8

9 **E. Provisions for Use of the Mitigation Bank Area.** The Corps and/or Ecology may
10 consider the Sponsor as being in material default of a provision of this Instrument and proceed
11 accordingly under Article IV.J., should the Corps and/or Ecology, in consultation with the IRT,
12 determine that either of the following have occurred:
13

14 1. The grant of additional easements, rights-of-way, or any other property interest in the
15 project areas without the written consent of the Corps and Ecology.
16

17 2. The use or authorization of the use of any areas within the Bank for any purpose that
18 is contrary to the provisions of this Instrument or the conservation easement, or which interferes
19 with the conservation purposes of the Bank.
20

21 **F. Maintenance Provisions.** Following achievement of the performance standards, the
22 Sponsor agrees to perform all necessary work to maintain those standards as prescribed in
23 Appendix F, Section F.5.
24

25 **G. Monitoring Provisions.** The Sponsor agrees to perform all necessary work, pursuant to
26 Appendix F, to monitor the Bank during the establishment period to demonstrate compliance
27 with the performance standards established in Appendix C.
28

29 **H. Contingency Plans/Remedial Actions.** In the event the Bank fails to achieve, within the
30 specified time schedule, one or more of the performance standards as delineated in Appendix D,
31 the Sponsor shall develop necessary contingency plans and implement appropriate remedial and
32 monitoring actions for the Bank as specified in Appendix F, Section F.4., to attain those project
33 objectives and performance standards. Prior to implementing any remediation, monitoring, or
34 other corrective measures, the Sponsor shall obtain approval of the contingency plans from the
35 Corps and Ecology. The Corps and Ecology shall consult with the IRT prior to approval of the
36 plans. All appropriate environmental documentation, permits, and other authorizations needed
37 to implement the contingency plan or take remedial action shall be obtained by the Sponsor. In
38 the event the Sponsor fails to implement necessary contingency actions within the prescribed
39 period, the Corps and/or Ecology, following consultation with the Sponsor and the IRT, will
40 direct remedial, corrective, and/or sanctioning action in accordance with the procedures specified
41 in Appendix F, Section F.4.A. Alternatively, the Corps and/or Ecology may accomplish such
42 remedial action directly, acting through a Third Party Designee, by accessing the financial
43 assurance instrument pursuant to Articles III.C.1.a. and III.C.1.b. of this Instrument.
44

45 **I. Force Majeure.** The Sponsor may request, pursuant to Article III.B., and the Corps and
46 Ecology may approve changes to the construction, operation, objectives, performance standards,

1 timelines or credit generation and award schedule of the Bank, pursuant to the standards and
2 procedures specified in Appendix F, Section F.4., if all of the following occur: an act or event
3 causes substantial damage such that it is determined to be a force majeure; such act or event has
4 a significant adverse impact on the quality of the aquatic functions, native vegetation, or soils of
5 the Bank site; and such act or event was beyond the reasonable control of the Sponsor, its agents,
6 contractors, or consultants to prevent or mitigate.

7 **1.** The evaluation of the damage caused by a force majeure and the resulting changes to
8 mitigation requirements involve a communicative process. If the Sponsor asserts a mitigation
9 site has sustained significant adverse impacts due to an event or act which may be determined to
10 be a force majeure, the Sponsor shall give written notice to the Corps, Ecology, and the IRT as
11 soon as is reasonably practicable. After receiving written notice, the Corps and Ecology, in
12 consultation with the Sponsor and the IRT, shall evaluate whether the event qualifies as force
13 majeure. The Corps and Ecology, in consultation with the Sponsor and the IRT, will then
14 evaluate whether significant adverse impacts have occurred to the site. If a force majeure event
15 is determined to have occurred and significant adverse impacts are found to have occurred to the
16 site, the Corps and Ecology, in consultation with the IRT and the Sponsor, will evaluate whether
17 and to what extent changes to the Bank site will be in the best interest of the site and the aquatic
18 environment, and may approve such changes as detailed above. The Corps and Ecology retain
19 sole discretion over the final determination of whether an act or event constitutes force majeure,
20 whether significant adverse impacts to the Bank site have occurred, and to what extent changes
21 to the Bank site or its management will be permitted.

22 **2.** Force majeure events include natural or human-caused catastrophic events or
23 deliberate and unlawful acts by third parties.

- 24 a. Examples of a natural catastrophic event include, but are not limited to: a flood
25 equal to or greater in magnitude than the 100-year flood event; an earthquake of a
26 force projected from an earthquake with a return period of 475 years; drought that
27 is significantly longer than the periodic multi-year drought cycles that are typical
28 of weather patterns in the Pacific Northwest; as well as events of the following
29 type when they reach a substantially damaging nature: disease, wildfire,
30 depredation, regional pest infestation, or significant fluviogeomorphic change.
- 31 b. Examples of a human-caused catastrophic event include, but are not limited to
32 substantial damage resulting from the following: war, insurrection, riot or other
33 civil disorders, spill of a hazardous or toxic substance, or fire.
- 34 c. Examples of a deliberate and unlawful act include, but are not limited to
35 substantial damage resulting from the following: the dumping of a hazardous or
36 toxic substance, as well as significant acts of vandalism or arson.

37
38 **3.** The consequences of any events of force majeure recognized as such by the Corps and
39 Ecology shall not affect the status of previously released credits, whether or not they have yet
40 been sold, used, or transferred.

41
42 **J. Default.** Should the Corps and/or Ecology, in consultation with the IRT, determine that the
43 Sponsor is in material default of any provision of this Instrument, the Corps and/or Ecology may

1 cease award of mitigation credits, and may notify the Sponsor that the award, sale, and/or
2 transfer of mitigation credits, or use by the Sponsor of Bank credits as compensatory mitigation
3 for its own activities causing adverse impacts to the aquatic environment, are suspended until the
4 delineated deficiencies are rectified. Upon written notification of suspension, the Sponsor agrees
5 to immediately cease any sale or transfer transactions not yet finally completed, and/or to cease
6 any use by the Sponsor of Bank credits as compensatory mitigation for its own activities causing
7 adverse impacts to the aquatic environment where a Corps or Ecology permit or authorization, as
8 required, has not yet been issued, until informed by the notifying agency that award, sale, use, or
9 transfer of credits may be resumed. Should the Sponsor remain in default for a period of 90
10 days, the Corps and Ecology, following consultation with the IRT, may terminate this Instrument
11 and any subsequent banking operations. In the event such termination action is commenced, the
12 Sponsor agrees to fulfill its pre-existing obligations to perform all establishment, monitoring,
13 maintenance, management, and remediation responsibilities that arise directly from credits that
14 have already been awarded, sold, used, or transferred at the time of termination. In the event of
15 termination, no further sale or transfer of credits may occur, nor any use by the Sponsor of Bank
16 credits as compensatory mitigation for its own activities causing adverse impacts to the aquatic
17 environment within the service area where a Corps or Ecology permit or authorization, as
18 required, has not yet been issued.

19
20 **K. Establishment Period of the Bank.** The establishment period of the Bank will commence
21 on the date the Instrument takes effect pursuant to Article VI.B.1. Prior to termination of the
22 establishment period of the Bank, the Corps and Ecology, following consultation with the IRT,
23 will perform a final compliance inspection to evaluate whether all performance standards have
24 been achieved. The establishment period for the bank will terminate, and the period of long-term
25 management and maintenance will commence, when the Corps and Ecology determine, in
26 consultation with the IRT and the Sponsor, that the following conditions have been met:

- 27
28 (1) all applicable performance standards prescribed in Appendix C have been achieved;
29 (2) all available credits have been awarded, or the Corps and Ecology, in consultation
30 with the IRT, have approved the Sponsor's written request to permanently cease
31 banking activities;
32 (3) the Sponsor has prepared a Long-Term Management and Maintenance Plan that has
33 been approved by the Corps and Ecology, pursuant to Article IV.M.1. and Appendix
34 G, Section G.2.;
35 (4) the Sponsor has either: (i) assumed responsibilities for accomplishing the Long-Term
36 Management and Maintenance Plan, in which case the Sponsor will fulfill the role of
37 Long-Term Steward, or (ii) assigned those responsibilities to another Long-Term
38 Steward pursuant to Article IV.M.2. of this Instrument;
39 (5) the LTMM Endowment Fund has been fully funded;
40 (6) the contents of the LTMM Endowment Fund have been transferred to the Long-Term
41 Steward; and
42 (7) the Bank has complied with the terms of this Instrument.

43
44 **L. Operational Life of the Bank.** The operational life of the Bank will commence on the
45 date the Instrument takes effect pursuant to Article VI.B.1. Following the termination of the
46 establishment period of the Bank, and (1) upon sale, transfer, or use by the Sponsor as
47 compensatory mitigation for its own activities causing adverse impacts to the aquatic

1 environment of all credits, or (2) upon approval by the Corps and Ecology, in consultation with
2 the IRT, of the Sponsor's written request to permanently cease banking activities, the operational
3 life of the Bank will terminate.

4
5 **M. Long-Term Management and Maintenance.**

6
7 1. The Sponsor shall develop a Long-Term Management and Maintenance Plan
8 consistent with the guidelines and objectives specified in Appendix G, Section G.2., and submit
9 the Long-Term Management and Maintenance Plan for approval by the Corps and Ecology, in
10 consultation with the IRT. The Sponsor is responsible, as Long-Term Steward, for execution of
11 the approved Long-Term Management and Maintenance Plan. The Sponsor may only deviate
12 from the approved Long-Term Management and Maintenance Plan upon written approval by the
13 Corps and Ecology, following consultation with the Sponsor and the IRT.

14
15 2. The Sponsor may assign its long-term management and maintenance responsibilities
16 to a third party assignee, which will then serve as Long-Term Steward in place of the Sponsor.
17 The identity of the assignee and the terms of the long-term management and maintenance
18 agreement between the Sponsor and the assignee must be approved by the Corps and Ecology,
19 following consultation with the IRT, in advance of the long-term management and maintenance
20 assignment.

21
22 3. Upon execution of a long-term management and maintenance assignment agreement
23 and the transfer of the contents of the LTMM Endowment Fund, and upon satisfaction of the
24 remaining requirements for termination of the establishment period of the Bank under Article
25 IV.K. of this Instrument, the Sponsor shall be relieved of all further long-term management and
26 maintenance responsibilities under this Instrument.

27
28 **N. Accomplishment of Sponsorship Responsibilities; Transfer of Ownership of the Bank**
29 **Site.** The Sponsor shall remain responsible for complying with the provisions of this Instrument
30 throughout the operational life of the Bank, regardless of the ownership status of the underlying
31 real property, unless those responsibilities have been assigned pursuant to the provisions of
32 Article VI.C. of this Instrument. The Sponsor may transfer ownership of all or a portion of the
33 Bank real property to another party provided the Corps and Ecology, following consultation with
34 the IRT, approve the transfer in writing.

35
36
37 **V. RESPONSIBILITIES OF THE CORPS AND ECOLOGY**

38
39 **A.** The Corps and Ecology agree to provide appropriate oversight in carrying out provisions of
40 this Instrument.

41
42 **B.** The Corps and Ecology agree to review and provide comments on project plans, monitoring
43 reports, contingency and remediation proposals, and similar submittals from the Sponsor in a
44 timely manner. The Corps and Ecology will coordinate their review with the IRT.

1 C. The Corps and Ecology agree to review requests to modify the terms of this Instrument,
2 transfer title or interest in the Bank, determine achievement of performance standards in order to
3 evaluate the award of credits for the Bank, or approve the Long-Term Management and
4 Maintenance Plan. The Corps and Ecology will coordinate review with the IRT so that a
5 decision is rendered or comments detailing deficiencies are provided in a timely manner. The
6 Corps and Ecology agree to not unreasonably withhold or delay decisions on such requests.
7

8 D. The Corps and Ecology agree to act in good faith when rendering decisions about
9 acceptability of financial assurances, requiring corrective or remedial actions, requiring long-
10 term management and maintenance actions, and awarding credits. The Corps and Ecology will
11 exercise good judgment in accessing financial assurances, and will utilize those monies only to
12 the extent they reasonably and in good faith conclude that such remedial or corrective actions are
13 an effective and efficient expenditure of resources. In implementing the process delineated in
14 Article III.C.1. of this Instrument, the Corps and Ecology will act in good faith in determining
15 the scope and nature of corrective actions to be undertaken; shall act in good faith in conducting
16 monitoring, developing reports, and assessing compliance with performance standards; and will
17 not unreasonably limit corrective action activities or otherwise apply their discretion so as to
18 unduly prejudice the Sponsor as to the timing or number of credits awarded. Corps and Ecology
19 approval of the identity of any assignee responsible for executing the Long-Term Management
20 and Maintenance Plan, and approval of the terms of any long-term management and maintenance
21 assignment agreement, will not be unreasonably withheld.
22

23 E. The Corps and Ecology will periodically inspect the Bank site as necessary to evaluate, in
24 consultation with the IRT, the achievement of performance standards, to assess the results of any
25 corrective measures taken, to monitor implementation of the Long-Term Management and
26 Maintenance Plan, and, in general, to verify the Sponsor's compliance with the provisions of this
27 Instrument.
28

29 F. Upon satisfaction of the requirements of Article IV.K. under this Instrument, the Corps and
30 Ecology will jointly issue a letter certifying that the establishment period of the Bank has
31 terminated, and that the period of long-term management and maintenance has begun, following
32 consultation with the IRT. Upon satisfaction of the requirements of Article IV.L. of this
33 Instrument, the Corps and Ecology will jointly issue a letter certifying that the operational life of
34 the Bank has terminated.
35

36 VI. GENERAL PROVISIONS 37

38 A. **Decision Making by Consensus.** The Corps and Ecology will strive to achieve consensus
39 among the IRT regarding issues that arise pertaining to the establishment, operation,
40 maintenance, and management of the Bank. The Corps and Ecology will coordinate the review
41 and oversight activities of the IRT so as to best facilitate opportunity to reach the desired
42 consensus. Review and oversight decisions will take into account the views of the Sponsor to
43 the maximum extent practicable. Where consensus cannot otherwise be reached within a
44 reasonable timeframe, following full consideration of the comments of the IRT and following
45 consultation with the Sponsor, the Corps holds the responsibility and authority under Section 404
46 of the Clean Water Act, and Ecology holds independent responsibility and authority under

1 Section 401 of the Clean Water Act and ch. 90.84 RCW, to make final decisions regarding the
2 application of the terms of this Instrument.
3

4 **B. Entry into Effect, Modification or Amendment, and Termination of the Instrument.**
5

6 1. This Instrument, consisting of both this Basic Agreement and the Appendices,
7 will enter into effect upon the signature by authorized representatives of each of the Corps,
8 Ecology, the Sponsor, and Pacific County, fulfilling its role as the “local jurisdiction” acting
9 pursuant to RCW 90.84.040, as of the date of the last of these signatures.
10

11 2. This Basic Agreement portion of the Instrument may be amended or modified only
12 with the written approval of the Sponsor, the Program Manager for Shorelands and
13 Environmental Assistance on behalf of Ecology, and the Seattle District Engineer on behalf of
14 the Corps, or their designees. Any such modifications or amendments will take effect following
15 consultation with the IRT. Amendment or modification of the provisions of the Appendices may
16 be effectuated through an exchange of letters signed by the Sponsor, the Mitigation Program
17 Manager serving as Co-Chair on behalf of the Corps, and the Wetland Section Manager serving
18 as Co-Chair on behalf of Ecology, following consultation with the IRT, provided the exchange of
19 letters expresses mutual agreement as to the exact language to be deleted or modified, and the
20 exact language to be inserted.
21

22 3. This Instrument may be terminated by the mutual agreement of the Sponsor, Corps,
23 and Ecology, following consultation with the IRT, or may be terminated under the terms of
24 Article IV.J. of this Instrument in the case of default by the Sponsor. In the event any
25 termination action is commenced, the Sponsor agrees to fulfill its pre-existing obligations to
26 perform all establishment, monitoring, maintenance, management, and remediation
27 responsibilities that arise directly from credits that have already been sold, used, or transferred at
28 the time of termination.
29

30 4. Upon termination of the operational life of the Bank pursuant to Article IV.L., and
31 certification to that effect pursuant to Article V.F., this Instrument shall terminate without further
32 action by any Party. Thereafter, the Long-Term Management and Maintenance Plan developed,
33 approved, and instituted in accordance with Article IV.M. shall govern the continuing
34 obligations of the Sponsor, or its assignee as applicable.
35

36 **C. Assignment of Obligations under this Instrument.** The Sponsor may be permitted to
37 assign its obligations, responsibilities, and entitlements under this Instrument to a third party.
38 The Corps and Ecology, following consultation with the IRT, must approve the identity of the
39 assignee in order for any assignment of this Instrument to effectively relieve the Sponsor of those
40 obligations. In evaluating a prospective assignee, the Corps and Ecology may consider
41 characteristics such as environmental mitigation expertise, wetlands mitigation project or
42 analogous experience, and financial strength and stability. Approval of the identity of the
43 assignee will not be unreasonably withheld. The assignee must execute a mitigation banking
44 instrument with the Corps and Ecology under terms identical, to the extent practicable, to the
45 present Instrument. The applicable financial assurances established pursuant to Articles III.C.1.
46 and III.C.2. of this Instrument must be initiated. The obligations, responsibilities, and

1 entitlements under this Instrument may reside in only a single entity at any one time, and may
2 not be severed or transferred piecemeal. However, the physical ownership of the Bank site real
3 property and the obligations, responsibilities, and entitlements under this Instrument are separate
4 and distinct; thus, ownership may be transferred, pursuant to the provisions of Article IV.N.,
5 independently of assignment of this Instrument. Once assignment of this Instrument has been
6 properly accomplished, the Sponsor will be relieved of all its obligations and responsibilities
7 under this Instrument. Specific additional provisions pertaining to the assignment of long-term
8 management and maintenance obligations are described at Article IV.M.

9
10 **D. Specific Language of this Basic Agreement Shall Be Controlling.** To the extent that
11 specific provisions of this Basic Agreement portion of the Instrument are inconsistent with any
12 terms and conditions contained in the Appendices, or inconsistent with other documents that are
13 incorporated into this Instrument by reference and that are not legally binding, the specific
14 language within this Basic Agreement shall be controlling.

15
16 **E. Notice.** Any notice required or permitted hereunder shall be deemed to have been given
17 either: (i) when delivered by hand, or (ii) three (3) days following the date deposited in the
18 United States mail, postage prepaid, by registered or certified mail, return receipt requested, or
19 (iii) when sent by Federal Express or similar next-day nationwide delivery system, addressed as
20 follows (or addressed in such other manner as the party being notified shall have requested by
21 written notice to the other party):
22

LBMB, Inc. Partners

1157 3rd Avenue, Suite 220
Longview, Washington 98632
360-578-1371

U.S. Army Corps of Engineers, Seattle District

Mitigation Banking Specialist/Co-Chair of the IRT
Regulatory Branch
Seattle District, Corps of Engineers
4735 E. Marginal Way South
P.O. Box 3755
Seattle, Washington 98124-3755
206-764-3495

Washington State Department of Ecology

Mitigation Banking Specialist/ Co-Chair of the IRT
Shorelands and Environmental Assistance Program
P.O. Box 47600
300 Desmond Drive
Olympia, Washington 98504-7600
360-407-6000

F. Entire Agreement. This Instrument, consisting of both this Basic Agreement and the Appendices, constitutes the entire agreement between the parties concerning the subject matter hereof.

G. Invalid Provisions. In the event any one or more of the provisions contained in this Instrument are held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provisions hereof, and this Instrument shall be construed as if such invalid, illegal, or unenforceable provision had not been contained herein.

H. Effect of Agreement. This Instrument does not in any manner affect statutory authorities and responsibilities of the signatory Parties. This Instrument is not intended, nor may it be relied upon, to create any rights in third parties enforceable in litigation with the United States or the State of Washington. This Instrument does not authorize, nor shall it be construed to permit, the establishment of any lien, encumbrance, or other claim with respect to the Bank property, with the sole exception of the right on the part of the Corps and Ecology to require the Sponsor to implement the provisions of this Instrument, including recording the conservation easement, required as a condition of the approval of the crediting plan delineated in this Instrument and issuance of any permits for discharges of dredged and fill material into waters of the United States associated with construction and operation and maintenance of the Bank.

1 **I. Attorneys' Fees.** If any action at law or equity, including any action for declaratory relief,
2 is brought to enforce or interpret the provisions of this Instrument, each party to the litigation
3 shall bear its own attorneys' fees and costs of litigation.
4

5 **J. Availability of Funds.** Implementation of this Instrument is subject to the requirements of
6 the Anti-Deficiency Act (32 U.S.C. § 1341) and the availability of appropriated funds. Nothing
7 in this Instrument may be construed to require the obligation, appropriation, or expenditure of
8 any money from the United States Treasury, in advance of an appropriation for that purpose.
9

10 **K. Headings and Captions.** Any paragraph heading or caption contained in this Instrument
11 shall be for convenience of reference only and shall not affect the construction or interpretation
12 of any provision of this Instrument.
13

14 **L. Counterparts.** This Instrument may be executed by the Parties in any combination, in one
15 or more counterparts, all of which together shall constitute one and the same instrument.
16

17 **M. Binding.** This Instrument, consisting of both this Basic Agreement and the Appendices,
18 shall be immediately, automatically, and irrevocably binding upon the Sponsor and its heirs,
19 successors, assigns, and legal representatives upon execution by the Sponsor, Ecology, Corps,
20 and Pacific County, fulfilling its role as the "local jurisdiction" acting pursuant to RCW
21 90.84.040.
22

1 IN WITNESS WHEREOF, the Parties hereto have executed this Instrument on the date herein
2 below last written.

3

4 **PARTIES**

5 By the Sponsor:

6

7

8 _____
Francis Naglich
9 President, LBMB, Inc.

_____ Date

10

11 By the Corps:

12

13

14 _____
Bruce A. Estok
15 Colonel, Corps of Engineers
16 Seattle District Engineer

_____ Date

17

18 By Ecology:

19

20

21 _____
Gordon White
22 Program Manager, Shorelands and Environmental Assistance Program
23 Washington State Department of Ecology

_____ Date

24

25 **OTHER IRT MEMBERS:**

26 Signature by other IRT members indicates assent on the part of the represented organization to
27 the provisions of the Instrument, but does not give rise to any affirmative obligations, express or
28 implied. This Instrument is not binding on the other IRT members.

29

30

31 APPROVED AS TO FORM ONLY:
32 PACIFIC COUNTY PROSECUTING ATTORNEY

33

34

35 _____
By: David Burke, Prosecutor

_____ Date

36

37 FOR PACIFIC COUNTY, WASHINGTON

38

39

40 _____
Kathy Spoor
41 Pacific County Administrative Officer

_____ Date

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APPENDIX A GENERAL BANK INFORMATION

A.1 Business Purpose and Ecological Goals of the Bank

The purpose of the Bank is to generate mitigation credits for projects that will have an adverse impact on the aquatic environment, and that need to compensate for those impacts as a condition of their permits or other regulatory requirements resulting from project impacts.

The primary ecological goals of the Long Beach Mitigation Bank are as follows:

1. Provide a wetland mitigation bank for impacts to freshwater wetlands within the service area of the Long Beach Peninsula by protecting high quality wetlands and uplands within the Loomis Lake drainage system.
2. Enhance onsite wetlands and uplands.
3. Through preservation of critical wetlands and uplands, provide perpetual water quality, hydrologic, and habitat functions for an important lacustrine and depressional wetland system located centrally within the Long Beach Peninsula service area.

Relevant documentation supporting the technical information in these appendices is included in a separate Resource Folder. The Resource Folder is not considered part of the MBI but is prepared by the Sponsor and provided to all IRT members to serve as a reference document. The Resource Folder includes the wetland delineation report, the Basis of Design report, and other technical information that were used to establish baseline conditions at the Bank and support the design for the site.

A.2 Bank Location and Legal Description

The Bank is located in the southeast quarter of Section 28, Township 11 North, Range 11 West of the Willamette Meridian, on the Long Beach Peninsula near the City of Long Beach, Pacific County, Washington (**Figure A-1, Vicinity Map**). The Bank site is in the Water Resource Inventory Area (WRIA) 24, Willapa Basin. The Long Beach Peninsula has not been assigned to a subbasin of this WRIA. Undeveloped wetlands border the Bank site to the north, high-density residences, low-density residences, and forest lands border the site to the east, and one residence, forest land, and the Category I wetland border the site to the south. The Category I wetland continues offsite to the east and north, with residential development on a dune ridge approximately 300 feet from the east site boundary.

All real property to be included within the Bank site is within tax parcels 74049901000 and 74049908000 (**Figure A-2, Site Survey**). These parcels are owned in fee simple by LBMB, Inc., and have been pledged for use in the Bank in a manner consistent with this Instrument. The legal description of the Bank site and Declaration of Covenants are provided in **Exhibit A**. The Declaration of Covenants figure in **Exhibit A** shows three areas that have been preserved as mitigation sites for impacts to three projects that previously impacted wetlands on the peninsula.

The buffer widths around the perimeter of the site are based on current and anticipated land-use intensities on adjacent properties and the risk of impacts to the Bank from adjacent activities. While the 200-foot buffer adjacent to the northwest corner of the site and the denser residential neighborhood is less than that recommended by Ecology, the 150-foot buffer adjacent to the west and south are generally wider than is recommended by Ecology. Therefore, buffer “averaging” is appropriate to the particular circumstances of the LBMB site and its adjacent land uses. Narrower buffer widths of 50 feet are appropriate on the north and south sides of site where adjacent high-quality wetlands pose a low risk for future impact. Similarly, the risk of adjacent development is low on the eastern bank boundary, because three 100-foot-wide declarations of covenant legally protect the bank, and adjacent properties to the east consist of Category I wetlands. After considering the three covenant areas and buffers as discussed above, the mitigation area available for credit generation is 62.90 acres (**Figure A-3, Mitigation Area Site Map**).

The area of the parcels owned by LBMB Inc. is approximately 82.00 acres. Inclusion of the aforementioned property in the Bank and granting of a conservation easement restricting future land uses for the benefit of the Bank shall not convey or establish any property interest on the part of any Party to this Instrument, nor convey or establish any interest in Bank credits. The Instrument does not authorize, nor shall it be construed to permit, the establishment of any lien, encumbrance, or other claim with respect to the property, with the sole exception of the right on the part of the Corps and Ecology to require the Sponsor to implement elements of this Instrument, including recording the conservation easement.

A.3 Site Description and Baseline Conditions

A.3.1 Site Description

The proposed Bank is located within a mature interdunal wetland system extending approximately 15 miles along the length of the Long Beach Peninsula. Washington Department of Natural Resources has listed this wetland a Natural Heritage Wetland (WDNR 2011). The Bank site is located in a wide wetland swale with multiple dune ridges and wetlands to the east and west. This area is within the largest portion of the peninsula characterized by a relatively low density of development. It is located between the communities of Long Beach to the south and Ocean Park to the north. This area also has the highest density of lakes and wetlands, with at least four sets of dune ridges and swales running parallel in a north-south orientation.

The Bank site is generally flat with elevations that range from approximately 20 to 30 feet above mean sea level. There are two wetlands within the Bank. A closed, depressional, 2.59-acre Category II wetland is located in the western portion of the site (**Figure A-4, Existing Conditions**). Vegetation within the Category II wetland and associated uplands consists of a mature conifer and deciduous forest with an understory of shrubs and herbaceous species. The wetland on the eastern portion of the site is a 61.76-acre Category I wetland that is part of the 15-mile wetland system at the interior of the peninsula, also referred to as the Loomis Lake drainage or wetland complex.

The proposed Bank has been historically used for timber production and is zoned as Rural Agricultural. The western portion of the property had been selectively logged within the last 20

years. There are no structures, driveways, roads, or recreational trails on the site. Access roads lead from SR 103 to the small residential area adjacent to the western site boundary, and a gravel road extends from the residential area south along the western boundary. There has been illegal garbage dumping along the gravel road that includes appliances, televisions, campers, and vehicle bodies. There are no structures on the property.

A.3.2 Baseline Conditions

The following description of the mitigation site includes discussions of the topography, soils, hydrology, vegetation, and wildlife on the Bank site.

Soils

Soils within the proposed Bank are shown on **Figure A-5, Soil Survey Map**. Soil types were identified on the United States Department of Agriculture's Natural Resources Conservation Service internet site (NRCS 2010) as Netarts fine sand, 3 to 12 percent slopes (#92); Seastrand mucky peat, (#132); Yaquina loamy fine sand (#162), and Water (#169). All soils identified on the site except Netarts fine sand are listed as hydric soils by the State of Washington (NRCS 2011).

Netarts fine sand (#92) is very deep, well-drained soil on old, stabilized, sand dunes. Native woody vegetation typically consists of conifers. Seastrand mucky peat soils (#132) are very deep, very poorly drained soils in depressional areas between sand dunes, and the water regime has been altered by ditching. This is an organic soil formed in decomposed plant remains deposited over sand. Native vegetation is mainly conifers, rushes, and sedges. Yaquina loamy fine sand (#162) is very deep, somewhat-poorly drained soil in depressional areas between stabilized sand dunes. Native vegetation is primarily red alder, with some conifers.

The Natural Resources Conservation Service (NRCS 2010) maps 58 percent of the onsite soils as Seastrand mucky peat, an organic soil, and there are bog plants on the site. Meeting these criteria qualifies it as bog habitat according to the *Washington State Wetland Rating System for Western Washington* (Hruby 2006).

Hydrology

The site is within the Loomis Lake drainage basin that outlets primarily to the Pacific Ocean near the community of Ocean Park. However, due to the flat nature of the long interior areas of the peninsula, it is possible for water to flow southerly at times toward the South Main drainage near the City of Long Beach and into the Pacific Ocean, or easterly through ditches to the Giles Slough drainage into Willapa Bay. The interior wetlands and lakes of the peninsula are often hydrologically connected due to a combination of drainage-district improvements, agricultural drainage for cranberry production, road and drainage projects, and flood-control projects.

Most groundwater on the peninsula flows horizontally in the shallow groundwater system; however, some flows downward in areas of recharge and upward in areas of discharge (USGS 1995). Annual groundwater discharge to lakes and marshes is assumed to be minimal, but it varies seasonally.

The primary hydrologic source for both onsite wetlands is a shallow groundwater table. **Figure A-6, Hydroperiods**, shows the wide range of water regimes provided onsite areas of the

wetland. The wetland system has permanent, seasonal, and occasional inundation, as well as some areas that are only saturated. This represents all hydroperiod types on the peninsula.

Vegetation

Ecological Land Services (ELS) noted plant species at the Bank site on August 15, 2007 and April 8 and 18, 2008 and a total of 66 plant species were identified onsite (see the Bank Site Plant Survey in Appendix F in the Basis of Design Report). No federal endangered, threatened, proposed, candidate, or species of concern were found (USFWS 2011), and no state endangered, threatened, or sensitive species were identified (WDNR 2011).

A map of Cowardin vegetation classes within the proposed mitigation bank is shown on **Figure A-7, Cowardin Vegetative Classes**, which include aquatic bed, emergent, scrub/shrub, and forested. Forested areas have multiple strata including trees, sub-canopy, shrubs, herbaceous plants, and mosses/groundcovers.

Plant communities on the Bank site include low-elevation freshwater wetlands that are also listed in the *Washington Natural Heritage Program* information (WDNR 2010):

- Sitka sedge (*Carex aquatilis* var. *dives*) - herbaceous vegetation
- Western crabapple – Hooker’s willow / slough sedge (*Malus fusca* – *Salix hookeriana* / *Carex obnupta*) - shrubland
- Sweetgale / skunk cabbage (*Myrica gale* / *Lysichiton americanum*) - shrubland
- Douglas spirea (*Spiraea douglasii*) - shrubland.

Low-elevation sphagnum bogs include the following plant communities:

- Bog Labrador tea – Bog laurel / sphagnum spp. (*Ledum groenlandicum* – *Kalmia microphylla* / *Sphagnum* spp.) - shrubland
- Shore pine / bog Labrador tea – bog laurel / sphagnum spp. (*Pinus contorta* var. *contorta* / *Ledum groenlandicum* - *Kalmia microphylla* / *Sphagnum* spp.) – woodland

Forested areas of the Bank site are dominated by Sitka spruce (*Picea sitchensis*, FAC) and red alder (*Alnus rubra*, FAC). Scrub-shrub areas are dominated by Douglas spirea (*Spiraea douglasii*, FACW), Nootka rose (*Rosa nutkana*, FAC), salmonberry (*Rubus spectabilis*, FAC), and Hooker’s willow (*Salix hookeriana*, FACW). Areas of emergent vegetation are generally dominated by slough sedge (*Carex obnupta*, OBL), and aquatic-bed vegetation is dominated by spatter-dock, also known as yellow pond-lily (*Nuphar luteum*, OBL).

The following bog plants have been identified in areas of Seastrand mucky peat soils: bog cranberry (*Vaccinium oxycoccus*, OBL), bog Labrador tea (*Ledum groenlandicum*, OBL), western bog laurel (*Kalmia microphylla* ssp. *occidentalis*, FACW), brown-stemmed peat moss (*Sphagnum lindbergii*, NI), and small red peat moss (*Sphagnum capillifolium*, NI).

Vegetation observed in upland areas in the western portion of the mitigation site consist of Douglas fir (*Pseudotsuga menziesii*, FACU), western hemlock (*Tsuga heterophylla*, FACU), Sitka spruce, red alder, evergreen huckleberry (*Vaccinium ovatum*, UPL), cascara (*Rhamnus purshiana*, FAC), red huckleberry (*Vaccinium parvifolium*, FACU), red elderberry (*Sambucus racemosa*, FACU), thimbleberry (*Rubus parviflorus*, FAC), salal (*Gaultheria shallon*, FACU), false lily-of-the-valley (*Maianthemum dilatatum*, FAC), deer fern (*Blechnum spicant*, FAC),

trailing blackberry (*Rubus ursinus*, FACU), sword fern (*Polystichum munitum*, FACU), and running club moss (*Lycopodium clavatum*, FAC). There are small patches of non-native blackberries in the wetland buffer areas, but no other invasive plants have been observed on the site.

The onsite areas that meet the WDFW definition of old-growth (stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees per acre > 81 cm (32 in) dbh or > 200 years of age) and mature forest (stands with average diameters 53 cm (21 in) dbh) are dominated by large Sitka spruce trees interspersed with occasional western hemlock, forming a multi-layered canopy with occasional small openings. This type of habitat is located in several areas on the Bank property. The largest area extends along the western boundary of the Category I wetland and bisects both uplands and wetlands. Other forest habitat of this type is located on north-south oriented ridges in the eastern portion of the property.

ELS conducted a survey of tree diameters at the Bank site in 2010. This survey confirmed that there are forested areas in the western portion of the site which are a state priority habitat containing both Sitka spruce and western hemlock species. Spruce tree diameters included 26 trees between 30 and 40 inches diameter at breast height (dbh), six between 40 and 50 inches dbh, two between 50 and 60 inches dbh, and one tree had a diameter of 90 inches dbh (see the photograph in the Basis of Design report). The recorded western hemlock had a dbh of 29 inches.

Wildlife

On August 15, 2007, ELS biologists observed signs of the following species: black bear, beaver, moles, chipmunk, banana slug, swallowtail butterfly, osprey, Steller's jay, grouse, and a bald eagle nest. A bird survey was conducted on the property on April 9, 2010, and 24 species were identified (see Appendix D in the Basis of Design Report). This survey also reports evidence of black bear, deer, coyotes, rabbits, and beaver. Habitat for muskrat, weasels, rodents, amphibians, and reptiles were also observed and Roosevelt elk also occur in the inner peninsula. Additionally, a pair of bald eagles have been recorded on the site, and were observed to produce offspring in 2011.

The WDFW Priority Habitats and Species (PHS) report (2007) does not show priority species on the Bank site; however, ELS biologists have identified the following WDFW priority habitats on the site: freshwater wetlands, fresh deepwater, mature forest, and "snags and logs". The site was logged in the 1970s, large trees occur on the site, and other trees will continue to mature. The PHS report shows marbled murrelet nest sites north of Oysterville, in the hills east of Seaview, and on Cape Disappointment. These nest sites also are in the areas with eagle nests, so nearby predator nests, such as the onsite eagle nest, are not necessarily a deterrent to murrelet nesting in the area. Murrelets could nest on the Bank site.

The WDNR stream-typing map (WDNR 2010b) shows that the large pond and the two other ponds on the LBMB site are fish bearing. It is not known at this time which fish species are living within these ponds; however, onsite areas are connected by surface water to Loomis Lake during portions of the year. For this reason, fish at the Bank site are expected to be the same as in Loomis Lake (yellow perch, largemouth bass, pumpkinseed, black crappie, brown bullhead, rainbow trout, bluegill, sculpin, and three-spine stickleback; Mueller 1997).

The WDFW internet site, *SalmonScape* (WDFW 2010b) does not identify salmonid species within site boundaries; however, it does show that winter steelhead and fall chum are present in the lower reaches of Tarlatt Slough, and it shows coho are present in Tarlatt Slough up to Breaker Lake and Briscoe Lake, which are less than 2 miles south of the site.

A.4 Wetland Functional Assessment

Functions for the wetlands were assessed using the *Western Washington Wetland Rating Form* (Hruby 2006). The rating system is based on the functions of water quality, hydrology, and wildlife habitat.

A.4.1 Category I Wetland Functions

The large wetland is a Category I, depressional wetland (scoring a total of 92 points out of 100); it provides a very high level of water-quality functions (30 points), high hydrologic functions (28 points), and a very high level of wildlife-habitat function (34 points). It also qualifies as a Category I wetland because it is listed as a Natural Heritage Wetland by the Washington Department of Natural Resources (WDNR 2010b), and it has areas of mature forest.

Water Quality (Removing nutrients, sediment, metals, and toxic organic compounds)

The wetland has a high score for water-quality functions (30 points). It has intermittently flowing surface outlets, areas of organic and clay soils, and there is persistent vegetation throughout 95 percent of its area. It has the opportunity to improve water quality because it receives runoff from roads and areas of residential and agricultural land use. Although the large wetland system has been disconnected from other natural habitats by roads and human activity, and its buffers have been reduced in many areas, the wetland provides important local and regional functions. It provides high levels of water-quality functions, because it receives water from agricultural and residential areas. It also functions as a groundwater recharge area; the average precipitation of 80 inches per year recharges freshwater in the aquifer, preventing salt-water intrusion from Willapa Bay and the Pacific Ocean.

Hydrology (Reducing peak flows, decreasing downstream erosion, recharging groundwater)

The primary hydrologic source for the wetland is the seasonally high water table. The wetland has a high score for hydrologic function (28 points). It has an intermittently flowing surface outlet, there is ponding up to 3 feet in depth, and the wetland's watershed is less than 10 times the area of the wetland (**Figure A-4, Existing Conditions**). The wetland does not have an opportunity to reduce flooding because it does not drain to a stream that has flooding problems.

Wildlife Habitat (General, invertebrates, amphibians, fish, birds, mammals)

Habitat suitability for wildlife in the wetland is high (34 points) because there are five vegetative classes (aquatic bed, emergent, scrub/shrub, forested, and forested areas with more than 3 strata). There are five hydroperiods, including permanently inundated, seasonally inundated, occasionally inundated, saturated, and lake-fringe wetland in Loomis Lake. There is high plant-species richness, and there are high interspersions of vegetative classes.

Special habitat features include downed logs, standing snags, overhanging vegetation, beaver activity, and at least ¼ of an acre of thin-stemmed persistent vegetation in seasonally inundated

areas. Greater than 50 percent of the buffer is relatively undisturbed for a distance of 330 feet. There are undisturbed connections to wetlands and uplands at least 150 feet wide, with at least 30 percent cover of shrubs that connect undisturbed wetlands and uplands of more than 250 acres. There are also more than three wetlands within 1 mile with relatively undisturbed connections. The Loomis Lake outlet channel has riparian habitat and there is more than 1 acre of mature forest in and near the wetland. There is bog habitat in the wetland. Within the large wetland swale, approximately one-half the circumference of the wetland buffer within 330 feet of the wetland is undisturbed. The remaining areas are either used for agriculture, residential areas, or are within the City of Long Beach. There are also opportunities for species to move between wetland areas and between wetlands and uplands, because there are still many corridors and connections between these areas that are uninterrupted by human land uses.

A.4.2 Category II Wetland Functions

The western wetland is a Category II, depressional wetland (scoring a total of 57 points out of 100); it provides a high level of water-quality functions (24 points), moderately low hydrologic functions (12 points), and a moderately high level of wildlife-habitat function (21 points).

Water Quality (Removing nutrients, sediment, metals, and toxic organic compounds)

The wetland has a moderately high score for water-quality functions (24 points). It has no surface outlet, there is persistent vegetation throughout 95 percent of its area, and there is seasonal inundation in more than half the wetland. It has the opportunity to improve water quality because it receives runoff from roads and residences.

Hydrology (Reducing peak flows, decreasing downstream erosion, recharging groundwater)

The primary hydrologic source for the wetland is the seasonally high water table. The wetland has a moderately low score for hydrologic function (12 points). It has no outlet, there is ponding up to 2 feet in depth, and the wetland's watershed is less than 10 times the area of the wetland (**Figure A-4, Existing Conditions**). There is no opportunity for the wetland to provide hydrologic benefits because there is no outlet.

Wildlife Habitat (General, invertebrates, amphibians, fish, birds, mammals)

Habitat suitability for wildlife in the wetland is moderately high (21 points) because there are two vegetative classes (forested and forested areas with more than 3 strata). There are two hydroperiods (**Figure A-4, Existing Conditions**) including seasonally inundated and saturated. There is moderate plant-species richness, and there are no interspersions of vegetative classes. Special habitat features include downed logs, standing snags, and there is less than 25 percent of the area with invasive species. Greater than 50 percent of the buffer is relatively undisturbed for a distance of 170 feet. There are undisturbed connections to wetlands and uplands at least 150 feet wide, with at least 30 percent cover of shrubs or forest that connect undisturbed wetlands and uplands of more than 250 acres. There are also more than three wetlands within 1 mile with relatively undisturbed connections. WDFW priority habitats present onsite include "snags and logs" and mature forests.

A.5 Watershed Restoration Needs Met by Bank Site

The focus of this Bank is to provide mitigation for projects within the service area that impact wetlands within the coastal plain in current or historic dunes on the Long Beach Peninsula.

Onsite mitigation for impacts to wetlands from single-family residential projects, farming, and commercial development are often not practical due to limitations of property size and lot configuration. There are many long and narrow legal lots-of-record, termed "piano-key lots", located on the peninsula that contribute to unavoidable wetland and buffer impacts (**Figure A-8, Oceanfront Parcels Typical on Peninsula**). The majority of legal lots are oriented east to west whereas interdunal wetlands are oriented from north to south and bisect multiple lots. Onsite wetland mitigation within these lots is inadequate to achieve functional replacement and also provide buffers to mitigation areas. On-site wetland mitigation typically involves construction of a new wetland, or enhancement of an existing wetland, within a confined location that is often surrounded by other development and due to the lack of available area, it is inadequately buffered. Over time, encroachments occur within the mitigation area or its buffer, both inadvertently and purposefully, that degrade the mitigation area and reduce its function. Furthermore, in a dune system, wetlands typically occur within a mosaic pattern intermixed with uplands. If the uplands are removed or otherwise altered for wetland creation, even though well-intentioned, the mosaic of uplands and wetlands is interrupted and overall function of the broader system is reduced. The potential for improving wetland functions in these situations is also limited because of the higher development density, which leads to a high level of human presence and multiple cumulative impacts to each wetland.

Therefore, instead of providing onsite mitigation on small lots with limited options of improving wetland function, protection, or compliance, watershed restoration needs in the area can be met by the preservation and enhancement of existing high-quality wetlands that are in danger of impacts from residential development, cranberry farming, or timber harvest. A mitigation bank that preserves high-quality wetlands can potentially offset unavoidable impacts to wetlands in the service area through the removal of impact risk. Important wetland functions can be maintained and unique and rare mature wetland systems, such as forested wetlands and bogs, can be protected and allowed to mature without risk of damage.

A.6 Ecological Appropriateness of Enhancement Design

The planting of Western red cedar (*Thuja plicata*) trees is considered an enhancement to the existing plant and wildlife community at the LBMB site due to the following rationale:

In present day, Western red cedar occurs naturally, although sporadically, on the Long Beach Peninsula. At least two red cedar trees were observed growing on the upland portions of the site, and at least a few more are likely since the entire site has not been inventoried. We know that very old cedars (500 years plus) are located in a "heritage" grove of trees located on Long Island, approximately four miles east from LBMB. Another suspected 1,000-plus year old tree is located on Cranguyma Farms forest land approximately the same distance southeast from LBMB. Therefore, the coastal climate is conducive for red cedars. On the Peninsula, it is likely that logging practices over the past century have targeted cedar, mainly for rot-resistant building and fencing materials. Since red cedar is a slow-growing species, it was not likely replanted as a silvicultural practice. Therefore over time, it is likely that Western red cedar occurrence has decreased markedly throughout the Peninsula, ironically because it was desired but not replanted.

Western red cedar is somewhat shade-tolerant, therefore can be interplanted among forest areas with breaks in the canopy. It can tolerate the intermittently wet and dry sandy soil conditions common on the Peninsula, as well as the acidic soils typical of the Pacific Northwest.

Western red cedar is an important tree species for wildlife, and in particular woodpecker bird species, squirrels, chipmunks and other cavity-nesting birds and mammals. The pileated woodpecker specifically targets red cedars with internal rot for boring insects and grubs, and thereby creates cavities for nesting. When red cedar trees fall and become horizontal woody debris, their rot resistance is beneficial to providing long term cover for insects, amphibians, reptiles and small mammals.

A.7 Rationale for Site Selection

The following criteria were used for mitigation-bank site selection, followed by a summary of the specific Bank site characteristics:

- One contiguous piece of land, or series of adjacent parcels, of sufficient size to provide suitable habitat and hydrologic functions beneficial to the overall environment.
- Within the present or historic interdunal wetland system on the Long Beach Peninsula.
- In the same or comparable watershed situated on the peninsula between the Pacific Ocean and Willapa Bay watersheds, or part of the large internal wetland swales in the center of the peninsula.
- Category I wetland or the potential for restoring or enhancing to Category I within 10 years.
- Contains areas at risk from impact including timber harvest, residential development, or cranberry farming.
- A large percentage of wetland area or adjacent high-quality upland habitat within property boundaries.
- Connections to large, relatively undisturbed wetland or upland areas.

The proposed 76.25-acre mitigation bank is located on two parcels about one mile south of Loomis Lake, which is within the same mature interdunal wetland system, as can be seen on the National Wetland Inventory Map (**Figures A-9a through A-9d, National Wetlands Inventory Map Zones 1-4**). The Bank site is located in a wide wetland swale with multiple dune ridges and wetlands to the east and west. This area is the largest portion of the peninsula characterized by a relatively light density of development, being located between the communities of Long Beach to the south and Ocean Park to the north. This area also contains numerous lakes and wetlands, mainly because the peninsula is the widest in this area with at least four sets of dune ridges and swales running parallel in a north-south orientation. The site is within the Loomis Lake drainage basin (**Figure A-10, Drainage Areas**) which outlets primarily to the Pacific Ocean near the community of Ocean Park. However, due to the flat nature of the long interior areas of the peninsula, it is not improbable for drainage to also be southerly at times toward the South Main drainage or easterly through ditches to the Giles Slough drainage into Willapa Bay. Due to a combination of drainage-district improvements, agricultural drainage for cranberry production, road and drainage projects, as well as flood-control projects, the interior wetlands and lakes of the peninsula are often hydrologically interconnected.

Figures A-11a through A-11c, Protected Lands in the Service Area, show areas of the peninsula where lands are already preserved through conservation easements, covenants, or deed restrictions. The largest area of preserved freshwater wetlands is located north of the Bank site near Loomis Lake and east of the Bank site adjacent to Cranberry, Tape, Island, Lost, and Mallard lakes. The only other substantial area of freshwater wetlands that are preserved is the northern portion of Hines Marsh, near Leadbetter State Park. Most of the preserved areas protect estuarine wetlands near Cape Disappointment, on the south shore of Willapa Bay, on Long Island within Willapa Bay, and on Leadbetter State Park on the northern tip of the peninsula. If the proposed Bank is established with perpetual legal protection from development, it will extend the existing conserved freshwater wetlands located south of Loomis Lake. This will further protect this extensive wetland system from development pressures that are extending north from Long Beach and south from Ocean Park. Despite relative low density development in the approximate center of the peninsula, the central freshwater wetland areas south of Ocean Park have experienced significant development pressure from subdivisions, single-family development, cranberry-growing operations, and logging for commercial timber harvest. This central area is important refugia for peninsula wildlife.

As seen on **Figure A-12, Wildlife Corridors Within One Mile**, the proposed bank will preserve wetland and upland wildlife corridors that have a wide range of hydroperiods and vegetation types that provide habitats and corridors for mammals, birds, waterfowl, fish, amphibians, reptiles, and invertebrates. These corridors are valuable for wildlife accessing areas of wetland or upland necessary to meeting their daily, seasonal, or life-cycle needs that require different habitat types. It is also necessary to allow interbreeding between subpopulations that occupy different areas of the peninsula to maintain genetic variability. **Figure A-4, Existing Conditions**, shows existing conditions at the site, which includes a Category I wetland on the eastern portion of the site that is in a relatively natural state (61.76 acres onsite). It is part of the 15 mile-long wetland swale in the center of the peninsula, and it is connected year-round by surface water to Loomis Lake, about one mile north of the site. A forested, 2.59 acre, Category II wetland is in the western portion of the site that extends north-south in a shallow swale.

A.8 Bank Site Compliance with the Federal Rule on Mitigation for using Preservation as Compensatory Mitigation (33 CFR 332.3(h))

According to the Federal Rule on Mitigation, preservation may only used for mitigation when the required criteria are met, as outlined in Title 33 of the *Code of Federal Regulations*, Section 332.3 (33 CFR 332.3(h)). These Criteria are enumerated below, with the rationale of how the Bank site meets the requirements of the criteria following each individual criterion.

1. *The resources to be preserved provide important physical, chemical, or biological functions for the watershed and,*
2. *The resources to be preserved contribute significantly to the ecological sustainability of the watershed;*

As mentioned previously, establishment of the Bank site will extend the existing conserved freshwater wetlands located south of Loomis Lake. This will further protect this extensive wetland system from development pressures that are extending north from Long Beach and south from Ocean Park and contribute significantly to maintaining the ecological sustainability of the

watershed. Despite relative low density development in the approximate center of the peninsula, the central freshwater wetland areas south of Ocean Park have experienced significant development pressure from subdivisions, single-family development, cranberry-growing operations, and logging for commercial timber harvest. This central area is important refugia for peninsula wildlife. The proposed bank will preserve wetland and upland wildlife corridors that have a wide range of hydroperiods and vegetation types that provide habitats and corridors for mammals, birds, waterfowl, fish, amphibians, reptiles, and invertebrates. These corridors are valuable for wildlife accessing areas of wetland or upland necessary to meeting their daily, seasonal, or life-cycle needs that require different habitat types. It is also necessary to allow interbreeding between subpopulations that occupy different areas of the peninsula to maintain genetic variability.

The Bank site's Category I wetland contains three separate conditions defined as Special Characteristics by the *Western Washington Wetland Rating System* (Hruby 2006). These Special Characteristics (Natural Heritage Wetland, Mature Forest and Bog) define the Bank site as having a biological importance above and beyond the functions evaluated solely by the water quality, hydrologic, and habitat ratings.

Specifically, the Category I wetland within the bank site is identified by the Department of Natural Resource's Washington Natural Heritage Program as a Natural Heritage Wetland, characterized by high quality undisturbed wetland habitat.

Over one acre of Mature Forest is found in the west portion of the Bank site and is characterized by Sitka spruce with average diameters (dbh) exceeding 21 inches, with a majority of the individual trees ranging between 21 and 35 inches dbh. The largest measured Sitka spruce onsite was recorded with a 90 inch dbh.

The central portion of the Bank site contains bog habitat, consisting of Seastrand mucky peat soils and the characteristic bog species of western bog laurel (*Kalmia microphylla* ssp. *occidentalis*, FACW), bog cranberry (*Vaccinium oxycoccus*, OBL), bog Labrador tea (*Ledum groenlandicum*, OBL), brown-stemmed peat moss (*Sphagnum lindbergii*, NI), and small red peat moss (*Sphagnum capillifolium*, NI).

3. *The resources are under threat of destruction or adverse modifications*

The Bank site is at risk from timber harvesting for saw logs and pulpwood, selective timber harvest in wetlands, and is also at risk from conversion to cranberry farming (**Figure A-13, Potential Onsite Impacts (Industrial)**). Clearcut timber harvesting for saw logs and pulpwood could occur in the uplands east and west of the Category II wetland (16.56 acres), and selective timber harvest could occur in the forested wetland areas of both wetlands (15.41 acres). The site has been logged in the last 15 years, but there are still many mature trees too large for most mills to process. However, there are also many smaller trees that are ready for harvest. Timber values in this area increase 3 to 4 percent each year. Cranberry production could occur in the 13.81 acres between the onsite wetlands.

Currently, the property consists of two tax lots and in accordance with the zoning and comprehensive plan designation, the property could be developed into a minimum of eight

residential lots with 10 acres minimum per lot, and up to 16 lots with 5 acres minimum per lot. **Figure A-14, Potential Onsite Impacts (Residential)**, shows a typical development concept with the minimum eight lots. There is ample upland area along the western portion of the property to facilitate development of eight residential properties. Residential areas with associated homes, driveways, garages, outbuildings, barns, and livestock paddocks could potentially impact wetland functions by increasing impervious surfaces that produce contaminated stormwater runoff from driveways, pesticide and fertilizer from lawns and gardens, animal waste, and septic-tank effluent. Wildlife within the wetlands will experience increased noise and light, as well as the presence of humans, pets, and livestock. Additionally, the Category II wetland would be crossed by several driveways. If this property was developed as a rural residential subdivision, a shared community trail would be a typical amenity offered for the landowners. Such a trail with viewing platforms could be constructed, which would cause noise and visual impacts into the wetlands.

Potential impacts from adjacent properties include residential development, clearcut and selective timber harvesting, and water table drawdowns due to cranberry harvesting methods. **Figure A-15, 1943 and 2006 Aerial Photographs**, shows aerial photographs from 1943 and 2007 that indicate the level of residential growth the area has experienced in the last 64 years. The Pacific County Comprehensive Plan projected 6,007 new residents in Pacific County between 1996 and 2016. The projected land needed for this growth was estimated at 5,118 acres, which was 48 percent of the vacant buildable land in 1996. The increased demand for residential development on the peninsula will lead to the increased potential for impacts to critical areas and their buffers.

Preservation of this documented old-growth and mature forest habitat located within uplands is worthy of similar credit afforded to preserved Category I and II wetlands. These large trees and the habitat are relatively rare on the Long Beach Peninsula due to logging, land conversions, and development. Some of the larger trees, estimated to be greater than 200 years in age, were growing when the Lewis and Clark Expedition reached the Long Beach/Seaview area in 1804. For this consideration alone they are heritage trees and reflect more than two centuries of climate and natural history on the Peninsula. Without protection, they are subject to the threat of commercial timber harvest. Because many of the trees are located in uplands, no protective wetland regulations apply to them. Furthermore, we know that forest practice rules allow logging, in many instances, within wetlands.

Protecting the upland habitat onsite is also justified if the 200-foot wide buffers are applied to the Category I wetland and 150-foot wide buffers on the Category II wetlands. In this scenario, nearly the entire site would be wetland and buffer. However, because these are not the locally required buffer widths and will not likely be for the next 2 to 3 years, much of these well-forested uplands are at risk of commercial timber harvest. Such harvest threatens the integrity of the natural ecosystem on this property and the interspersed habitats between wetland and upland.

Finally, it is worth considering the value of high-quality upland habitats on the Long Beach Peninsula. We know that with the advent of regulations protecting wetlands, land development has been and will continue to be focused on uplands. It is worth consideration that uplands,

especially those with well-developed and mature forested habitats, are equally at-risk for impacts and cumulative losses than wetlands.

4. *The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).*

A conservation easement which will permanently protect the Bank site will be approved, initiated, and recorded pursuant to Article III.D of this Instrument, and Section G.1 of Appendix G.

5. *Where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities.*

The preservation activities will be conducted in conjunction with ecological enhancement measures including native species plantings, noxious weed eradication, and site protection elements.

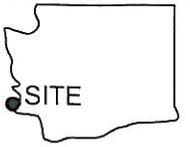
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- United States Geological Survey (USGS). 1995. *Ground-Water Flow and Water Quality in the Sand Aquifer of Long Beach Peninsula, Washington*. Water-Resources Investigation Report 95-4026. Prepared in cooperation with the Pacific County Department of Community Development and Washington State Department of Ecology. Tacoma, Washington.
- United States Government. 2011. *Code of Federal Regulations, Title 33, Section 332.3(h), General Compensatory Mitigation Requirements, Preservation*, as published in the Federal Register.
- Washington State Department of Fish and Wildlife (WDFW). 2010. *SalmonScape*. Internet site accessed April 2010: <http://wdfw.wa.gov/mapping/salmonscape/>.
- Washington State Department of Fish and Wildlife (WDFW). 2007. *Priority Species and Habitat Report in the Vicinity of T11R11W Section 28*. September 24.
- Washington State Department of Natural Resources (WDNR). 2011. Internet site accessed October 25, 2011: http://www.dnr.wa.gov/ResearchScience/HowTo/ConservationRestoration/Pages/amp_nh_data_instructions.aspx.
- Washington State Department of Natural Resources (WDNR). 2010. *Stream-Typing Map*. Internet site accessed April 2010: http://www.dnr.wa.gov/forestpractices/water_typing/.

Washington State Department of Natural Resources (WDNR). November 2010b. *List of Known Occurrences of Rare Plants in Washington - Pacific County. Washington Natural Heritage Information System.* Online document accessed October 25, 2011: <http://www1.dnr.wa.gov/nhp/refdesk/lists/plantsxco/pacific.html>.

1/7/2013 12:57 PM S:\Pacific-WA\County-Projects\1645-LBMB, Inc\1645.01-Long Beach Mitigation Bank\1645.01-FIGS.dwg Jennifer Johnston

WASHINGTON



46° 24' 27" N Latitude
124° 02' 46" W Longitude
LOCATION MAP

R 11 W

6				1
31				38

T
11
N

PROJECT VICINITY MAP

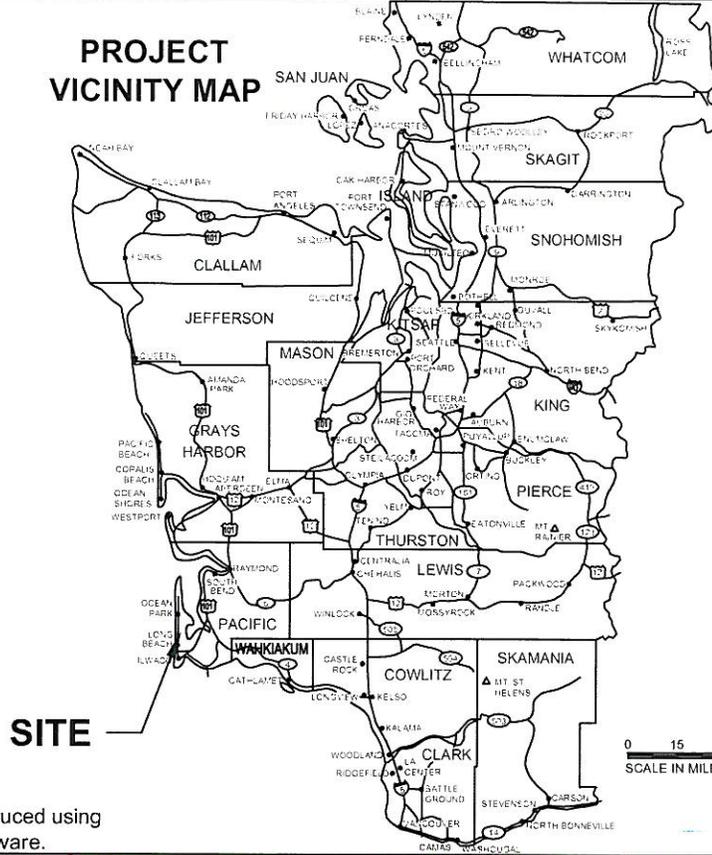
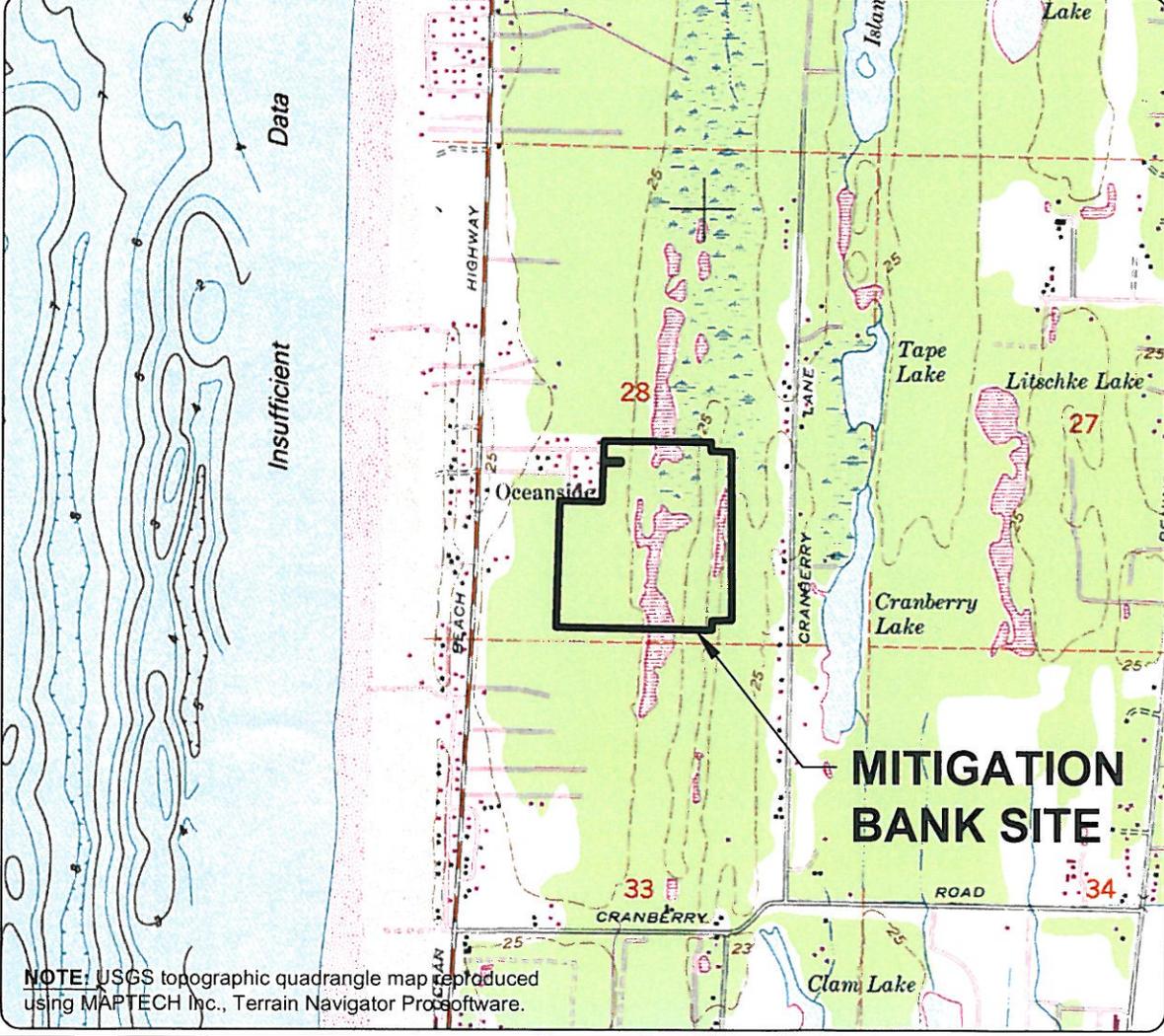


Figure A-1
VICINITY MAP

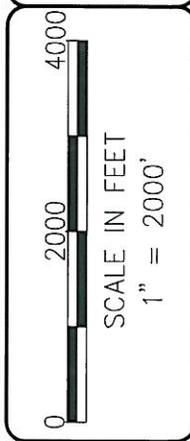
Long Beach Mitigation Bank
LBMB, Inc.
Pacific County, Washington
Section 28, Township 11N, Range 11W, W.M.

DATE: 4/17/12
DWN: BCB
REQ. BY: LS
PRJ. MGR: FN
CHK:
PROJECT NO:
1645.01

NOTE:
USGS topographic quadrangle map reproduced using
MAPTECH Inc., Terrain Navigator Pro software.

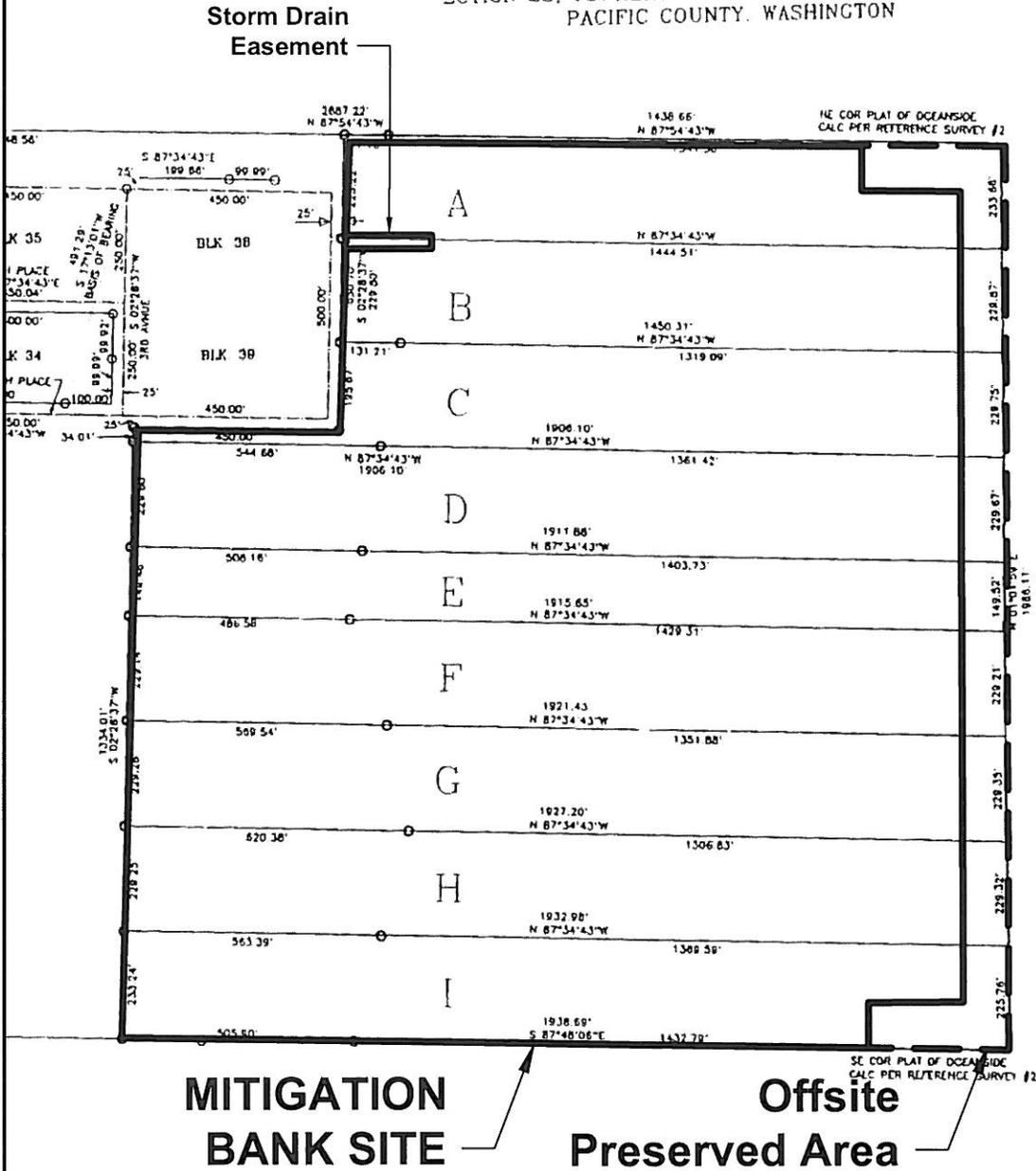


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Phone: (360) 578-1371 Fax: (360) 414-9305



NOTE: USGS topographic quadrangle map reproduced using MAPTECH Inc., Terrain Navigator Pro software.

PART OF THE
R. CARUTHER D.L.C.
LOCATED IN THE
NE1/4 SE1/4, SE1/4 SE1/4, SW1/4 SE1/4,
NW1/4 SE1/4, NE1/4 SW1/4 AND SE1/4 SW1/4
SECTION 28, TOWNSHIP 11 NORTH, RANGE 11 WEST, W.M.
PACIFIC COUNTY, WASHINGTON



Legal Description for Storm Drainage Easement

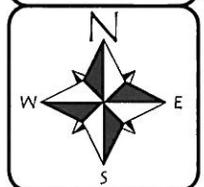
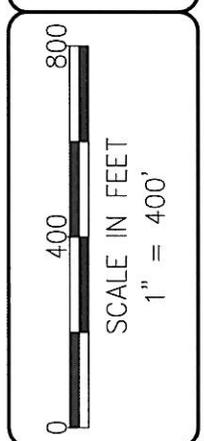
A strip of land 30-feet in width, 15-feet on each side of that boundary extending from platted Fourth Avenue, First Addition to Ocean Side, easterly 190-feet, along the boundary line of Tract A and Tract B of Ocean Side Plat, Volume D-1 of Plats at page 38 records of Pacific County.

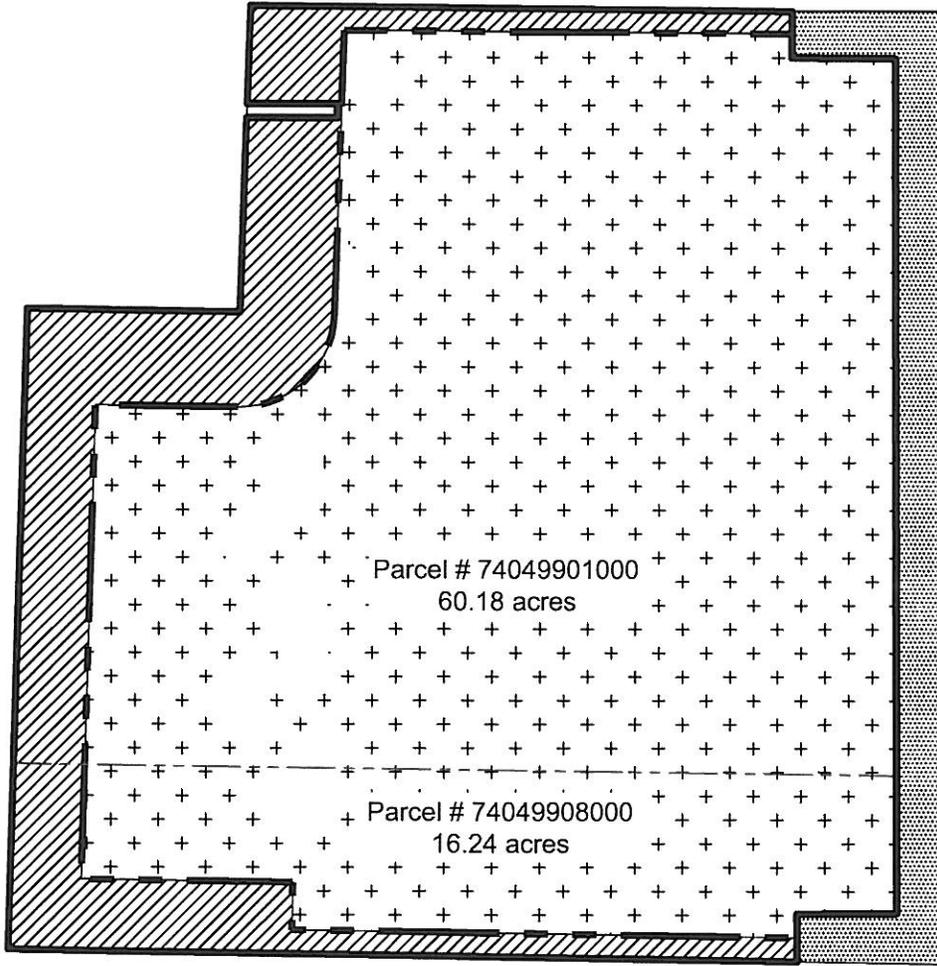
NOTE: Survey provided by Bluhm & Associates Land Surveyors, Inc.

Figure A-2
SITE SURVEY
Proposal for Long Beach Wetland Mitigation Bank
LBMB, Inc.
Pacific County, Washington
Section 28, Township 11N, Range 11W, W.M.

DATE: 4/17/12
DWN: BCB
REQ. BY: LS
PRJ. MGR: FN
CHK:
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1645.01

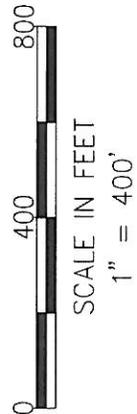
ECOLOGICAL LAND SERVICES, INC.
1157 3rd Ave., Suite 220
Longview, WA 98632
Phone: (360) 578-1371 Fax: (360) 414-9305





LEGEND:

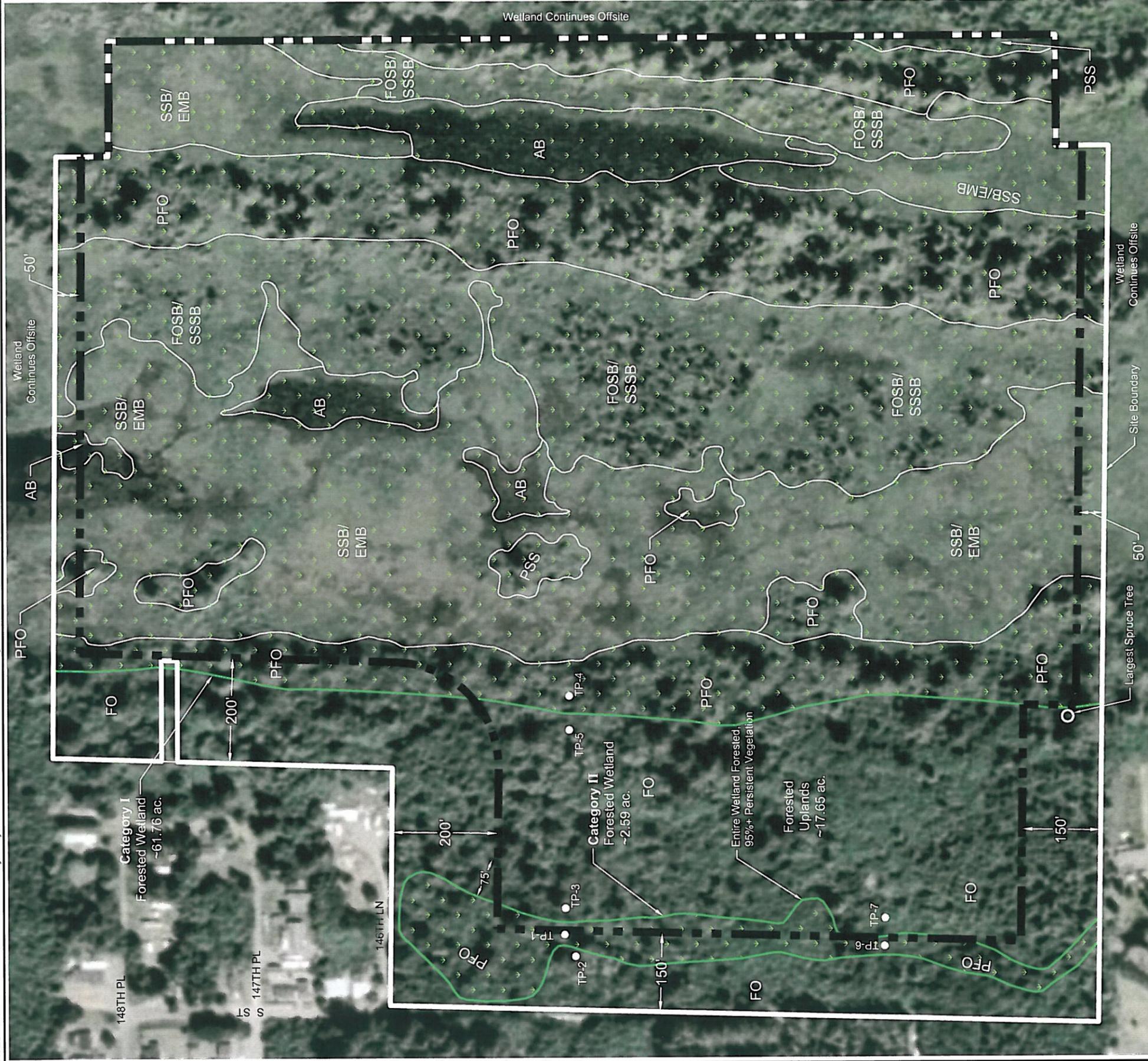
-  Mitigation Bank Site Boundary (76.25 acres)
-  Bank Buffer (13.35 acres)
-  Credit Generation Area (62.90 acres)
-  Previously Authorized Mitigation Area (5.58 acres)




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DATE: 7/24/12
DWN: BCB
REQ. BY: LS
PRJ. MGR: FN
CHK:
PROJECT NO:
1645.01

Figure A-3
MITIGATION AREA SITE MAP
Proposal for Long Beach Wetland Mitigation Bank
LBMB, Inc.
Pacific County, Washington
Section 28, T11N, R11W, W.M.



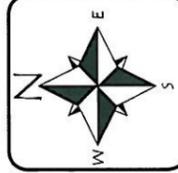
LEGEND:

- Site Boundary
- Bank Buffer
- Wetland Boundary
- Test Plot Location
- Cowardin Class Boundary
- AB = Aquatic Bed
- EMB = Emergent Bog
- FO = Forested Upland
- FOSB = Forested Sphagnum Bog
- PFO = Palustrine Forested Wetland
- PSS = Palustrine Scrub-Shrub Wetland
- SSB = Scrub-Shrub Bog
- SSSB = Scrub-Shrub Sphagnum Bog

Cowardin Vegetation Class Areas		
Class Area	Total Site (acres)	Credit Generation Area (acres)
AB	3.33	0.05
FO	17.55	8.24
PFO	19.84	3.66
PSS	0.61	0
SSB/EMB	20.68	0.94
FOSB/SSSB	14.24	0.46
Totals:	76.25	13.35

NOTES:

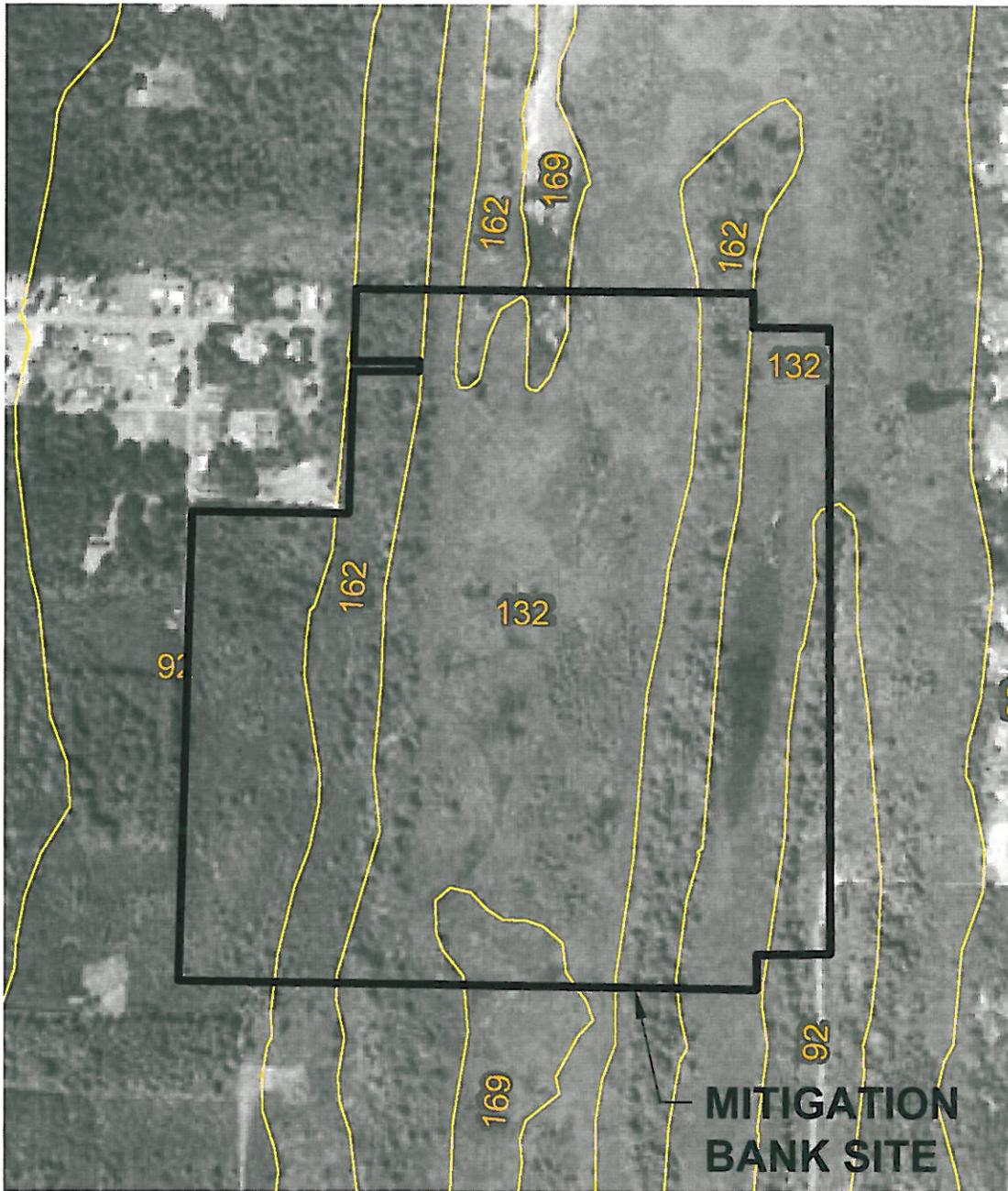
1. The Category II wetland has no known surface water outlet. Ponding depth is 0.5 to 2.0 feet above the surface; no interspersions of habitats.
2. Buffers are undisturbed on east side of the Category I wetland and upland corridor to east is intact.
3. Map depicts Cowardin vegetation classes per Western Washington Rating form numbers D 1.3, R 1.2, R 3.1, R 3.2, L 1.2, L 3, S 1.3, H 1.1, and H 1.4.
4. 2006 aerial photo provided by Google Earth™.



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DATE: 4/17/12
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 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO: 1645.01

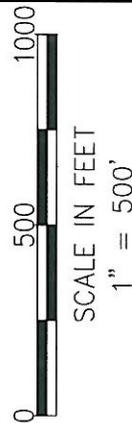
Figure A-4
EXISTING CONDITIONS
 Long Beach Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



LEGEND:

- 92 Netarts fine sand, 3 to 12 percent slopes. Partially Hydric.
- 132 Seastrand mucky peat. All Hydric.
- 162 Yaquina loamy fine sand. All Hydric.
- 169 Water. All Hydric.

NOTE: Map provided on-line by NRCS at web address:
<http://websoilsurvey.nrcs.usda.gov/app/>



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 CHK:
 PROJECT NO:
 1645.01

Figure A-5
 SOIL SURVEY MAP
 Long Beach Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

Storm Drain Easement
(190' x 30')



LEGEND:

- Sa = Saturated (16% of Total Area)
- Oc = Occasionally Inundated (3% of Total Area)
- Se = Seasonally Inundated (53% of Total Area)
- P = Permanently Inundated (5% of Total Area)

NOTES:

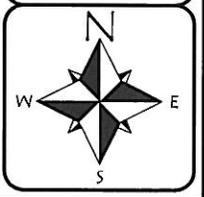
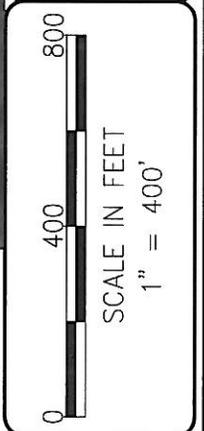
1. Map depicts Hydroperiods per Western Washington Rating form numbers D 1.1, 1.4, and H 1.2.
2. Aerial photograph (2006) provided by Google Earth™.

Figure A-6
 HYDROPERIODS
 Long Beach Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO:
 1645.01

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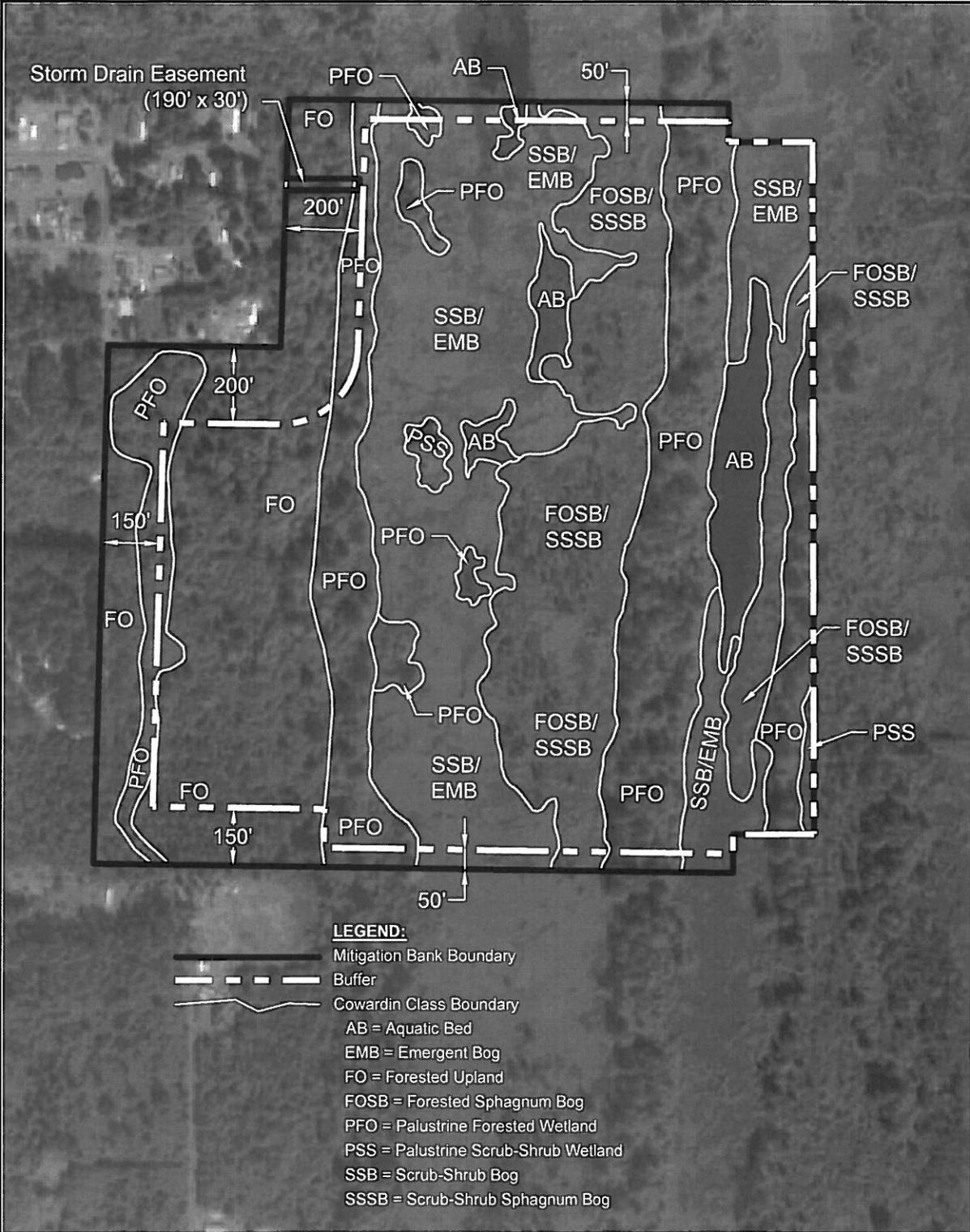
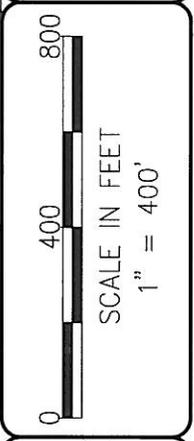


Figure A-7
COWARDIN VEGETATIVE CLASSES
 Long Beach Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO: 1645.01

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 Phone: (360) 578-1371 Fax: (360) 414-9305



NOTES:

- Map depicts Cowardin vegetation classes per Western Washington Rating form numbers D 1.3, R 1.2, R 3.1, R 3.2, L 1.2, L 3, S 1.3, H 1.1, and H 1.4.
- Aerial photograph (2006) provided by Google Earth™.

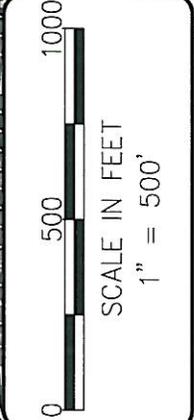


LEGEND:

Tax Lot Boundary

NOTES:

1. Base map provided by the Pacific County GIS Department.
2. 2009 aerial photo provided by the USDA Aerial Photography Field Office.

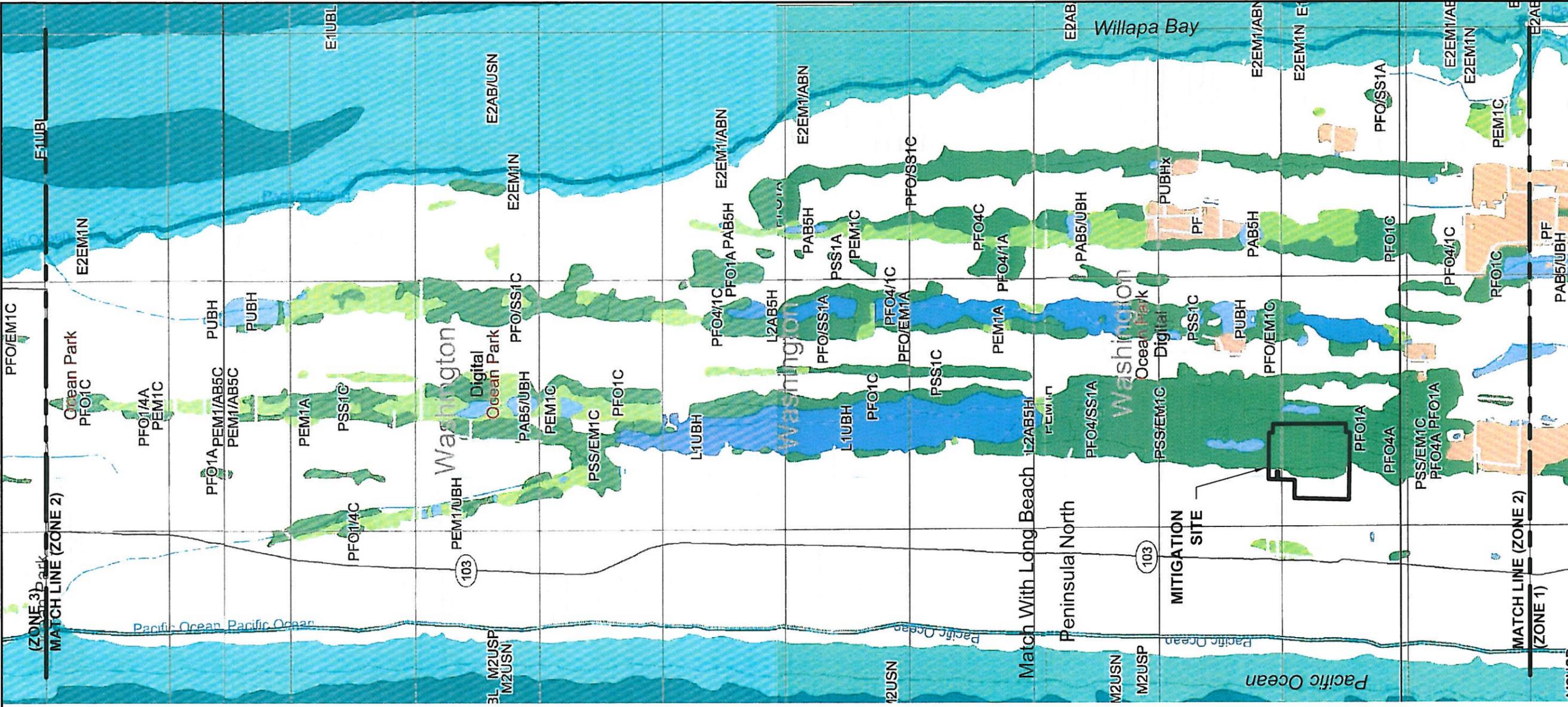


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 DWN: JKJ
 REQ. BY: FN
 PRJ. MGR: FN
 CHK:
 PROJECT NO:
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Figure A-8
OCEANFRONT PARCELS TYPICAL ON PENINSULA
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

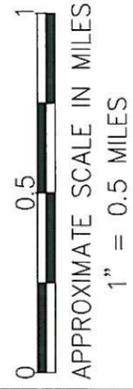
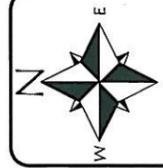
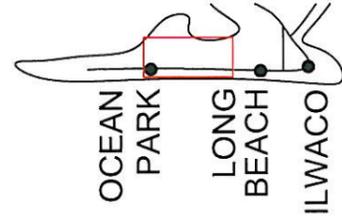


LEGEND:

-  Lake
-  Freshwater Pond
-  Estuarine or Marine Deepwater
-  Estuarine or Marine Wetland
-  Forested or Scrub-shrub Wetlands
-  Emergent Wetlands
-  Riverine
-  Cranberry Farms

NOTES:

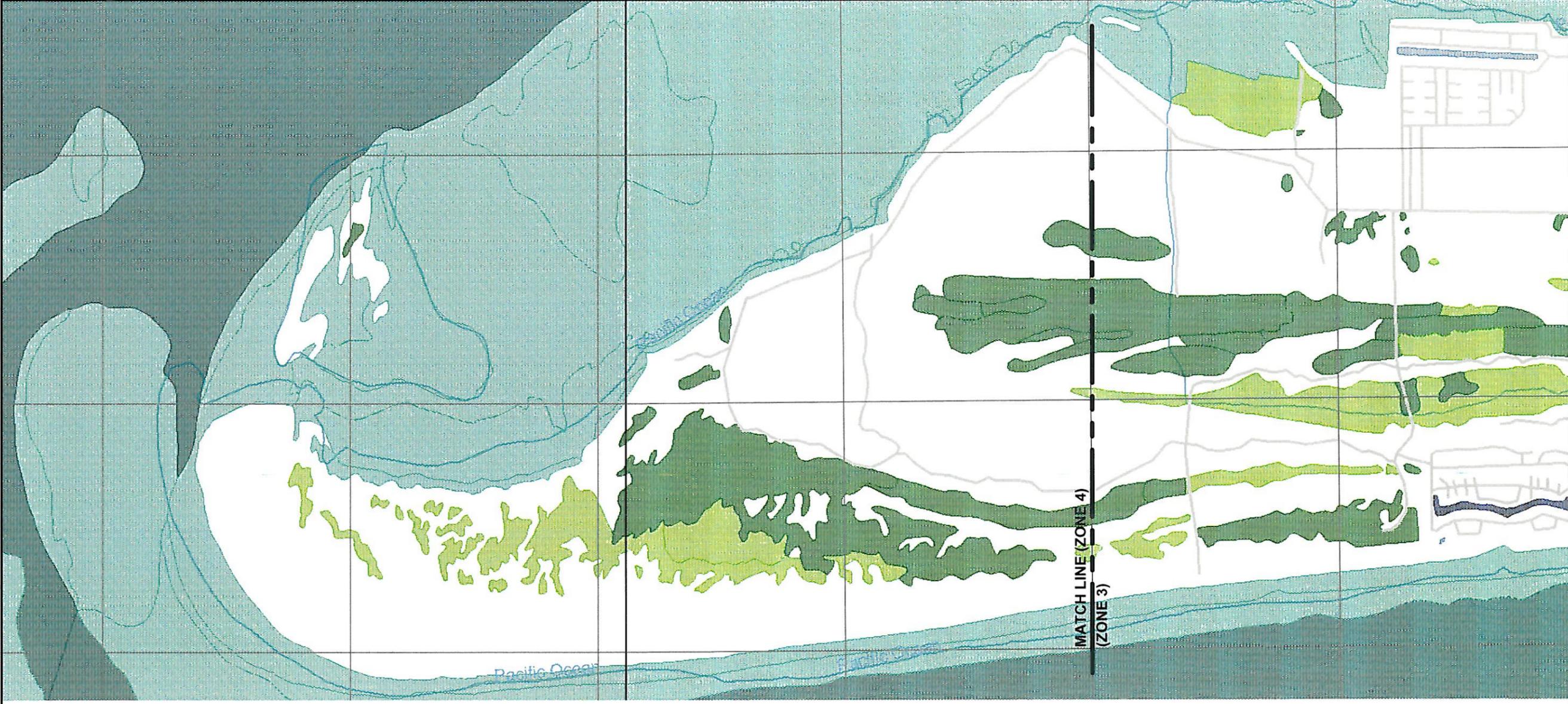
1. Map provided on-line by US Fish & Wildlife Service at web address: <http://www.fws.gov/wetlands/data/index.html>
2. Map scale is approximate. Property boundary location and size is approximate.



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 CHK:
 PROJECT NO: 1645.01

Figure A-9b
 NATIONAL WETLANDS INVENTORY MAP ZONE 2
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

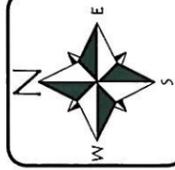
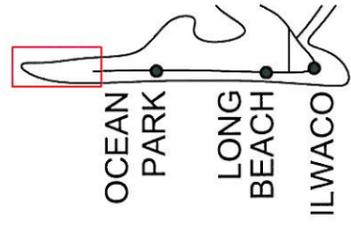


LEGEND:

-  Lake
-  Freshwater Pond
-  Estuarine or Marine Deepwater
-  Estuarine or Marine Wetland
-  Forested or Scrub-shrub Wetlands
-  Emergent Wetlands
-  Riverine
-  Cranberry Farms

NOTES:

1. Map provided on-line by US Fish & Wildlife Service at web address: <http://www.fws.gov/wetlands/data/index.html>
2. Map scale is approximate. Property boundary location and size is approximate.



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Figure A-9d
NATIONAL WETLANDS INVENTORY MAP ZONE 4
Long Beach Mitigation Bank
LBMB, LLC
Pacific County, Washington
Section 28, Township 11N, Range 11W, W.M.

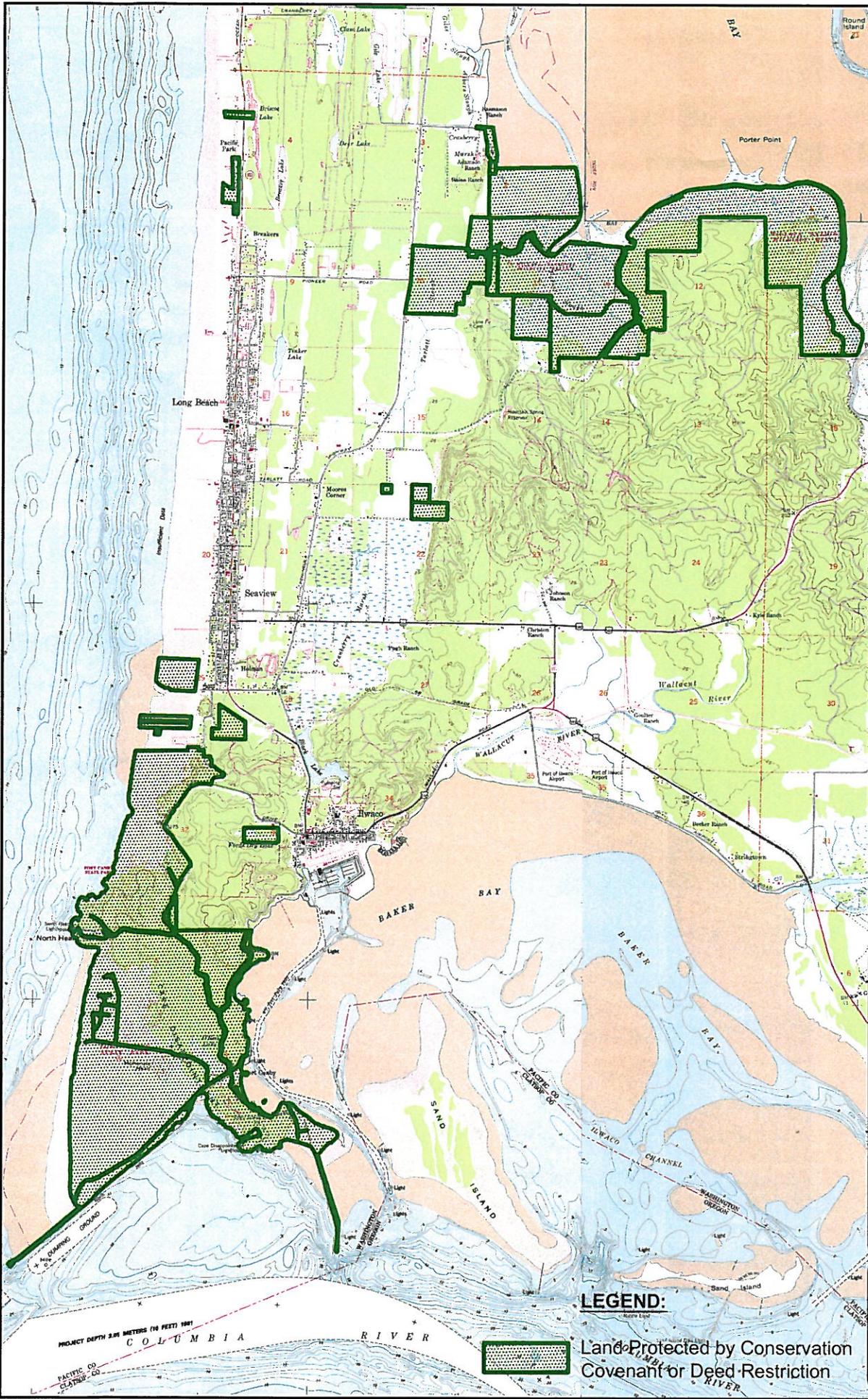


Figure A-11a
PROTECTED LANDS IN THE SERVICE AREA
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO:
 1645.01

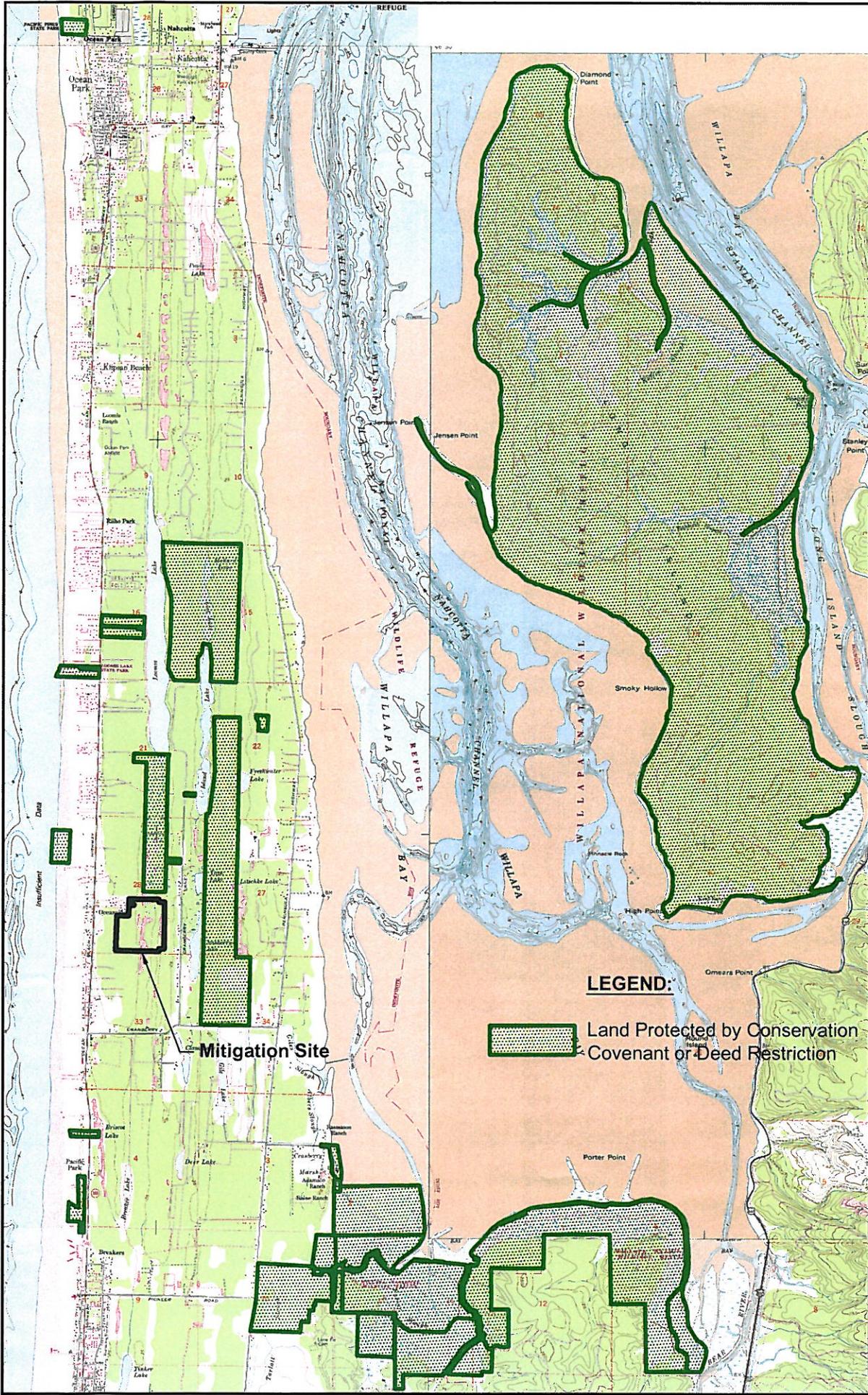
ECOLOGICAL LAND SERVICES, INC.

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 Longview, WA 98632
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0 1 2
 SCALE IN MILES
 1" = 1 MILE

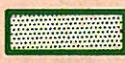


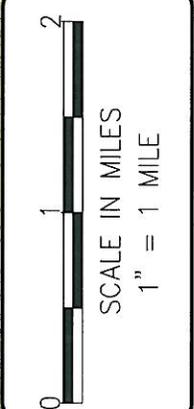
LEGEND:
 Land Protected by Conservation Covenant or Deed Restriction



Mitigation Site

LEGEND:

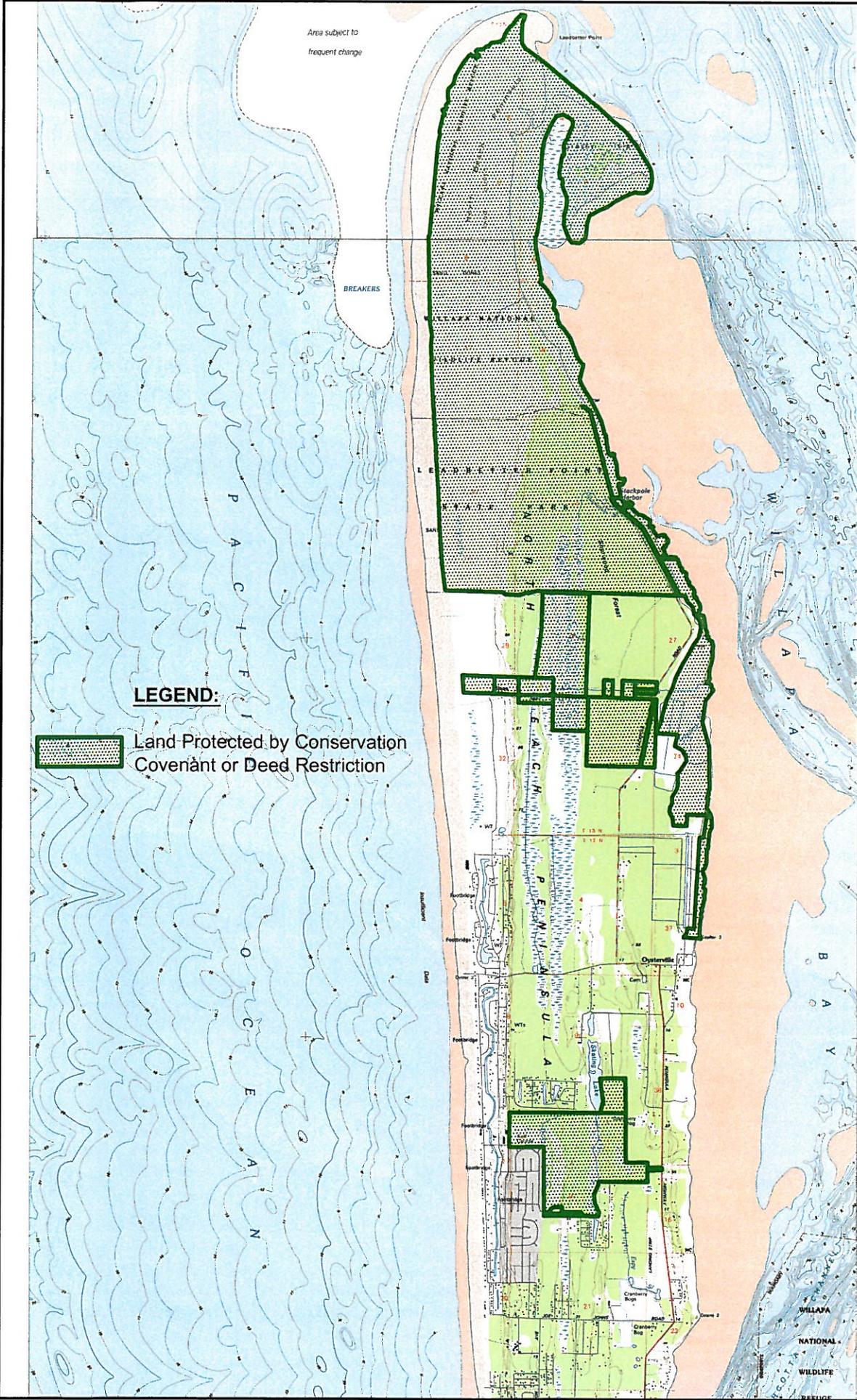
 Land Protected by Conservation Covenant or Deed Restriction



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 CHK:
 PROJECT NO: 1645.01

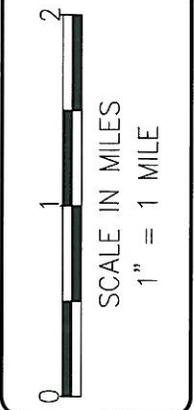
Figure A-11b
PROTECTED LANDS IN THE SERVICE AREA
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



LEGEND:



Land Protected by Conservation Covenant or Deed Restriction

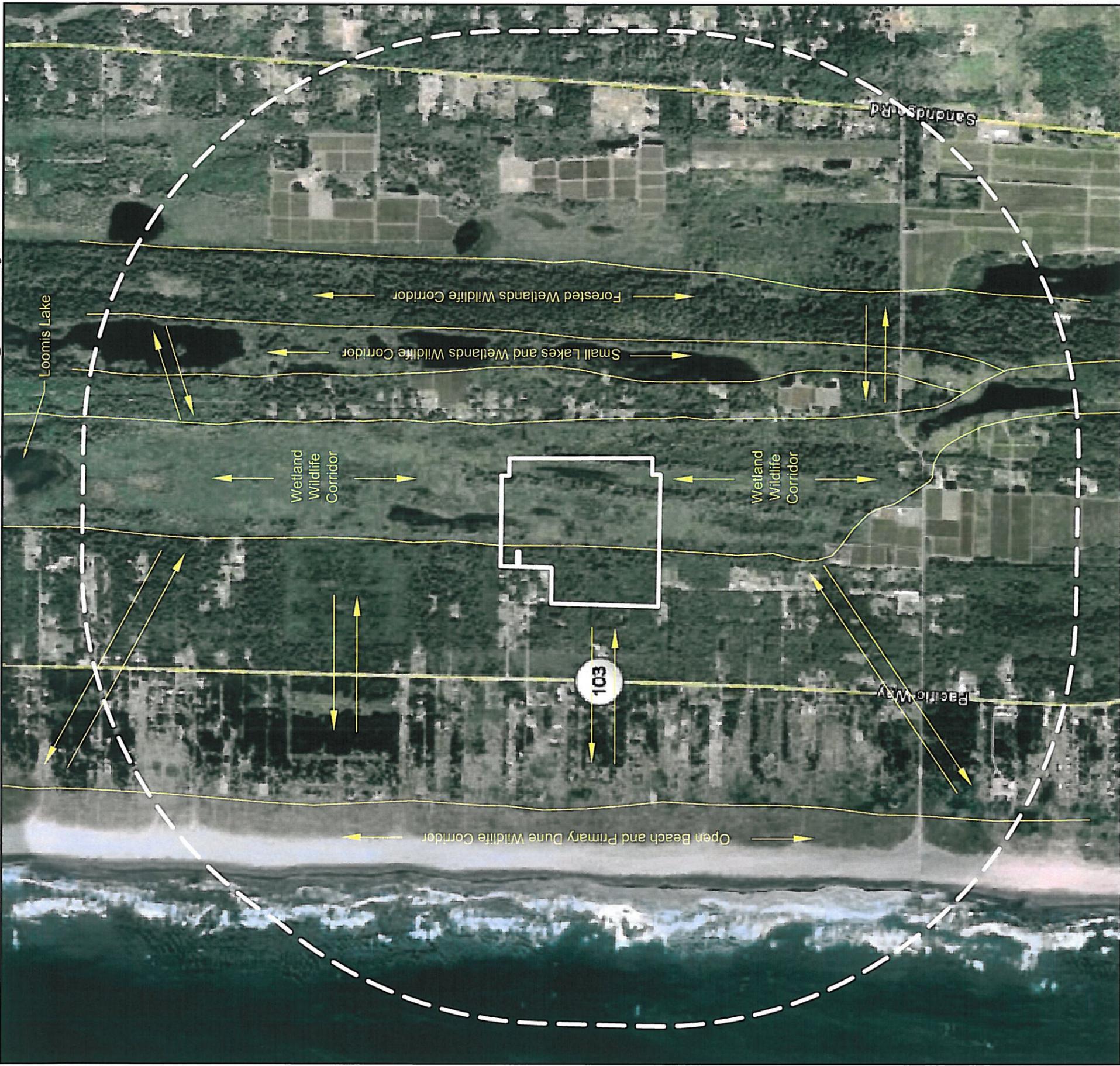


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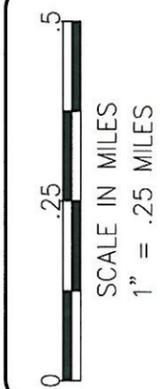
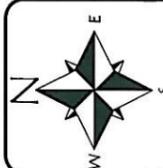
Figure A-11c
PROTECTED LANDS IN THE SERVICE AREA
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



LEGEND:

-  Site Boundary
-  1 Mile Radius from Site Boundary
-  Wildlife Corridor
-  Cross Connections Between Primary Wildlife Corridors

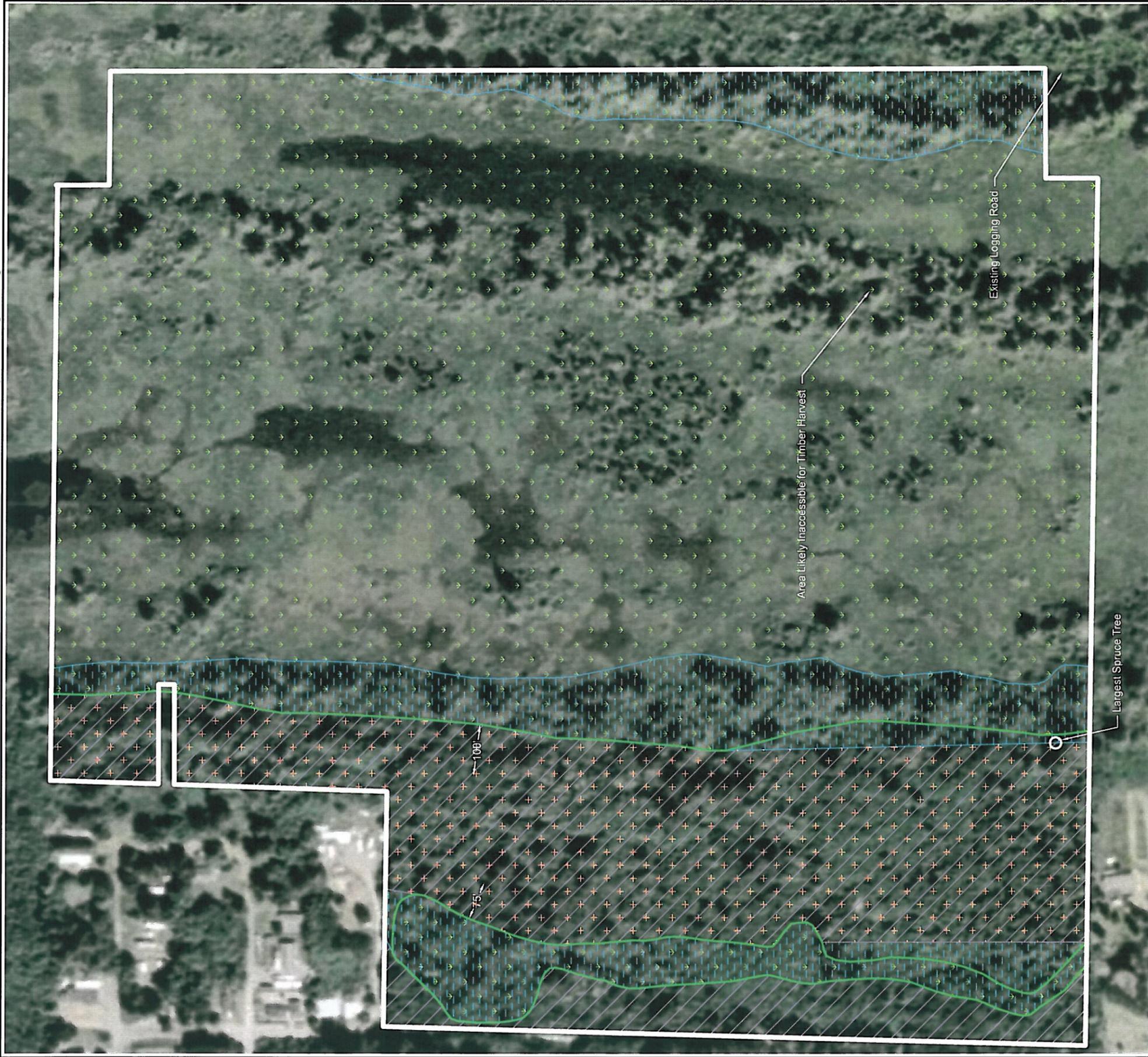
NOTE: Aerial photograph (2006) provided by Google Earth™.



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 PROJECT NO:
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Figure A-12
WILDLIFE CORRIDORS WITHIN ONE MILE
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



LEGEND:

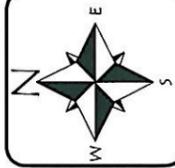
Site Boundary

Wetland Boundary

Area at Risk from Conversion to Cranberry Production (13.69 ac.)

Area at Risk from Complete Harvest of Timber Saw Logs and Pulpwood (16.44 ac.)

Area at Risk from Selected Timber Harvest (11.61 ac.)



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PROJECT NO:
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Figure A-13
POTENTIAL ONSITE IMPACTS (INDUSTRIAL)
Long Beach Mitigation Bank
LBMB, LLC
Pacific County, Washington
Section 28, Township 11N, Range 11W, W.M.



LEGEND:



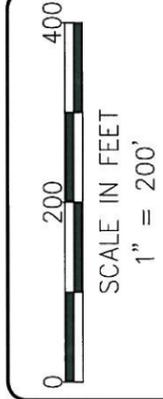
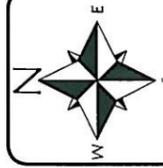
Potential Single Family Residences, and Appurtenances on Minimum 10-Acre Tracts, Including Groundwater Wells and Onsite Sewage Treatment Systems

Shared Driveways and Road Improvements, Facilitating Upland Residential Development

Shared Community Trail

Trail to Wetland Viewing Platform

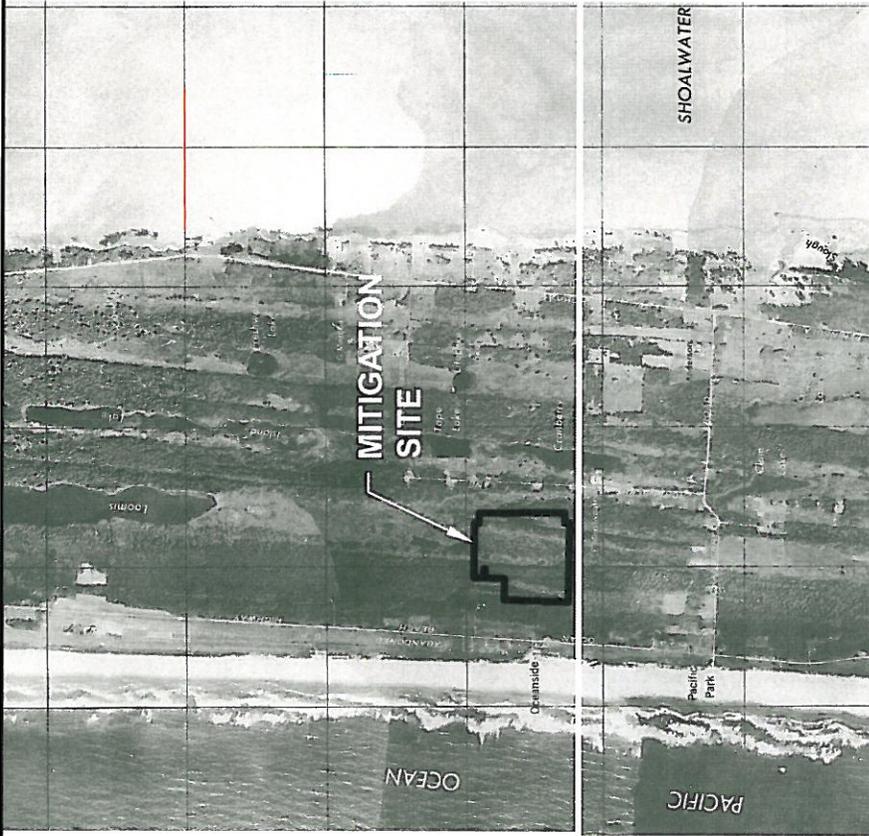
Primary Building Envelope Suited for Home, Garage, Outbuildings, Barn, Livestock Paddock, Onsite Septic and Well, etc.



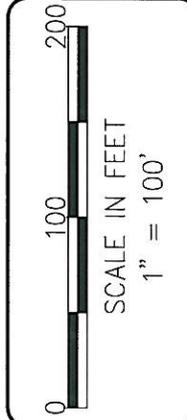
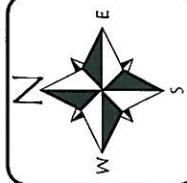
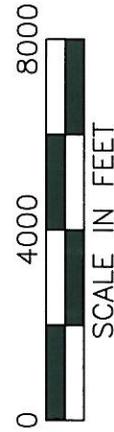
ECOLOGICAL LAND SERVICES, INC.
 1157 3rd Ave., Suite 220
 Longview, WA 98632
 Phone: (360) 578-1371 Fax: (360) 414-9305

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO: 1645.01

Figure A-14
POTENTIAL ONSITE IMPACTS (RESIDENTIAL)
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



1943 Aerial



ECOLOGICAL LAND SERVICES, INC.
 1157 3rd Ave., Suite 220
 Longview, WA 98632
 Phone: (360) 578-1371 Fax: (360) 414-9305

DATE: 4/17/12
 DWN: JKJ
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO:
 1645.01

Figure A-15
 1943 AND 2006 AERIAL PHOTOGRAPHS
 Long Beach Mitigation Bank
 LBMB, LLC
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.



2006 Aerial

NOTES:

1. 2006 aerial provided by Google Earth™, 2007.
2. 1943 aerial provided by the Army Map Service.

EXHIBIT A

All that portion of the R. Caruther D.L.C. located in the Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$), Southeast Quarter Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$), of Section 28, Township 11 North, Range 11 West, Willamette Meridian, Pacific County, Washington as following described line: Beginning at a Northeast corner Plat of Oceanside as the TRUE POINT OF BEGINNING of said line THENCE South $1^{\circ}1'59''$ West, 1986.11 feet; THENCE North $87^{\circ}48'06''$ West, 1938.69 feet to a $\frac{1}{2}''$ iron rod with cap marked K. Bluhm LS 29269; THENCE North $2^{\circ}28'37''$ East, 1334.01 feet to a $\frac{1}{2}''$ iron rod with cap marked K. Bluhm LS 29269; THENCE South $87^{\circ}54'43''$ East, 450.00 feet to a $\frac{1}{2}''$ iron rod with cap marked K. Bluhm LS 29269; THENCE North $2^{\circ}28'37''$ East, 650.70 feet to a $\frac{1}{2}''$ iron rod with cap marked K. Bluhm LS 29269; THENCE South $87^{\circ}54'43''$ East, 1438.66 feet to the TERMINUS of said line.

EXCEPTING THE AREAS AS DESCRIBED:

The Tehrani-Atlas mitigation area as all that portion of the R. Caruther D.L.C. located in the Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$), Southeast Quarter Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$), of Section 28, Township 11 North, Range 11 West, W.M., Pacific County, Washington as following described line: Beginning at a Northeast corner Plat of Oceanside as the TRUE POINT OF BEGINNING of said line; thence South $1^{\circ}1'59''$ West, 1986.11 feet, thence North $87^{\circ}48'06''$ West, 272.77 feet, thence North $1^{\circ}1'59''$ East, 100.00 feet, thence South $87^{\circ}48'06''$ East, 172.40 feet, thence North $1^{\circ}1'59''$ East, 1885.92 feet, thence South $87^{\circ}54'43''$ East, 100.37 feet to the terminus of said line.

The Eaton mitigation area as all that portion of the R. Caruther D.L.C. located in the Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$), Southeast Quarter Southeast Quarter (SE $\frac{1}{4}$ SE $\frac{1}{4}$), of Section 28, Township 11 North, Range 11 West, W.M., Pacific County, Washington as following described line: Beginning at a Northeast corner Plat of Oceanside: thence North $87^{\circ}54'43''$ West, 100.37 feet to the

TRUE POINT OF BEGINNING of said line; thence South 1°1'59" West, 100.00 feet, thence North 87°54'43" West, 218.00 feet, thence North 1°1'59" East, 100.00 feet, thence South 87°54'43" East, 218.01 feet to the terminus of said line.

The Little mitigation area as all that portion of the R. Caruther D.L.C. located in the Northeast Quarter of the Southeast Quarter (NE ¼ SW ¼), Southeast Quarter Southeast Quarter (SE ¼ SE ¼), of Section 28, Township 11 North, Range 11 West, W.M., Pacific County, Washington as following described line: Beginning at a Northeast corner Plat of Oceanside thence South 1°1'59" West, 1986.11 feet, thence North 87°48'06" West, 272.77 feet, as the TRUE POINT OF BEGINNING of said line; thence North 1°1'59" East, 100.00 feet, thence South 89°45'0" West, 37.00 feet, thence South 1°1'59" West, 100.02 feet, thence South 87°48'6" East, 37.00 feet to the terminus of said line.

And an easement for stormwater as a strip of land 30-feet in width, 15-feet on each side of that boundary extending from platted Fourth Avenue, First Addition to Ocean Side, easterly 190-feet, along the boundary line of Tract A and Tract B of Ocean Side Plat, Volume D-1 of Plats at page 38 records of Pacific County.

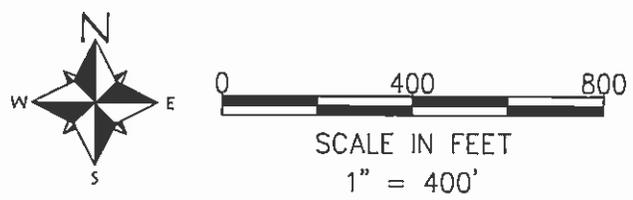
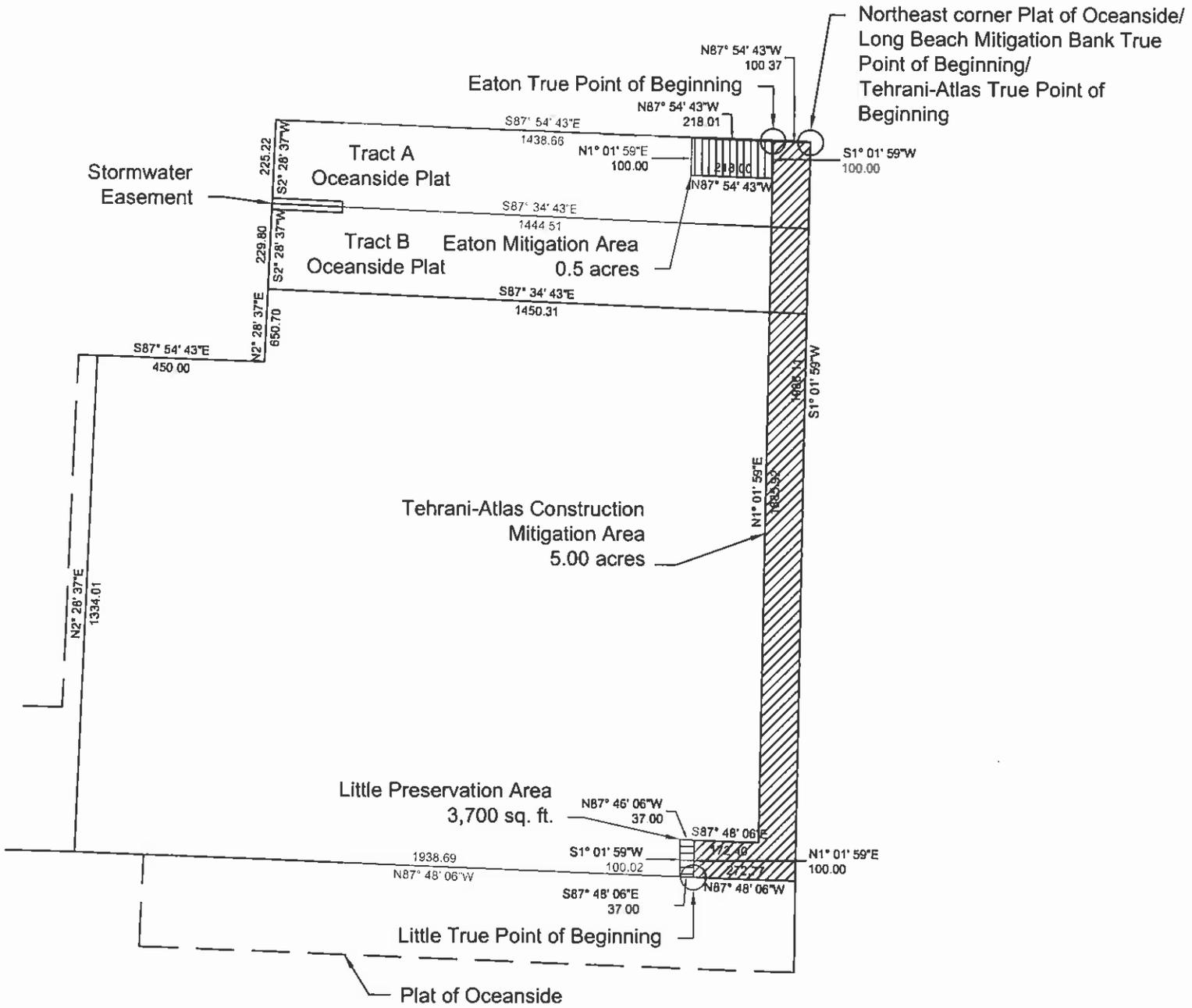


Exhibit A

APPENDIX B BANK DEVELOPMENT PLAN AND DESIGN

B.1 Development Plan – Overview

The general goal of the Bank site design is to preserve 61.76-acres of a Category I wetland in the central portion of the site, a 2.59-acre Category II wetland on the western portion of the site, as well as valuable upland habitat with a mature forest (**Figure B-1, Bank Site Design**). The site is threatened by impacts from timber harvest, conversion to cranberry production, and residential development.

In early 2011, approximately 2.61 acres of openings in the forested canopy along the western boundary of the Category I wetland have been hand cleared of non-native blackberries and were planted with 2-gallon containers of Western red cedar (*Thuja plicata*) 3 to 5 feet in height. Plant selection and planting methods used followed specifications in the Basis of Design Report, as listed below:

Plant Specifications

Planting tasks are listed in the order that they are anticipated to occur; however, some tasks may occur concurrently or may precede other tasks because of unforeseen site and/or procedural constraints.

Plant materials will conform to the following criteria:

- Container stock will be kept moist until installation.
- Containerized trees and shrubs will be a minimum of 36-inches tall.
- Container stock will have a well-developed root system and will not be excessively root bound.
- The planter will be responsible for inspecting container stock prior to and during planting; the planter will cull unacceptable plant materials.

Planting Methods

- Container plants will be purchased from a native plant nursery.
- Dig a 24-inch-wide planting hole that is 6 inches deeper than the root system and to 4 inches wider. Scarify sides of the hole.
- Remove the plant from the container and loosen roots with hand or score vertically on sides and bottom with knife.
- Set plant upright and plumb in hole so the crown is 2- to 3-inches above the finish grade.
- Replace loose soil around plant and firmly compact the soil around the plant to eliminate air spaces. Do not use frozen soil for backfilling.

Enhancement with red cedar plantings was proposed for areas where tree cover was more sparse, recognizing that this tree species (*Thuja plicata*) had largely been removed from the area, likely from previous logging activities. Plantings of this tree would compete relatively well within a sparse overstory of existing trees and shrubs. Western red cedar is typically well-represented in coastal forest areas, but does not occur regularly on this property due to previous timber harvests

and because it is typically not replanted as commonly as other conifers in silvicultural practices. By replanting this species it will augment the forests return to a mixed overstory of coniferous trees typically found within a coastal forest.

In early 2011 when planting took place, non-native blackberries along the entire western boundary of the site were removed. Garbage had been dumped on the site near the gravel road on the western site boundary. Garbage removal began in early 2011 when the trees were planted, and the remaining large items were removed in early 2012.

A three-strand smooth-wire fence was installed in early 2012 around portions of the site near residential developments, to discourage trespassing and garbage dumping, yet allow for wildlife movement. The fence has signs that prohibit trespassing and hunting, which are posted every 100 feet. A fence around the entire perimeter of the site is not necessary, because human or livestock access is not likely from other areas that are less accessible, such as areas of seasonal or permanent inundation.

A conservation easement and deed restriction will be recorded in Pacific County to protect the site from disturbances in perpetuity. After the Bank sells all of its credits, the site and long-term endowment will be turned over to a non-profit organization so it will be protected and managed in perpetuity.

B.2 Implementation Schedule

As described above, the originally proposed activities have been completed. In early 2011, 2.61 acres of non-native blackberries were cleared and 300 2-gallon containers (3 to 5 feet in height) of Western red cedar were planted.

The following schedule was implemented in early 2012 to complete the site design.

1. Complete garbage removal.
2. Install three-strand smooth-wire fence along the western boundary and along the westernmost 500 feet of the southern boundary.
3. Post signs that prohibit trespassing and hunting on every 100 feet of the fence.

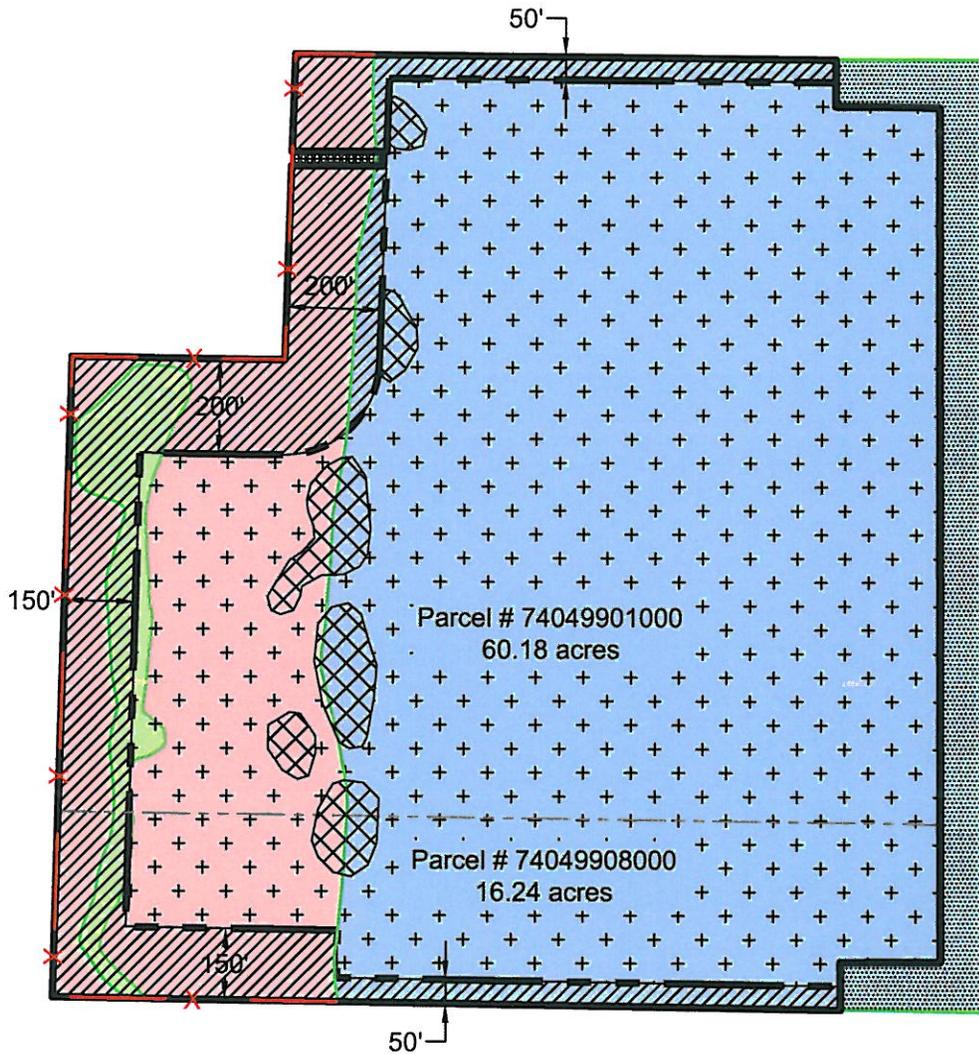
Pursuant to 33 CFR 332.8(o)(3), the ecological lift generated by these enhancement activities reflects the incremental improvement generated by the Sponsor as compared with “pre-compensatory mitigation site conditions,” even though some of these enhancement activities may have pre-dated execution of this Instrument.

B.3 Maintenance

General maintenance will be performed throughout the year to address conditions that may limit the success of the Bank and meet the Performance Standards and Objectives described in Appendix C. Anticipated maintenance activities fall into two main categories and include, but

are not limited to, vegetative maintenance and general maintenance. Vegetative maintenance includes such activities as watering, replanting failed plants to meet performance standards, repairing any areas subject to erosion, controlling invasive plants, mowing, and deterring herbivores such as voles, beaver, and deer. Mowing weeds at the base of trees and shrubs to discourage voles and root competition may occur for up to two years following planting. General maintenance activities include: repairing the fence, re-installing signs, and removing garbage. All maintenance activities will be documented in monitoring reports.

Weed control will occur as needed, throughout the growing season, and will target reed canarygrass (*Phalaris arundinacea*), Himalayan blackberry (*Rubus armeniacus*), and any non-native invasive species that attempt to colonize the site. If found, Japanese knotweed (*Polygonum cuspidatum*), English ivy (*Hedera helix*), and purple loosestrife (*Lythrum salicaria*) will be immediately eradicated onsite. Invasive-plant control will follow methods recommended by the Pacific County Weed Management Department and will be controlled by mowing, uprooting, or selective application of herbicides approved by the Washington State Department of Agriculture. Weed control methods will be performed according to the most effective control for that species and according to Washington Department of Agriculture regulations, which include hand pulling, spot spraying, inoculation, or weed wiping with the appropriate herbicides.



LEGEND:

- Mitigation Site Boundary (76.25 acres)
- Parcel Line
- Bank Buffer (13.35 acres)
- Category I Wetlands (61.72 acres)
- Category II Wetlands (2.59 acres)
- Forested Upland (17.52 acres)
- Wetland/Upland Enhancement Areas (2.61 acres)
- Storm Drain Easement (0.13 acres)
- Previously Authorized Mitigation Area (5.58 acres)
- Three-Strand Smooth-Wire Fence
- Preservation Only (60.29 acres)
- Category I Wetland Preservation (51.45 acres)
- Category II Wetland Preservation (0.50 acres)
- Forested Upland (8.34 acres)

Table 1 – Proposed Bank Activities/Areas

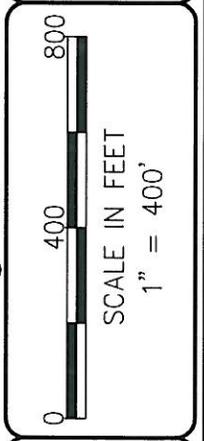
Bank Activity/Area	Area (acres)
Wetland and Upland Preservation	60.29
Wetland and Upland Enhancement	2.61
Buffer	13.35
Previously Authorized Mitigation Area	5.58
Storm Drain Easement	0.13
Total	81.96

Figure B-1
BANK SITE DESIGN
 Proposal for Long Beach Wetland Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, T11N, R11W, W.M.

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
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ECOLOGICAL LAND SERVICES, INC.

 1157 3rd Ave., Suite 220
 Longview, WA 98632
 Phone: (360) 578-1371 Fax: (360) 414-9305



APPENDIX C BANK OBJECTIVES AND PERFORMANCE STANDARDS

C.1 Requirements for Bank Objectives and Performance Standards

A. Implementation of the Long Beach Mitigation Bank is anticipated to result in substantial gains in aquatic ecosystem functions as compared to pre-compensatory mitigation project site conditions, or those that would likely accrue on the site if the Bank were not constructed, through preserving and enhancing aquatic ecosystem functions. The Sponsor must be able to demonstrate tangible aquatic ecosystem gains before Bank credits can be awarded for sale, use, or other transfer, because these functional gains will be used to offset comparable losses to other components of the aquatic environment in the Bank service area. The Bank's success will be measured by the enumerated objectives, each of which is subdivided into specific performance standards. The prescribed performance standards each provide a gauge for measuring the success of the ecological restoration and enhancement efforts at the Bank.

B. Unless otherwise noted, all documentation required for demonstrating attainment of performance standards will be submitted to the IRT for review and approval as a condition of credit award. Documentation can typically be included in required monitoring reports. IRT award of credits will be reflected in a letter issued using a joint letterhead and signed by the Corps and Ecology.

C. Recreational, educational, and scientific activities that do not conflict with the use limitations or other provisions of the conservation easement, do not interfere with the delineated purposes and goals of the Bank, and do not adversely affect the ecological viability and functionality of the Bank may take place on the Bank site. Specifically, the site may be used by the owners and guests for walking, bird watching and other passive recreation.

D. All performance standards apply to the entire Bank site including the buffer area.

C.2 Bank Objectives and Performance Standards

Objective 1: Protect Aquatic Ecosystem Functions

Permanently protect aquatic ecosystem functions at the Bank by instituting the Instrument and implementing a conservation easement with permanent funding for site stewardship. Each of the performance standards associated with this objective must be met before any Bank credits may be awarded, and before any construction or other implementation activities may be initiated pursuant to this Instrument. Any construction or implementation activities conducted onsite prior to the inception of the establishment period must cease as of the effective date of this Instrument pursuant to Article VI.B.1, until performance standards 1.a. through 1.e. have been accomplished. The initial award of credits in recognition of accomplishment of these performance standards will serve as the IRT's notification that implementation activities are authorized to commence.

Performance Standard	Documentation
1a. Complete the development of an appropriate Mitigation Banking Instrument and Appendices.	Mitigation Banking Instrument has been signed by the Sponsor and the applicable regulatory agencies. An original signed Instrument must be provided to each of the signatories.
1b. Protect ecosystem functions by placing an IRT-approved conservation easement on the property.	Provide the IRT with copies of the signed, IRT-approved conservation easement and evidence that it has been recorded with Pacific County and placed on the property title.
1c. Provide financial assurance by establishing an IRT-accepted financial assurance mechanism pursuant to the requirements established in Article III.C.1. of the Instrument.	Demonstrate to the IRT that a compliant and acceptable financial assurance mechanism has been established to provide financial assurance for the establishment period.
1d. Establish a Long-Term Management and Maintenance Endowment Fund escrow account and develop an escrow agreement, all pursuant to the requirements established in Article III.C.2. of the Instrument.	Demonstrate to the IRT that a Long-Term Management and Maintenance Endowment Fund has been initiated through establishment of a compliant and acceptable escrow account. Enter into an escrow agreement with the Corps and Ecology.
1e. Obtain all appropriate environmental documentation, permits, and other authorizations needed to establish and maintain the Bank.	Provide IRT with copies of all environmental documentation, permits, and other authorizations.

Objective 2: Remove Garbage

Garbage will be removed along the western boundary of the property.

Performance Standard	Documentation
2a. Appliances, vehicles, and other garbage ¹ will be removed and will be recycled or disposed at an appropriate facility.	As-built report with photographs showing before and after conditions of garbage removal and areas of garbage removal indicated on a site map approved by the IRT.
2b. In Years 1, 3, 5, and 7, remove any garbage the size of an 8-ounce soup can or larger on the site following approval of As-built.	Monitoring reports documenting the absence of garbage at the time of monitoring event in Years 1, 3, 5, and 7 approved by the IRT. Documentation includes photographs and an explanation of where and what type of garbage was removed.

¹ Garbage includes appliances, vehicles, and other forms of litter and trash that do not naturally occur on-site.

Objective 3: Vegetation

Enhance approximately 2.61 acres of wetland and upland shown on **Figure B-1, Bank Site Design**, and control invasive vegetation on the Bank site.

Note: “Cover” is used in this MBI to mean the actual proportion of the ground surface of the sample plot that is covered by a vertical projection of foliage (by single species or defined group of species) as viewed from above (or below for taller shrubs and trees), or by bare substrate.

Performance Standard	Documentation
3a. Plant western red cedar in approximately 2.61 acres shown on Figure B-1.	As-built planting plan showing planted areas is approved by the IRT.
3b. Planted tree survival will be 100% in Year 1, 95% in Year 3, 90% in Year 5, and 90% in Year 7 following approval of As-built. Survival counts can include natural recruits.	Monitoring reports documenting survival of planted trees approved by the IRT. Document survival in Years 1, 3, 5, and 7.
3c. Cover of invasive non-natives, including but not limited to, reed canarygrass and blackberries do not collectively exceed 10% cover at Years 1, 3, 5 and 7 in the western portion of the site (defined as that area west of the Category I wetland) and in Years 3 and 7 in the eastern portion of the site (defined as that area of the Category I wetland extending to the east property line) following approval of As-built. Additional species may be added by the IRT to this list based on site conditions, following consultation with the Sponsor.	Monitoring reports documenting percent cover of non-native invasive blackberries and other invasive species approved by the IRT. Document the percent cover of invasives in the western portion of the site in Years 1, 3, 5, and 7 and the eastern portion of the site in Years 3 and 7.
3d. Over the entire site, zero tolerance of Japanese knotweed (and related hybrids), Purple loosestrife, and English ivy colonization is maintained. Map any specimens and eradicate during growing season of each year. Additional species may be added by the IRT to this list based on site conditions following, consultation with the Sponsor.	Monitoring reports documenting identification and eradication approved by the IRT. Inventory and eradicate annually and include in monitoring reports at Years 1, 3, 5, and 7.

Objective 4: Install Fence and Signs

Discourage garbage dumping, trespassing, and hunting on the Bank site by installing a 3-strand smooth-wire fence along the western property boundary and the westernmost 100 feet of the southern property boundary and posting no-trespassing and no-hunting signs.

Performance Standard	Documentation
4a. Construct a three-strand smooth-wire fence 5-feet tall.	As-built drawings and photographs showing completed fence are approved by the IRT.
4b. Install plastic signs every 100 feet on the fence that prohibit trespassing and hunting.	As-built drawings and photographs showing completed fence and signs are approved by the IRT.

APPENDIX D CREDIT GENERATION AND AWARD SCHEDULE

D.1 Generation of Credits:

A. Credits will be established and awarded to the Bank upon the Sponsor's demonstration that the Performance Standards reflected in Appendix C, Section C.2 have been met.

B. A credit is defined as a unit of measure representing the increase in the ecological value of the Bank site. A credit for this Bank represents the increase in functions and values of the wetland systems on the project site. This increase in function results from the preservation and enhancement of wetlands on the Bank site. Wetland function is preserved by removal of the risk of future impacts, in this case including, agricultural conversion to cranberry beds or other farm crops, timber harvest, or site development for single family residential development. The Bank site contains high conservation values, including Category I and II wetlands, a bog, mature forested uplands and a bald eagle nest site.

The site is positioned centrally in the Loomis Lake drainage, one of the largest complex of lakes and wetlands on the Long Beach Peninsula. Loomis Lake, downstream and north of the Bank, is an important recreational boating and fishing lake for the public, accessible through Loomis Lake State Park. Other properties north of the site have already been placed in conservation status, thereby the addition of this preserved site will augment the extent and coverage of protected properties within this important drainage system. There also remains few properties of this size and location that offer high conservation values on the Long Beach Peninsula. While typical wetland preservation ratios range from 10:1 to 20:1, the credit ratio of 6:1 is appropriate here due to the size of the site, the complexity of habitat and high conservation values, the certainty of its protection, and the risk to the site including its wetland and upland habitat function, if the property is not protected from human-caused perturbation. The anticipated credits reflected in Table D-1 are determined based on the anticipation that the Bank will continue to rate as a high functioning system.

C. The precise number of credits actually generated by the Bank cannot be determined until the project is implemented and the success of preservation and enhancement activities is assessed by the Corps and Ecology, in consultation with the IRT. The final number of credits will be determined by the Corps and Ecology, in consultation with the IRT, and will be based on achievement of the Performance Standards set forth in Appendix C of this instrument.

D. Credits generated by the Bank will be calculated as shown in the table below:

Table D-1: Wetland Credit Generation by Bank Development Activity

Bank Activity	Area of Credit Generation (acres)	Credit Ratio (Activity Area: Universal Credit)	Anticipated Number of Credits
Wetland and Upland Preservation	60.29	6:1	10.05
Wetland and Upland Enhancement	2.61	3:1	0.87
Total	62.90		10.92

D.2 Credit Award Schedule

A. Credits will be awarded to the Bank for sale, use, or other transfer as the performance standards associated with those credits are met, with the following exceptions: (1) no credits may be awarded prior to meeting all of the performance standards associated with Objective 1, and (2) no credits associated with the Year 7 performance standards may be awarded until at least 60% of all possible credits associated with Years 0 through 6 have been awarded.

B. The Corps and Ecology, in consultation with the IRT, will typically approve the award of credits according to the schedule in Table D-2, below. Credits may not be awarded sooner than specified in Table D-2, except where otherwise noted or in extraordinary situations with the written approval of the Corps and Ecology, in consultation with the IRT. If the Bank is not able to meet a particular performance standard by the year indicated in Table D-2, the Sponsor may submit documentation of successful satisfaction of that performance standard during a subsequent year, and the Corps and Ecology, in consultation with the IRT, will give full consideration to the award of appropriate credits for sale, use, or transfer without reduction or other penalty.

C. The Corps and Ecology may, at their discretion following consultation with the IRT, award partial credit for partial accomplishment of a performance standard. In the event a specific performance standard is not met, but the IRT feels that the site is progressing satisfactorily, the Corps and Ecology may, at their discretion following consultation with the IRT, award credits.

D. Once a credit is awarded, the Bank may sell, use, or otherwise transfer that credit at any time, subject to the provisions of this Instrument.

E. If the institution of an adaptive management or remedial action plan as described in Section F.4 of Appendix F causes delay in the achievement of a performance standard, the timeline for achievement of each subsequent milestone for that performance standard will be deferred for a like interval, unless otherwise specifically approved by the Corps and Ecology, following consultation with the IRT. The Corps and Ecology, following consultation with the IRT and with the Sponsor, will determine what remedial actions are necessary to correct the situation, pursuant to Article IV.H. and Section F.4, and direct their performance prior to the award of any additional mitigation credits.

Table D-2 Credit Release Schedule

Potential credits to be released – 10.92							
	Pre-Construction Credits	Year 0* Credits	Year 1 Credits	Year 3 Credits	Year 5 Credits	Year 7 Credits	Total Credits
Objective 1. Administrative Protections							
1a. MBI Signed	1.50						1.50
1b. CE Recorded	1.50						1.50
1c. Financial Assurances Completed	1.50						1.50
1d. Long-Term M & M Fund and Escrow Agreement Created	1.50						1.50
Objective 2. Garbage Removal							
2a. Garbage Removed - As-built		0.30					0.30
2b. Garbage Removal. Years 1,3,5,7			0.25	0.25	0.25	0.25	1.00
Objective 3. Vegetation							
3a. Plantings Installed – As-built		0.80					0.80
3b. Planted trees survival. Years 1,3,5,7			0.25	0.25	0.25	0.36	1.11
3c. & 3d. Invasive species control. Years 1,3,5,7			0.25	0.25	0.25	0.36	1.11
Objective 4. Install Fencing and Signs							
4a. Fence Installed – As-built		0.30					0.30
4b. Signs Installed – As-built		0.30					0.30
Total Credits Available in the Period	6.00	1.70	0.75	0.75	0.75	0.97	10.92

* Year 0 is the calendar year during which construction is completed and the as-built drawings are submitted by the Sponsor and approved by the IRT. Year 1 is the first year of site monitoring, following approval of the as-built drawings.

APPENDIX E PROCEDURES FOR USE OF MITIGATION BANK CREDITS AND DEBIT USE

E.1 Service Area

A. The Service Area for the Bank includes projects with palustrine and lacustrine wetland impacts on the coastal plain of the Long Beach Peninsula that drain to Willapa Bay or the Pacific Ocean or have no outlet. This covers the western portion of the Willapa Water Resources Inventory Area (WRIA 24). The Long Beach peninsula is not assigned to a subbasin of WRIA 24. This service area was selected based on its topography (landform), soil types, as well as groundwater and surface-water flow patterns in relationship to aquatic ecosystems (Hruby 2009). Table E-1 summarizes the extent of the service area (**Figure E-1, Service Area**).

Table E-1 Extent of the Long Beach Mitigation Bank Service Area.

Northern Limits	Northern extent of the Long Beach Peninsula.
Western Limits	Top of the primary dune along the Pacific Ocean.
Southern Limits	McKenzie Head at the mouth of the Columbia River.
Eastern Limits	East edges of the deflation plain along the hills to the east. Eastern shoreline of the Long Beach Peninsula along Willapa Bay, excluding estuarine wetlands.

The Bank may be used to compensate for permitted impacts that are located within the service area if specifically approved by the appropriate agencies requiring mitigation.

B. The Bank may be used to compensate for permitted impacts outside the service area if specifically approved by the appropriate agencies requiring mitigation and the Corps and Ecology, following consultation with the IRT, provided that such mitigation would be practicable and environmentally preferable to other mitigation alternatives. As such, out-of-service-area impacts will only be allowed in special circumstances, which will be evaluated on a case-by-case basis. Examples include projects that span multiple basins, such as transportation and utility corridors and pipelines, and settlement of enforcement actions.

E.2 Credit-Debit Ratios

A. Bank credits may be used, subject to the approval of the regulatory agencies with jurisdiction over the impact, to compensate for authorized permanent or temporary impacts, as well as to resolve enforcement or permit compliance actions such as replacing previously implemented project-specific mitigation that has partially or completely failed.

B. Each credit withdrawal transaction agreement that is associated with a permit must indicate the permit number of the impacting project, the number of credits transacted, and must expressly specify that the Sponsor, and its successors and assigns, assumes responsibility for

accomplishment and maintenance of the permittee’s compensatory mitigation requirements associated with the impacting project, upon completion of the credit transaction.

C. The following table depicts the approximate number of Bank credits typically required by the IRT agencies to compensate for each unit of permanent loss of listed aquatic resource type and functional level. The actual number of Bank credits required to compensate for an adverse impact to aquatic resources in any particular situation depends on many factors (such as whether the impact is permanent or temporary) and will be determined on a case-by-case basis by the regulatory agency(ies) authorizing the impact. The wetland functional categories are based on the *Washington State Wetland Rating System for Western Washington, revised* (Ecology Publication # 04-06-025). Units of loss are measured in acres for wetland and buffer impacts and may be measured in either acres or linear feet for stream impacts. Due to the variety and typically high level of functioning of both streams and Category I wetlands, compensation for impacts to these resources by Bank credits will be determined by the regulatory agencies on a case-by-case basis.

Table E-2: Typical Credit-Debit Ratios

Resource Impact	Bank Credits: Impact Acreage
Wetland, Category I	Case-by-Case
Wetland, Category II	1.2:1
Wetland, Category III	1:1
Wetland, Category IV	0.85:1
Critical Area Buffer	Case-by-Case

E.3 Procedures for Use of Mitigation Bank Credits

A. Use of Mitigation Bank Credits: Public and private proponents of activities regulated under Sections 401 and 404 of the Clean Water Act (33 U.S. Code §§ 1341, 1344), Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code § 403), Washington State Water Pollution Control Act (Chapter 90.48, RCW), Shoreline Management Act (RCW 90.58), Growth Management Act (RCW 36.70A), Hydraulic Code (RCW 75.20), and other Federal, State, and local authorities may be eligible to use the Bank as mitigation for unavoidable impacts. The Bank will be eligible to serve public and private end users by providing advance compensatory mitigation for authorized impacts to regulated areas that require mitigation to settle enforcement claims. The Bank is intended to provide replacement of lost functions and values including: wetlands, endangered species habitat, and upland/buffer habitat.

B. An applicant seeking a permit for a project with impacts to the aquatic environment within the service area must generally obtain the approval of each regulatory agency with jurisdiction over that project in order to use the Bank as a source of compensatory mitigation. To receive approval to use the Bank, the applicant must demonstrate to the satisfaction of the pertinent regulatory agencies that the project complies with all applicable requirements pertaining to alternatives and mitigation sequencing and that purchasing credits from the Bank for compensatory mitigation would be in the best interest of the environment. Specifically, a permit

applicant must generally be able to demonstrate to the satisfaction of the involved regulatory agencies that:

(1) There is no practicable alternative to adversely impacting the water body, critical area, buffer, or other regulated area; and

(2) All appropriate and practicable measures to minimize adverse impacts to the aquatic ecosystem have been considered and included in the project; and

It is solely the determination of the agency(ies) permitting the project with adverse impacts as to whether a proposed use of Bank credits within the service area is appropriate and environmentally preferable to other mitigation alternatives.

C. Upon receiving permission to utilize credits from the Bank the permittee must contact the Sponsor to ensure that credits are available. Upon completion of the transaction, the Sponsor will inform the permitting agencies of each completed transaction, through email or a letter with an attached copy of the accounting ledger.

D. Other types of credit users may include, but are not necessarily limited to, purchases made that will not be associated with a particular project or impact (i.e., “good will” purchases), purchases made by natural resource stewards resulting from expenditures from in-lieu-fees (or similar type funds), and other conservation purposes.

E. The Sponsor may use the Bank site to provide compensatory mitigation to offset impacts to environmental elements other than aquatic resources. Such use shall result in no physical changes to the Bank site unless approved by the Corps and Ecology, in consultation with the IRT. The Sponsor must obtain approval from the Corps and Ecology, following consultation with the IRT, prior to establishing currencies other than the wetland mitigation credits that are established by Appendix D of this Instrument. The agencies that regulate those specific environmental elements are responsible for establishing the value of the currency and release schedules, and determining the appropriateness of using the Bank as compensatory mitigation for impacts to those elements. The Corps and Ecology, in consultation with the IRT, will determine how withdrawal of those currencies will affect the amount of potential wetland mitigation credits remaining. The Sponsor shall record the award and use of all currencies on the Bank ledger and otherwise follow the procedures as outlined in Appendix E.4. Use of the Bank for compensatory mitigation for other environmental elements shall not conflict with the provisions of this Instrument.

E.4 Accounting Procedures

A. The Sponsor shall establish and maintain for inspection and reporting purposes a ledger of all credits that are awarded through the achievement of specified performance standards, as well as credits that are sold, used, or transferred. The Sponsor will record each credit withdrawal transaction that receives a permit with the Pacific County Auditor, and submit a copy of the

recorded transaction to each member of the IRT within 30 days from the stamped registration date.

B. The ledger must follow the current ledger template approved by the Corps and Ecology. The following information, at a minimum, will be recorded in the ledger for each transaction:

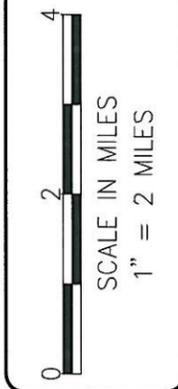
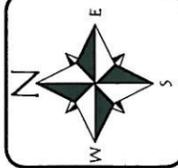
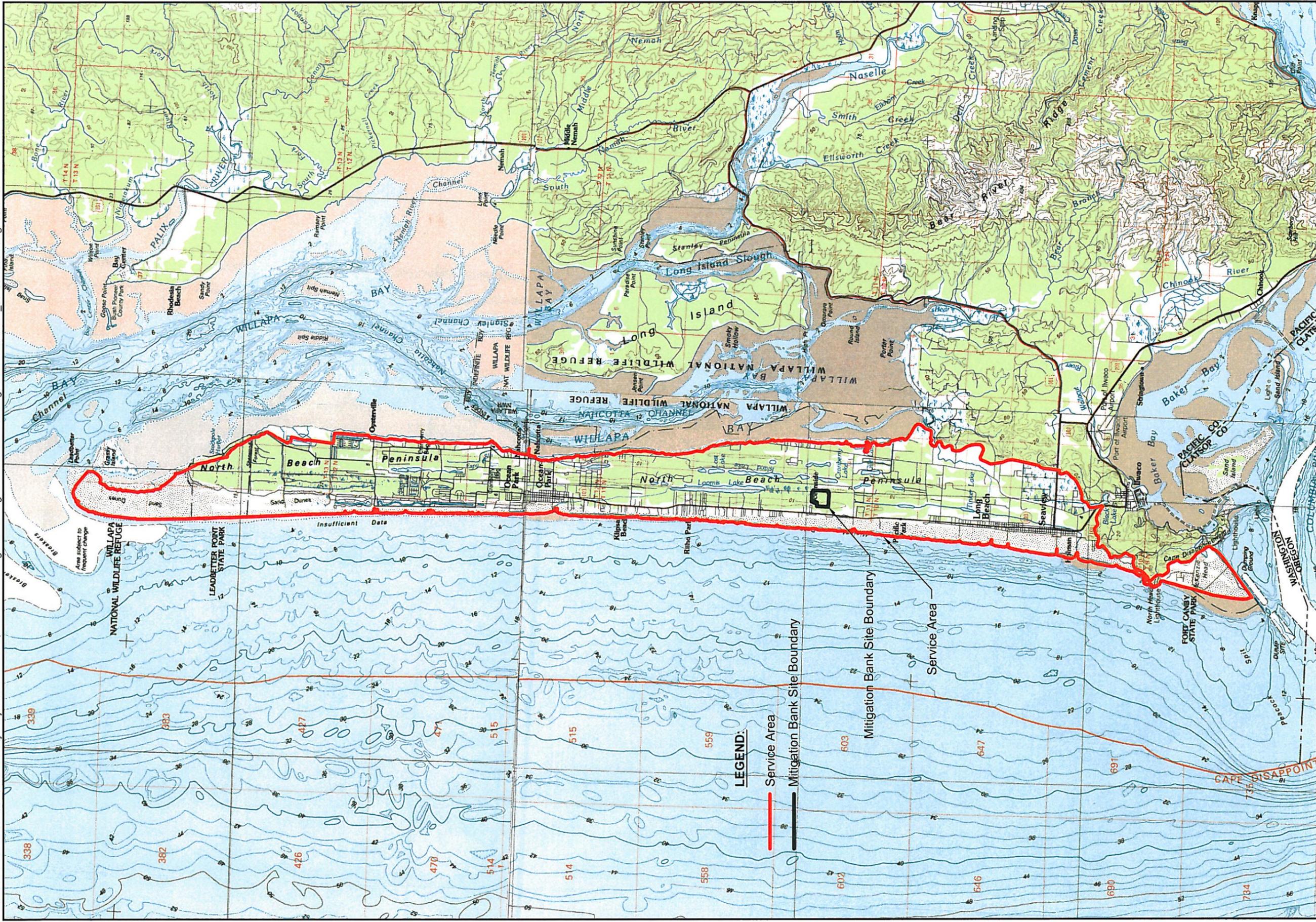
- (1) Date of transaction.
- (2) Number of credits transacted.
- (3) For credits awarded, reference the performance standard(s) to which the awarded credits correspond.
- (4) For credit sales/use/transfers, include the name, address, and telephone number of purchaser/user/transferee; and include all the following information that applies: permit number(s), permit issuance date, and name of the regulatory agency(ies) issuing permits; location of the project for which the credits are being purchased/used/transferred; the size of the impacts; and a brief description of the project impacts requiring compensatory mitigation (e.g., nature and quality of aquatic resources affected).
- (5) For credits withdrawn from the ledger for reasons other than credit sale/use/transfer, include the specific reason for withdrawal.
- (6) Bank credit balance after the award or transaction.

C. The Sponsor will provide an updated Bank ledger to each member of the IRT each time credits are awarded, sold, used, or otherwise transferred. This must be provided within 30 days of any credit transaction. The Sponsor will also submit an annual ledger by February 1 of each year. The annual ledger must show a cumulative tabulation of all credit transactions at the Bank through December 31. This ledger will be submitted in conjunction with the monitoring reports until (1) all credits have been awarded and sold, used, or otherwise transferred; or (2) until the Corps and Ecology, in consultation with the IRT, have accepted the Sponsor's written request to permanently cease all banking activity.

References

Hruby, Thomas, Kim Harper, and Stephen Stanley. 2009. *Selecting Wetland Mitigation Sites Using a Watershed Approach*. Washington State Department of Ecology. Publication #09-06-032. Olympia, Washington.

Hruby, T. 2006. *Wetland Rating System for Western Washington (Revised)*. Washington State Department of Ecology. Publication #04-06-025. Olympia, Washington.



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 Longview, WA 98632
 Phone: (360) 578-1371 Fax: (360) 414-9305

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO:
 1645.01

Figure E-1
 SERVICE AREA
 Long Beach Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, Township 11N, Range 11W, W.M.

APPENDIX F ESTABLISHMENT PERIOD MONITORING, REPORTING, MAINTENANCE, AND REMEDIAL ACTION

During the establishment period, the Sponsor shall monitor and report on the progress of the Bank toward achieving the goals, objectives, and performance standards established by these Appendices and take all actions directed by the Corps and/or Ecology, following consultation with the IRT, to remediate any consideration that prevents a component of the Bank from achieving the goals, objectives, and performance standards of the Bank. Procedures for as-built reports, monitoring reports and remedial actions are described below.

F.1 As-Built Reports

An as-built report will be submitted to the IRT upon the completion of construction/enhancement activities to verify garbage removal, invasive-species removal, planting, and the presence of fencing and signs. At a minimum, the following components should be included in each of the as-built reports:

- Name and contact information for the parties responsible for the Bank preservation and enhancement area including the Bank Sponsor, engineers, biologist, and wetland professional on site during enhancement and fence construction.
- Ecology, Corps, and Local permit numbers
- Dates when activities began and ended such as invasive-plant removal, plant installation, and fencing and sign installation
- Photographs of the site at as-built conditions taken from photo stations (panoramic photos are recommended)
- Description of any problems encountered and solutions implemented (with reasons for changes)
- List of any follow-up actions needed with a schedule
- 11x17 maps of the Bank site showing:
 - Installed planting scheme – quantities, densities, sizes, approximate locations, and plant-material sources
 - Locations of permanent photo stations
 - Date when the maps were produced and, if applicable, when information was collected
 - Sample plot locations

As-built reports will be submitted to each member of the IRT within 90 days of completing on-site enhancement work, and must demonstrate compliance with Appendix B and any modifications to the Bank development plan and design, approved by the Corps and Ecology prior to their implementation, following consultation with the IRT.

Permanent photo points will be established in Year 0 to document site conditions. Photo point locations will be documented in the as-built report. A biologist will document Year 0 post-

implementation conditions in the as-built report for invasive-species removal, plantings, fence and sign installation, and garbage removal. The report will also include photographs and as-built drawings. The as-built reports will also establish baseline conditions for future monitoring.

F.2 Establishment Period Monitoring

A performance monitoring program will be implemented to determine the degree of success of the mitigation effort during the establishment period. Monitoring will include periodic surveys and site evaluations to establish the foundation on which the Bank can demonstrate to the IRT that pertinent performance standards have been achieved and continue to be maintained. This plan describes the performance standards as certified in this Mitigation Banking Instrument, the field methods and procedures that will track attainment of the performance standards, and the procedures for attaining quality assurance and quality control. The monitoring plan is designed to be as simple and quantitative as possible. The monitoring efforts will evaluate and document the success of the performance standards; the performance standards dictate the data collection and analysis procedures defined in this plan. All monitoring will be conducted by qualified personnel.

F.2.1 Overview of Monitoring Requirements

As-built and on-going monitoring requirements specific to each performance standard (see Section C.2 of Appendix C) are summarized below.

Ecological Goal #1: Protect Aquatic Ecosystem Functions

- As-built report that includes photographs showing before and after conditions in areas of garbage removal. These areas will be drawn on a site map to show where garbage was removed (Performance Standard 2a).
- Submit monitoring reports documenting the absence of garbage in Years 1, 3, 5, and 7 (Performance Standard 2b).
- Submit as-built drawings and photographs showing completed fence and signs (Performance Standards 4a and 4b).

Ecological Goal #2: Enhance approximately 2.61 acres of wetland and upland, and control invasive vegetation on the Bank site.

- Submit as-built report documenting planted areas (Performance Standard 3a).
- Submit monitoring reports documenting survival of planted trees in Years 1, 3, 5, and 7 (Performance Standard 3b).
- Submit monitoring reports documenting percent cover of non-native invasive blackberries and any other invasive species in the western portion of the site in Years 1, 3, 5, and 7 and in the eastern portion (defined as the western boundary of the Category I wetland extending to the east property line) of the site in Years 3 and 7 (Performance Standard 3c).
- Annual inventory for aggressive non-native invasive species including Japanese knotweed, Purple loosestrife, and English Ivy, presence and eradication reported in monitoring reports for Years 1, 3, 5, and 7 (Performance standard 3d.)

F.2.2 Monitoring Protocol

Formal monitoring will include both qualitative and quantitative monitoring to address fulfillment of the Bank objectives and performance standards (see Appendix C). Formal monitoring will occur throughout Years 1, 3, 5, and 7 according to the monitoring schedule and sampling protocol described below.

Informal monitoring provides a general overview of site progress, and will be conducted during years for which there is no formal quantitative monitoring reporting requirement to ensure that the site appears to be progressing towards meeting performance standards. Specifically, a qualitative visual inspection of the Bank will be conducted during periodic site visits to identify concerns associated with meeting Bank objectives and performance standards, if any. Informal monitoring will usually include observation notes and site photos. Informal monitoring will be the only monitoring method during the years for which there are no performance standards, although it will also be employed during years of formal monitoring. Informal monitoring will consist of visual observation and documentation of garbage, signs of trespass/vandalism, plant condition, and presence of invasive species. Informal monitoring observations will be documented in the formal monitoring reports in Years 1, 3, 5, and 7.

F.2.3 Vegetation

In early 2011, 2.61 acres of native blackberries were cleared and 300 Western red cedar in 2-gallon containers (3-5 feet in height) were planted in an area totaling 2.61 acres.

To assess the development of the planted species, vegetation monitoring will measure the following:

- Documentation of beneficial recruits.
- Percent survival of planted Western red cedar and overall plant vigor, as observed in leader growth, coloration of foliage, strength of root system at tree base, stoutness and straightness of stem, and overall appearance.
- Quantitatively determine percent survival by providing specific plant counts of Western red cedar.
- Change in the planted community over time (photographs from permanent photo points and panoramic view(s)).

Formal and informal monitoring of the enhancement area will occur over the 7-year monitoring period. Formal monitoring and monitoring reports will be completed in Years 1, 3, 5, and 7. Successful mitigation will be measured by attainment of the performance standards described in Appendix C. Experience in the field may indicate that other performance monitoring methods would provide more useful information; the regulatory agencies must approve in advance any changes in the means of gathering or reporting performance data.

15 permanent photo point locations will be established throughout the site (Figure F-1) and permanently marked with metal posts. Photo point locations will be placed on the as-built and included in the monitoring reports.

Non-native invasive species presence and percent cover will be documented in monitoring reports as recorded for Years 1, 3, 5, and 7. Identical standards apply to the eastern portion of the site (defined as that area of the Category I wetland extending to the east property line) in Years 3 and 7. Invasive species will be monitored utilizing transects ranging in length from 700 feet to 850 feet as depicted on **Figure F-1, Monitoring Plots and Photo Points**. These transect locations were selected to obtain a broad spectrum of the various plant communities on the site. Percent cover of invasive species will be estimated visually within 5 feet on each side of the transect (10 feet total) along the entire length of the transect. All areas of invasive species (other than zero-tolerance species) measuring at least 25 square feet in size (approximately 5-feet by 5-feet) will be mapped and documented. Noxious weed control measures used to maintain percent cover standards or baseline conditions for invasive non-natives may include mechanical vegetation control and herbicide treatments. There shall be zero tolerance for Japanese knotweed (and hybrids), purple loosestrife, and English ivy onsite. Presence and eradication of these species must be noted in monitoring reports for Years 1, 3, 5, and 7. Annual surveys for these species shall occur. Eradication of these zero tolerance species will consist of stem-injection of herbicide for Japanese knotweed, and mechanical removal for both purple loosestrife and English ivy.

F.2.4 Garbage Removal

Monitoring for the presence of garbage will include walking the length of the three-strand smooth-wire fence. All garbage the size of an 8-ounce soup can or larger will be removed. If garbage is found, it will be removed as it is discovered; however, if equipment or other personnel are required, garbage will be removed during maintenance activities.

F.2.5 Fencing and Signs

Monitoring will include walking the length of the 3-strand smooth-wire fence to check its condition and to make necessary repairs to the fence. No hunting/trespassing signs are required to be posted along the fence at 100 foot intervals, and if found missing during the course of monitoring, the signs will be replaced. Findings and repairs or replacements will be documented in monitoring reports.

F.3 Reports

The Sponsor will prepare and submit to each member of the IRT monitoring reports in Years 1, 3, 5 and 7, that will inform the IRT of the status of Bank establishment and operation. These reports will document Bank conditions and provide the supporting information required to document the attainment of goals, objectives, and performance standards as a basis for a decision whether to award credits. Monitoring reports for years 1, 3, 5, and 7 will be submitted by February 1 of the following year, with a copy for each member of the IRT. Each monitoring report will contain the following information:

A. An overview of the current ecological condition of the Bank, including a survey of the vegetative communities, effectiveness of the enhancement activities accomplished to date, and

progress of the Bank in achieving the specific performance standards of the Bank. To provide data for evaluating progress towards achievement of performance standards, photo points will be established at selected locations within the Bank to evaluate relevant performance standards. Experience in the field may indicate that other performance monitoring methods would provide more useful information; the Corps and Ecology, in consultation with the IRT must approve in advance any changes in the means of gathering or reporting performance data. All monitoring will be conducted by qualified personnel. In Year 7, a current aerial photo of the Bank site will be included in the monitoring report.

B. A detailed discussion about the likely cause and impact of any setback or failure that occurred and recommendations for future actions and strategies that might resolve those problems.

C. Pertinent additional information on such aspects of the Bank as hydrology, soils, vegetation, fish and wildlife use of the area, recreational and scientific use of the Bank, and natural events such as disease, wildfire, and flooding that occurred.

D. Explanations of the need for any contingency or remedial measures, and detailed proposals for their implementation.

E. Photographs of the Bank taken from permanent locations that are accurately identified on the as-built drawings. The photographs are intended to document the progress of each component of the Bank, as well as the Bank in general, toward achieving the objectives and performance standards of the Bank. Such photo-monitoring will include general vantage points around the margin of the Bank, vantage points within the Bank, and at specific monitoring locations such as sampling points.

Table F-1 Summary of Annual Monitoring Tasks

Bank Year	Report Name	Performance Standard	Monitoring Task	Monitoring Area	Expected Site Visits
Year 0	As-built Report	2a	Document garbage occurrence and removal	Western and southern property boundary	By December 31 of year of completion
		3a	Submit planting as-built information	6 Planted Areas	By December 31 of year of completion
		4a	Document fence construction	Western and southern property boundary	By December 31 of year of completion
		4b	Document sign installation on fence every 100 feet	Western and southern property boundary	By December 31 of year of completion
Years 1, 3	Monitoring Report	2b	Document absence of garbage	Western and southern property boundary	One time, June-September
		3b	Collect tree survival data in planted areas	6 Planted Areas	One time, June-September
		3c	Document cover of invasive species	Western and Eastern portions of site	One time, June-September
		3d	Mapping and eradication of aggressive species (Japanese knotweed, etc)	Entire site	One time, June-September
Years 5, 7,	Monitoring Report	2b	Document absence of garbage	Western and southern property boundary	One time, June-September
		3b	Collect survival data in planted areas	6 Planted Areas	One time, June-September
		3c	Document cover of invasive species	Western and Eastern portions of site	One time, June-September
		3d	Mapping and eradication of aggressive species (Japanese knotweed, etc.)	Entire site	One time, June-September

F.4 Remedial Action during the Establishment Period of the Bank

In the event that one or more components of the Bank do not achieve performance standards or comply with any other requirement of this Instrument, the following sequence of remedial actions will be taken.

A. If the monitoring reports, or inspection by representatives of the IRT agencies, indicate persistent failure to achieve and maintain the prescribed performance standards, the Sponsor will propose adaptive management actions to correct the shortcomings. A thorough analysis of vegetation and wetland monitoring data may result in the identification of other factors, not identified in the performance standards or monitoring data, causing the project to fall short of its objectives. The Corps and/or Ecology, following consultation with the IRT and the Sponsor, may also direct adaptive management actions if the Corps and/or Ecology identify a need for corrective action and no adaptive management plan acceptable to the IRT has been submitted within a reasonable period of time. The adaptive management plan shall specify the nature of further examination of areas for potential causes of failure and/or corrective action to be conducted, the schedule of completion for those activities, and a monitoring plan for assessing the effectiveness of the corrective action. The objective of the adaptive management plan shall be to attain the originally prescribed Bank objectives, either through achieving the original performance standards or through new standards subsequently developed based on evaluation of

the Bank site as it matures and is assessed. The Sponsor shall also implement all mitigation that the Corps and/or Ecology, in consultation with the IRT, determine is reasonably necessary to compensate for those authorized impacts to the aquatic environment that have not been successfully redressed by the Bank pursuant to the requirements of this Instrument. If modified or replacement performance standards are proposed, the Sponsor may not initiate activities designed to achieve those replacement standards until those performance standards are approved by the Corps or Ecology, following consultation with the IRT. During the period that a specific component of the Bank is out of compliance, the Corps and/or Ecology, following consultation with the IRT may direct that credits generated by that Bank component may not be sold, used, or otherwise transferred.

B. If remedial actions taken by the Sponsor under the provisions of the preceding paragraph do not bring that performance standard of the Bank into compliance with the requirements of this Instrument, including any approved changes to the Instrument, the Sponsor may request approval to discontinue efforts to achieve one or more performance standards for the Bank. If the Corps and Ecology, following consultation with the IRT, approve of the proposal to discontinue efforts to achieve one or more performance standards, they need not be accomplished but no additional credits may be awarded for those performance standard(s). At the discretion of the Corps and Ecology, following consultation with the IRT, the Sponsor may also be released from future maintenance and monitoring obligations for those performance standard(s), provided that releasing the Sponsor from those obligations does not adversely affect the remainder of the Bank, or affect credits already sold, used, or transferred to date.

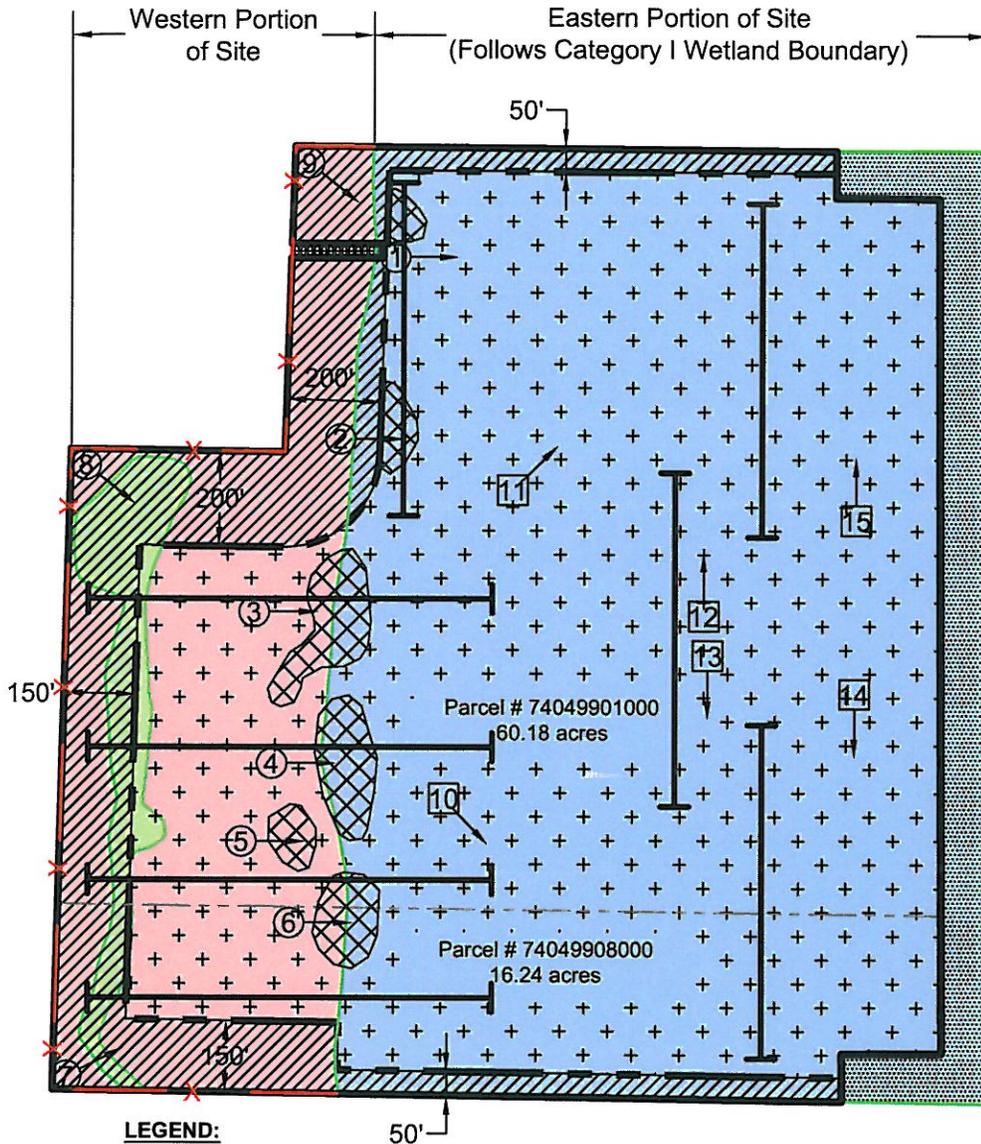
C. If the Corps and Ecology, following consultation with the IRT, determine that the failure of one or more performance standards of the Bank to comply with the requirements of this Instrument adversely affects the ability of the Bank to achieve its goals or objectives, or if the Sponsor does not make a reasonable effort to bring the Bank into compliance with this Instrument, the Corps and Ecology, following consultation with the IRT, may terminate this Instrument and the operation of the Bank pursuant to Article IV.J.

D. If the Corps and/or Ecology, following consultation with the IRT, direct remedial or adaptive management action pursuant to Section F.4.A and compliance with the performance standards is not restored within a further reasonable period of time, and the Sponsor does not obtain approval of any request to discontinue efforts pursuant to Section F.4.B, the Corps and/or Ecology may alternatively ensure the accomplishment of corrective or remedial action on their own initiative, acting through a Third Party Designee, by accessing the financial assurance instrument pursuant to Article III.C.1 and Section H.1 of Appendix H to this Instrument.

F.5 Maintenance during the Establishment Period of the Bank

General maintenance will be performed throughout the year to address conditions that may limit the success of the Bank and attainment of performance standards and objectives. The Sponsor is responsible for all site maintenance activities throughout the establishment period of the Bank. Maintenance activities will include, but are not limited to, vegetative maintenance (including replanting, repair of any areas subject to erosion, weed control around plantings, control of

invasive species, and control and discouragement of voles, beaver and deer foraging on plants), and general maintenance (including fence repair, sign replacement, and garbage removal).



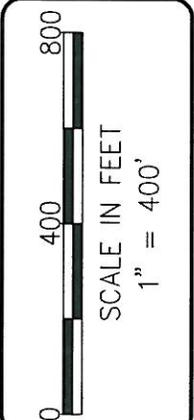
- LEGEND:**
- Mitigation Site Boundary (76.25 acres)
 - Parcel Line
 - Bank Buffer (13.35 acres)
 - Category I Wetlands (61.72 acres)
 - Category II Wetlands (2.59 acres)
 - Forested Upland (17.52 acres)
 - Preservation Only (60.29 acres)
 - Category I Wetland Preservation (51.45 acres)
 - Category II Wetland Preservation (0.50 acres)
 - Forested Upland (8.34 acres)
 - Wetland/Upland Enhancement Areas (2.61 acres)
 - Storm Drain Easement (0.13 acres)
 - Previously Authorized Mitigation Area (5.58 acres)
 - Three-Strand Smooth-Wire Fence
 - Photo Point-Years 1, 3, 5, & 7
 - Photo Point-Years 3 & 7 Only
 - Invasive Species Monitoring Transects

Figure F-1
MONITORING PLOTS AND PHOTO POINTS
 Proposal for Long Beach Wetland Mitigation Bank
 LBMB, Inc.
 Pacific County, Washington
 Section 28, T11N, R11W, W.M.

DATE: 4/17/12
 DWN: BCB
 REQ. BY: LS
 PRJ. MGR: FN
 CHK:
 PROJECT NO: 1645.01

ECOLOGICAL LAND SERVICES, INC.

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APPENDIX G LONG-TERM PROTECTION AND MANAGEMENT

G.1 Conservation Easement

A. The Sponsor will ensure, pursuant to Article III.D. of this Instrument, that an appropriate conservation easement is granted and recorded dedicating in perpetuity the property constituting the Bank, that is to be preserved or enhanced for credit. The conservation easement must be approved by the Corps and Ecology, following consultation with the IRT, and shall be recorded with the Pacific County Auditor. A copy of the recorded easement shall be provided to all members of the IRT. The conservation easement shall reflect that it may not be removed, modified, or transferred without written approval of the Corps and Ecology, in consultation with the IRT. The Corps and Ecology may consider any alteration or rescission of the conservation easement a default of the Sponsor's obligations under this Instrument and may institute appropriate action pursuant to Article IV.J. The Sponsor shall provide no less than 60 days advance written notice to the IRT of any transfer of fee title or any portion of the ownership interest in the Bank real property to another party. Conveyance of any interest in the property shall be subject to the conservation easement. Use prohibitions reflected in the easement will preclude the Bank site from being used for activities that would be incompatible with the establishment and operation of the Bank. All restrictions shall be granted in perpetuity without encumbrances or other reservations, except those encumbrances or reservations (e.g., retention of recreation and privileges by the landowners and their guests) approved by the Corps and Ecology, in consultation with the IRT, and not adversely affecting the ecological viability of the Bank. Any portion of the Bank site not encumbered by the conservation easement will not be credited for use in the Bank.

B. The conservation easement shall provide that all structures, facilities, and improvements within the Bank, including roads, trails and fences, that are merely incidental to the functionality of the Bank site but are necessary to the Bank management and maintenance activities, shall be maintained by the Sponsor or its assignee for as long as it is necessary to serve the needs of long-term management and maintenance. All structures, facilities and improvements that directly and substantially contribute to the functionality of the Bank site will be included within the responsibilities delineated in the Long-Term Management and Maintenance Plan.

G.2 Long-Term Management and Maintenance Plan

A. The Sponsor is responsible for ensuring that a Long-Term Management and Maintenance Plan is developed and implemented to protect and maintain in perpetuity the aquatic functions and values of the Bank site. This plan must be approved by the Corps and Ecology, following consultation with the IRT, prior to the termination of the establishment period of the Bank. Once the establishment period of the Bank has terminated pursuant to Article IV.K of this Instrument, the Sponsor will assume

responsibility for implementing that Long-Term Management and Maintenance Plan, as provided in Article IV.M of this Instrument, unless the Sponsor assigns this responsibility pursuant to the provisions of Article IV.M and Section G.2.D. of this Appendix.

B. To gain IRT approval, the Long-Term Management and Maintenance Plan will consist of enumerated objectives. The Bank will document that it is achieving each guideline or objective by submitting status reports to the IRT on a schedule approved by the IRT. A primary goal of the Bank is to preserve and enhance a self-sustaining natural aquatic system that achieves the intended level of aquatic ecosystem functionality with minimal human intervention, including long-term site maintenance. As such, natural changes to the vegetative community, other than changes caused by noxious weeds, that occur after all Bank performance standards have been met are not expected to require remediation.

C. The Long-Term Management and Maintenance Plan will include those elements necessary to provide long-term protection for the aquatic ecosystem and habitat resources of the Bank site. The specific elements of the Long-Term Management and Maintenance Plan must be tailored to meet the specific protection needs of the Bank site. At minimum, the IRT will likely find the following core elements to be necessary for inclusion in the Long-Term Management and Maintenance Plan. The particular characteristics of the Bank site at the end of the establishment period may necessitate including other elements not specified below, that are needed to protect the ecosystem resources present at the Bank.

(1) Periodically patrol the Bank site for signs of trespass and vandalism. Maintenance will include reasonable actions to deter trespass and repair vandalized Bank features.

(2) Monitor the condition of structural elements of the Bank site such as signage and fencing. The Long-Term Management and Maintenance Plan will include provisions to maintain and repair these improvements as necessary to achieve the objectives and functional performance goals of the Bank and comply with the provisions of the conservation easement. Improvements that are no longer needed to facilitate or protect the ecological function of the Bank site may be removed or abandoned if consistent with the terms and conditions of the conservation easement.

(3) Inspect the Bank site annually to locate and eradicate any occurrence of knotweed. The IRT anticipates that this long-term control will involve identifying and eradicating a relatively small number of recurrences each year. In the event the Corps and Ecology, in consultation with the IRT, determine that the watershed within which the Bank is located becomes infested with these species in the future, so that their effective control on the Bank site is either no longer practicable or unreasonably expensive, the IRT will consider appropriate changes to the Long-Term Management Plan.

(4) Inspect the site annually to locate and control noxious weeds other than knotweed. Noxious weed control measures may include mechanical vegetation control, herbicide treatments, and temporary plantings.

D. If the Sponsor elects to request the approval of the IRT to assign long-term management and maintenance to a Long-Term Steward pursuant to Article IV.M.2, the long-term management and maintenance assignment agreement will reflect that the assignee has assumed the obligation, owed to the IRT, of accomplishing the Long-Term Management and Maintenance Plan. The Corps and Ecology will also execute this assignment agreement. In exchange for the assignee's promise to achieve the Long-Term Management and Maintenance Plan, contemporaneously with the assignment of long-term management and maintenance responsibilities the Corps and Ecology will direct disbursement of the "full funding" amount specified in Article III.C.2.b. of this Instrument from the LTMM Endowment Fund escrow account, pursuant to Article III.C.2.d. of this Instrument. In the event the responsibility for executing the Long-Term Management and Maintenance Plan is not assigned to a third-party assignee, at the termination of the establishment period of the Bank the "full funding" amount specified in Article III.C.2.b. of this Instrument will be disbursed from the LTMM Endowment Fund escrow account to the Sponsor.

APPENDIX H FINANCIAL ASSURANCES

The Sponsor will institute and maintain financial assurances in accordance with the subsections immediately below. The Sponsor will provide a Letter of Credit to provide financial assurance underlying the establishment and initial functionality of the Bank.

H.1 Letter of Credit

A. The Irrevocable Letter of Credit prescribed in Article III.C.1 of this Instrument, underlying the establishment and functionality of the Bank, will adhere to the following form and contents.

B. Each Letter of Credit will be irrevocable and without condition other than those specifically authorized in this Instrument. Each Letter of Credit may not be withdrawn or canceled by the issuing financial institution prior to the designated expiration date, which may be no earlier than 9 years from the date of issuance. In lieu of a Letter of Credit with an effective period of 9 years, the Sponsor may elect to submit for the approval of the Corps and Ecology a Letter of Credit with an initial expiration date that extends a minimum period of one year from the date of issuance. Such a Letter of Credit shall provide that, unless the issuer provides the beneficiaries written notice of non-renewal at least 120 days in advance of the current expiration date, the Letter of Credit is automatically extended without amendment for one year from the expiration date, or any future expiration date, until a period of 12 years commencing with the date of first issuance is completed.

C. Each Letter of Credit will be issued to, and will designate, the Corps and Ecology as distinct and independent Beneficiaries. Each Letter of Credit will provide that the issuing financial institution shall honor the credit engagement and pay to the Third Party Designee the directed sum without inquiring whether the directing beneficiary agency or the receiving Third Party Designee has a right to make such a demand. Each Letter of Credit will provide that the issuing financial institution shall honor the credit engagement and pay to the Third Party Designee the directed sum without inquiring whether the directing beneficiary agency or the receiving Third Party Designee has a right to make such a demand. The Letter of Credit must further specify that the financial institution expressly waives the right to legally challenge, or require any justification for, such a demand for payment. The Letter of Credit must further specify that the Financial Institution expressly waives the right to legally challenge, or require any justification for, such a demand in payment. If the IRT has informed the Sponsor that one has been so designated, each Letter of Credit shall identify and designate the Third Party Designee. Upon presentation of a sight draft by either the Corps or Ecology, in writing on agency letterhead, accompanied by no other documentation than a reproduction of the Letter of Credit, the issuing financial institution shall disburse from the credit funds account to the Third Party Designee the amount specified by the Corps or Ecology, up to a maximum cumulative amount as reflected in the Letter of Credit. The Corps or Ecology shall be authorized to direct or make partial drawings, and multiple successive drawings, upon the credit account. The Corps and Ecology shall have the exclusive authority to direct disbursement of funds from the credit

funds account, and the direction of only one of these two agencies is required in order to accomplish a disbursement.

D. Each Letter of Credit shall acknowledge that, from time to time, the Beneficiary agencies may authorize a reduction in the required level of credit during the effective period of the Letter of Credit. Any such reduction must be authorized by both the Corps and Ecology, as Beneficiary agencies. Upon receipt of both authorizations, in writing on agency letterhead, the issuing financial institution will be authorized to reduce the level of maximum extended credit, and it may, as arranged between the Sponsor and the issuing financial institution, reissue or amend the applicable Letter of Credit accordingly to reflect that change.

E. Each Letter of Credit shall acknowledge that the Beneficiary agencies may authorize cancellation of the Letter of Credit prior to the scheduled expiration date reflected therein. Any such cancellation must be authorized by both the Corps and Ecology, as Beneficiary agencies. Upon receipt of both authorizations, in writing on agency letterhead, the issuing financial institution will be authorized to withdraw or rescind, as arranged between the Sponsor and the issuing financial institution, the applicable Letter of Credit.

F. If so directed by the Corps and Ecology, the Sponsor agrees to substitute any identification of the Third Party Designee with a replacement entity for each applicable Letter of Credit. The Sponsor agrees that it shall execute either an amendment or replacement of each applicable Letter of Credit in order to effect such a substitution. If substitution of the Third Party Designee is directed, all other terms and conditions of the applicable Letter of Credit shall remain unchanged, particularly including the credit amount and the expiration date.

G. The Sponsor is solely responsible for any costs, fees, or premiums associated with the issuance, modification, continuation in force, or termination of each Letter of Credit. Any such costs may not be deducted from the principal of the Letter of Credit.

H.2 Long-Term Management and Maintenance Endowment Fund

A. In order to implement the LTMM Endowment Fund, prescribed in Article III.C.2 of this Instrument and underlying management and maintenance actions to be taken following completion of the establishment period of the Bank, the Sponsor will establish an escrow account in an accredited and Federally-insured financial institution, as follows.

B. The LTMM Endowment Fund escrow account will be incrementally funded until it is fully funded, as prescribed in Articles III.C.2.b and III.C.2.c of this Instrument. Once the LTMM Endowment Fund is fully funded, the Sponsor will be released from any further obligation to deposit a designated sum corresponding to each sale, use, or transfer of credits. The Sponsor will be permitted to accelerate contributions to the LTMM Endowment Fund, and by doing so, the Sponsor may defer subsequent contributions until the balance in the LTMM Endowment Fund no longer matches or exceeds the balance required by the computation in Article III.C.2.b. The Sponsor will provide to the IRT an annual account statement displaying a cumulative tabulation of all deposits into the LTMM Endowment Fund escrow account, with each deposit

referencing the associated sale/use/transfer transaction, as well as the principal balance and total account balance, as of December 31 of the previous calendar year, by February 1 of each year. This statement will be submitted until (1) the LTMM Endowment Fund is fully funded or (2) until the Corps and Ecology, in consultation with the IRT, have accepted the Sponsor's written certification that it has terminated all banking activity.

C. The LTMM Endowment Fund escrow account may bear interest or other earnings. Any earnings generated by the escrow funds shall remain deposited with other escrow account funds. Earnings in excess of the full funding amount specified in Article III.C.2.c of this Instrument will be returned to the Sponsor at the time that the full funding amount is disbursed to the Long-Term Steward. The LTMM Endowment Fund account contents may be invested only in the following: an interest-bearing savings or passbook account, savings certificate, or certificate of deposit, held in each case by an institution that is insured by the Federal Deposit Insurance Corporation; alternatively, the LTMM Endowment Fund principal and earnings may be invested in direct obligations of the Government of the United States of America, in obligations of agencies or insurers that are guaranteed by the Government of the United States of America, or in a money market mutual fund consisting solely of such obligations.

D. The Sponsor will be responsible for all escrow agency and associated account fees, including account termination and final reconciliation costs, which may not be paid out of escrow account funds, or out of the interest or earnings generated thereon.

E. The terms of the escrow instructions will permit regular recurring deposits to the escrow principal as sales, use, or transfers of credits are made and designated sums corresponding to those sales, use, or transfers are deposited to the escrow account.