MITIGATION BANK INSTRUMENT
FOR
LONG TOM MITIGATION BANK

This Mitigation Bank Instrument (MBI), which describes the establishment, use, operation, and maintenance of the Long Tom Mitigation Bank (Bank) is an agreement made and entered into by and among EcoBank LLC (Sponsor(s)), the U.S. Army Corps of Engineers, Portland District (Corps), the Oregon Department of State Lands (DSL), the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the Oregon Department of Environmental Quality (DEQ), the Oregon Department of Fish and Wildlife (ODFW) and the East Lane Soil and Water Conservation District (ELSWCD).

I. PREAMBLE:

A. Purpose: Whereas, the purpose of this MBI is to establish guidelines, responsibilities, and standards for the establishment, use, operation, and maintenance of the Bank. The Bank will be used for compensatory mitigation for unavoidable impacts to waters of the United States or waters of the State including wetlands that result from activities authorized under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act and Oregon's Removal-Fill Law [Oregon Revised Statutes (ORS) 196.800-196.990 and Oregon Administrative Rule (OAR) 141-085] and for impacts from other activities as the co-chairs may authorize provided that such activities have met all applicable requirements and are authorized by the appropriate authority.

B. Goals and Objectives: Whereas, the primary goals of the Bank are to restore 2.31 acres of forested wetland habitat (PFOE/flats), restore 1.10 acres of wet prairie wetland habitat (PEME/flats), enhance 77.77 acres of wet prairie wetland habitat (PEME/flats), create 23.39 acres of wet prairie wetland habitat (PEME/flats), restore 14.12 acres of oak/pine woodlands with the objective of filtering sediments, buffering wildlife from human annoyance, providing connectivity to other woodland habitat, and providing wetland functional lift through habitat interspersion, and restore 6.95 acres of grassland/oak savanna habitat to also provide wetland functional lift through habitat interspersion, and preservation of 9.59 acres of existing oak woodland, riparian woodland, creeks and slough to provide habitat connectivity and wetland functional lift through habitat interspersion. All habitat types proposed for the Bank are key habitats for Oregon Conservation Strategy Conservation Opportunity Areas WV-22 Finley Muddy Creek area and WV-23 West Eugene.

C. Location and Ownership of Parcel: (1) Whereas, the Sponsor has provided proof of ownership of the mitigation bank site at the legal description described in Exhibit A of this MBI, and as depicted on a plan prepared by EcoBank LLC, dated March 10, 2008 (Exhibit B). Said parcels are hereinafter referred to as the "Property." (2) The Sponsor has not proposed additional phases; therefore, any additional phases of this bank require a modification to the MBI. (3) The Property is located in Lane County,

Township 15S, Range 05W, Section 26, Tax Lot 102 (Phase 1), Township 16S, Range 05W, Section 14, Tax Lot 200, and Township 16S, Range 05W, Section 11, Tax
Lot 901 (Phase 2). Phase 1 of the Bank is approximately 135.52 acres of the 135.52-acre tax lot. The address of Phase 1 of the Bank is 27575-27599 Cox Butte Road, in the City of Junction City, Oregon. Phase 2 of the Bank is approximately 95.3 acres in total out of the 148.8 acre total for the two tax lots. The address of Phase 2 tax lot 200 is 92348-92364 Alvadore Road, in the City of Junction City, Oregon. The address of Phase 2 tax lot 901 is 27574-27899 SR 36 (Mapleton-Junction City Hwy), in the City of Junction City, Oregon.

D. Establishment and Use of Credits: Whereas, in accordance with the provisions of this MBI and upon satisfaction of the performance standards contained in the Mitigation Plan (MP) (Exhibit C), mitigation credits determined in accordance with the Instrument (Exhibit C) will be available to be used as mitigation in accordance with all applicable requirements for permits issued under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act and Oregon's Removal-Fill Law [Oregon Revised Statutes (ORS) 196.800-196.990]. The final number of credits will be determined by the MBRT based upon the final approved design and the resulting habitats achieved for each phase of the Bank in accordance with the terms and conditions contained herein.

E. Mitigation Bank Review Team: Whereas, the Mitigation Banking Review Team (MBRT) consists of:

1. U.S. Army Corps of Engineers, Co-Chair; and

2. Oregon Department of State Lands, Co-Chair; and

3. Environmental Protection Agency; and

4. U.S. Fish and Wildlife Service; and

5. Oregon Department of Environmental Quality; and

6. Oregon Department of Fish and Wildlife; and

7. East Lane Soil & Water Conservation District.

H. Disclaimer: Whereas, this MBI does not in any manner affect statutory authorities and responsibilities of the signatory parties.

I. Exhibits: Whereas, the following Exhibits are incorporated by reference to this MBI:

1. "Exhibit A," Legal Property Description/Proof of Ownership and Vicinity Map
2. "Exhibit B," Proposed Site Plan (drawing);
3. "Exhibit C," Mitigation Plan;
4. "Exhibit D," Crediting and Debiting Procedure for the Bank;
5. "Exhibit E," Service Area Map;
6. "Exhibit F," Restrictive Covenant;

7. "Exhibit G" Statement of Sale of Credit for Long Tom Mitigation Bank;
8. "Exhibit H" Credit ledger.

NOW, THEREFORE, the parties hereto agree as to the following:

II. DEFINITIONS*

1. SPONSOR – A person who is proposing, or has established and/or is maintaining a mitigation bank. The sponsor is the entity that assumes all legal responsibilities for carrying out the terms of the MBI, unless specified otherwise explicitly in the MBI.

2. COMPENSATORY MITIGATION – Activities conducted by an authorization holder, permitee or third party to create, restore or enhance wetland functional attributes to compensate for the adverse effects of project development.

3. CREATION – To convert an area that has never been a wetland to a jurisdictional wetland.

4. CREDIT – A unit of measure of the increase in wetland functional attributes achieved at a mitigation bank site. Wetland credits are the unit of exchange for compensatory mitigation. ORS 196.600(2) further defines this term.

5. DEBIT – A unit of measure representing the reduction of credits at the mitigation bank corresponding to the impact at the project site.

6. ENHANCEMENT – Human activity that increases the function of an existing degraded wetland.

7. Instrument- The legally binding and enforceable agreement between the Director of DSL, the District Engineer of the Corps, and a mitigation bank sponsor that formally establishes the wetland mitigation bank and stipulates the terms and conditions of its construction, operation, and long-term management.

8. FINANCIAL ASSURANCES – Proof that the sponsor has the financial resources) provided through means such as surety bonds, trust funds, escrow accounts, proof of stable revenue sources for public agencies) to undertake, operate and maintain the proposed bank over the long term, and the ability to correct project deficiencies or performance failures, pursuant to the terms and conditions of the Instrument.

9. FUNCTIONS – The physical, chemical, and biological ecosystem processes of an aquatic resource without regard to their importance to society.

10. LEDGER – An accounting sheet of credits and debits.

11. MITIGATION – Sequentially avoiding impacts, minimizing impacts, and compensating for remaining impacts to aquatic resources; the same meaning as DSL's OAR 141-85-0010 (129).

12. MITIGATION BANK – Wetland(s) and any associated buffer(s) restored, enhanced, created, or protected, whose credits may be sold or exchanged to compensate for unavoidable future wetland losses due to removal, fill, or alteration activities.

12. MITIGATION BANK INSTRUMENT – The legally binding and enforceable agreement between the Director of DSL, the District Engineer of the Corps, and a mitigation bank sponsor that formally establishes the wetland mitigation bank and stipulates the terms and conditions of its construction, operation, and long-term management.

13. MITIGATION BANK REVIEW TEAM (MBRT) – An advisory committee to the DSL and the Corps on wetland mitigation banks. An interagency group of federal, state, tribal, and/or local regulatory and resource agency representatives which are signatories to an MBI. The Corps and DSL are the co-chair's of the MBRT and the final decision makers.

14. MITIGATION SITE PLAN – A detailed drawing that identifies specifically where aquatic resources and associated upland buffers will be restored, created, enhanced, or preserved on the mitigation bank.

15. PRESERVATION – The protection of ecologically important aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands or other aquatic resources as necessary to ensure protection and/or enhancement of the aquatic ecosystem.

16. RESTORATION – Re-establishment of wetland hydrology to a former wetland sufficient to support wetland characteristics.

17. PERFORMANCE STANDARDS– The minimum standards required to meet the objectives for which the Bank was established.

18. SERVICE AREA – The boundaries set forth in a MBI that include one or more watersheds identified on the United States Geological Survey, Hydrological Unit Map 1794, State of Oregon, for which a mitigation bank provides credits to compensate for adverse effects to waters of the United States. Service areas for mitigation banks are not mutually exclusive.

* Derived from:

Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (FR V. 60 No. 228, November 28, 1995);

Cowardin, L.M. et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U. S. Fish and Wildlife Service, Office of Biological Services. Washington, D.C. FWS/OBS-79/31. 131 pp.

Oregon Administrative Rules 141-085.

III. AUTHORITIES

The establishment, use, operation and maintenance of the Bank is carried out in accordance with the following authorities:

A. Federal:

1. Clean Water Act (33 USC 1251 et seq.);
2. Rivers and Harbors Act (33 USC 403);
3. Fish and Wildlife Coordination Act (16 USC 661 et seq.);
4. Regulatory Programs of the Corps of Engineers, Final Rule (33 CFR Parts 320-330);
5. Guidelines for Specification of Disposal Sites for Dredged and Fill Material (40 CFR Part 230);
6. Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army concerning the Determination of Mitigation Under Clean Water Act, Section 404 (b)(1) Guidelines (February 6, 1990);
7. Federal Guidance for the Establishment, Use, Operation of Mitigation Banks (60 F.R. 58605 et seq. November 28, 1995); and
8. Regulatory Guidance Letter No. 02-02, U.S. Army Corps of Engineers, December 26, 2002

B. State of Oregon:

1. Oregon Administrative Rules (OAR) 141-85-0010 through 141-85-445; and
2. Oregon Revised Statutes (ORS) 196.600-196.990

IV. ESTABLISHMENT OF THE BANK

A. Scope of Work: The Sponsor agrees to perform all necessary work, in accordance with the provisions of this MBI, to establish and maintain aquatic habitats and upland buffers, as described in the Mitigation Plan (Exhibit C), until it is demonstrated to the satisfaction of the Agencies represented on the MBRT (acting through the co-chairs) that the project complies with all provisions contained herein, or until all credits are sold, whichever is later. Work as described above shall include implementing the Mitigation Plan (Exhibit C). Prior to any debiting, the Proposed Site Plan (Exhibit B) for the Bank must be approved by the MBRT (acting through the co-chairs).

B. Permits: The Sponsor will obtain all appropriate permits or other authorizations needed to construct and maintain the Bank, prior to selling any credits. This MBI does not fulfill or substitute for such authorization.

C. Approval: Upon the co-chair agencies signing this MBI, the MBRT approves the Mitigation Plan (Exhibit C).

D. Financial Assurance Requirements of DSL: The Sponsor shall provide DSL with a financial security instrument or combination of instruments as provided in OAR 141-085-0176 sufficient to secure all debits made prior to satisfaction of the performance standards contained in the Mitigation Plan (MP) (Exhibit C). The Sponsor's liability under the financial security instrument shall begin at the time credit(s) are sold and shall continue until such time as the MBRT certifies that the performance

standards contained in the MP are satisfied. In the event DSL increases the financial security instrument amount as provided for in OAR 141-085-0176(5), Sponsor shall have 60 days from written notification by DSL to provide the specified additional financial security in a form deemed appropriate by DSL.

E. Real Estate Provisions: The Sponsor shall record a legal property protection document, such as a restrictive covenant or other protection instrument, on the Bank land and provide a copy to the Corps and DSL prior to the release of any credits. A template restrictive covenant is attached as Exhibit F. A copy of the recorded document shall be provided to the Corps and DSL prior to any release of credits. Prior to release of the last 15% of the approved credits, and with prior approval from MBRT, the Sponsor shall convey a perpetual conservation easement to an MBRT-approved conservation entity/long-term steward (Steward).

F. Corps Authorization: For the initial release of advance-credits by the Corps (not to exceed 30% of the total number of credits available from the entire bank), the Corps authorization must be issued and activated (i.e. discharge into a water of the U.S.). The Corps will use the enforcement authority outlined in 33 CFR 326 for enforcing the success of the performance standards as necessary.

G. As-Built Report: The Sponsor agrees to submit an as-built report to the MBRT co-chairs within 60 days following completion of the grading. The as-built report will describe in detail any substantial deviation from the requirements described in the Mitigation Plan submitted to the MBRT co-chairs in accordance with the Instrument. The as-built report shall contain photographs showing the finished structures.

V. OPERATION OF THE BANK

A. Service Area: The Bank is established to provide mitigation to compensate for impacts to waters of the United States and/or state waters, including wetlands, within the service area depicted on the excerpt of the USGS Hydrologic Unit Map as shown in Exhibit E. This service area shall include portions of hydrologic unit 17090003, within Polk, Benton, Linn and Lane Counties. The Bank may be used to compensate for impacts beyond the designated service area, on a case-by-case basis.

B. Access: With prior notice the Sponsor will allow, or otherwise provide for, access to the site by members of the MBRT or their agents or designees at reasonable times as necessary to conduct inspections, and compliance monitoring with respect to the requirements of this MBI. Inspecting parties shall not unreasonably disrupt or disturb activities on the property, and will provide written notice within reasonable time prior to the inspection.

C. Projects Eligible to Use the Bank: The Sponsor will be named as the party responsible for providing mitigation once a credit is sold. The following types of projects may be eligible to use the Bank:

1. All activities regulated under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, Oregon's Removal-Fill Law [Oregon Revised Statutes (ORS) 196.800-196.990] and other activities as the Corps or DSL may authorize consistent with this MBI may be eligible to use this Bank as compensatory mitigation for unavoidable impacts (some exceptions to this may be granted on a project by project basis); credits purchased may only be

used in conjunction with a Corps or DSL permit authorization, to resolve a DSL violation, or in conjunction with other actions as the Corps or DSL may authorize.

2. Permitees under the Corps' regulatory authority and/or under DSL's removal-fill program may withdraw bank credits as a means of providing compensatory mitigation required under those programs.

D. Number of Credits: Credits and debits will be assessed using measurements of the area of impacts and the mitigation land area. The number of credits created by development of this Bank is determined by a combination of land area and mitigation ratios provided in the Mitigation Plan (Exhibit C) as described in the Crediting and Debiting Procedure for the Bank (Exhibit D). The amount to be debited for each impact will depend upon the area of wetlands or waters to be impacted as determined during the permitting process by the respective regulatory agency.

E. Performance Standards: Credits will be released based on the achievement of performance standards. The performance standards are detailed in the Mitigation Plan (Exhibit C).

F. Party Responsible for Mitigation: The Sponsor will be the party responsible for providing the amount of mitigation sold and associated with eligible projects under Section V.C.

VI. MAINTENANCE AND MONITORING OF THE BANK

A. Maintenance Provisions: The Sponsor agrees to perform all necessary work to maintain the Bank consistent with the Mitigation Plan (Exhibit C). The Sponsor shall continue with such maintenance activities until completion of the monitoring period described in Section VI.B. Deviation from the approved MBI is subject to review and written approval by co-chairs.

B. Monitoring Provisions: The Sponsor agrees to perform all necessary work to monitor the Bank to demonstrate achievement of the performance standards established in the Mitigation Plan. The details of the monitoring provisions are described in the Mitigation Plan (Exhibit C).

C. Accounting Procedure: The Sponsor shall submit a statement (copy of the receipt) to the Corps and DSL each time credits are sold, a sample of this statement is attached as Exhibit G. In addition, the Sponsor shall submit an annual ledger to the Corps and DSL by January 31, annually, for distribution to all members of the MBRT, showing all transactions at the Bank for the previous calendar year and a cumulative tabulation of all transactions to date. Annual ledgers and transaction reports shall be submitted to the MBRT until the last credit is sold.

D. Contingency Plans/Remedial Actions: In the event the Bank or a specific phase of the Bank fails to achieve the performance standards specified the Mitigation Plan (Exhibit C), the Sponsor shall develop necessary contingency plans and implement appropriate remedial actions for the Bank or that phase of the bank in coordination with the MBRT. In the event the Sponsor fails to implement necessary remedial actions within one growing season (i.e., by November 1 of the following year) after notification by the Corps and/or DSL that remedial action is necessary the co-chairs will notify the Sponsor that appropriate remedial actions including suspension/revocation of available mitigation

credits. The Corps and DSL may implement their respective agencies enforcement authorities over the permit issued at any time.

E. Default: Should the co-chairs determine that the Sponsor is in material default of any provision of this MBI, the co-chairs shall notify the Sponsor that the sale or transfer of any credits will be suspended until the claimed deficiencies have been remedied. Upon notice of such suspension, the Sponsor agrees to immediately cease all sales or transfers of mitigation credits until the Corps and DSL inform the Sponsor that sales or transfers may be resumed. Should the Sponsor remain in default, the MBRT, acting through the Corps and DSL, may terminate the MBI and any subsequent Bank operations. Upon termination, the Sponsor agrees to perform and fulfill all obligations under this MBI relating to credits that were sold or transferred prior to termination.

F. Bank Closure: At the end of the monitoring period, upon satisfaction of the performance standards, the Corps and DSL shall issue a written "bank closure certification" to the Sponsor. DSL will notify the financial security holder, and thereafter any remaining requirement for financial assurances will cease. The Sponsor may be allowed to utilize any portion of the Bank lands that have not had compensation credits debited from it provided the utilization does not adversely impact the areas from which compensatory mitigation credit has been debited. Upon bank closure, the Long-Term Management Fund shall be conveyed to the Steward of the Bank lands.

G. Long-Term Ownership and Preservation: The Steward will be responsible for long-term stewardship of the Bank after the active monitoring period has ended and the Bank has been closed as described in Section VI. F. The Steward shall be responsible for managing the Bank in perpetuity in accordance with the terms of the restrictive covenant and conservation easement described in Section IV. E. To receive the last 15% of credits, a perpetual conservation easement must be approved by the co-chairs.

VII. RESPONSIBILITIES OF THE MITIGATION BANK REVIEW TEAM

A. The agencies represented on the MBRT agree to provide appropriate oversight in carrying out provisions of this MBI through the co-chairs.

B. The agencies represented on the MBRT agree to review and provide comments on all project plans, annual monitoring reports, credit review reports, and remediation plans, for the Bank. Comments, if any, will be submitted within a timely manner from the date of submittal. If comments are not received within the time required in the co-chairs rules or regulations, those comments may not be considered.

C. The agencies represented on the MBRT agree to review and confirm reports on evaluation of performance standards prior to approving the release of credits.

D. The agencies represented on the MBRT will conduct inspections, as necessary to verify the number of credits available at the Bank. Based on these inspections, the MBRT may recommend corrective actions to the Sponsor, until the terms and conditions of the MBI have been determined to be fully satisfied or until all credits have been sold, whichever is later.

VIII. OTHER PROVISIONS

A. Force Majeure: The Sponsor will not be responsible for Bank failure that is attributed to natural catastrophes such as flood, drought, disease, and regional pest infestation, that the co-chairs, determines is beyond the reasonable control of the Sponsor to prevent or mitigate.

B. Dispute Resolution: Resolution of disputes concerning the signatories' compliance with this MBI, including the determinations they make as specified in this MBI shall be in accordance with those stated in the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 Fed.Reg. 58610 and 58611, November 28, 1995) or any subsequent regulations. Disputes related to satisfaction of performance standards may be subject to independent review from government agencies or academia that are not part of the MBRT. The MBRT will evaluate any such input and determine whether the performance standards have been met. Appeals of any DSL decisions shall be processed according to OAR 141-085-0075 and OAR 141-085-0445.

C. Validity, Modification, and Termination of the MBI: This MBI will become valid on the latter date of the representative of the Corps or DSL signs this MBI. This MBI may only be amended or modified with the written approval of the Sponsor(s), Corps, and DSL. Any of the MBRT members may terminate their participation upon written notification to all the signatory parties. Any such termination shall not invalidate this MBI. Participation of the MBRT agency seeking termination will end thirty (30) days after written notification.

D. Specific Language of MBI Shall Be Controlling: To the extent that specific language in this document changes, modifies, or deletes terms and conditions contained in those documents that are incorporated into the MBI by reference, and that are not independently legally binding. The specific language within the MBI shall be controlling.

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

EcoBank LLC
38863 Scravel Hill Road NE
Albany OR 97322-9554

U.S. Army Corps of Engineers
CENWP-OD-G Policy Specialist
P.O. Box 2946
Portland Oregon 97208-2946

Oregon Department of State Lands
775 Summer Street NE, Suite 100
Salem, Oregon 97301-1279

F. Entire MBI: This MBI constitutes the entire agreement between the parties concerning the subject matter hereof and supersedes all prior agreements or undertakings.

G. Modification: This MBI may not be modified except by the written agreement of the DSL, Corps and the Sponsor. In the event the Sponsor determines that modifications must be made in the Mitigation Plan to ensure successful establishment of habitat within the Bank, the Sponsor shall submit a written request for such modification to the co-chairs, for approval. The co-chairs will distribute this request to the MBRT to seek their recommendations. The MBRT agrees to not unreasonably withhold or delay such approval. Documentation of implemented modifications shall be made consistent with this MBI.

H. Invalid Provisions: In the event any one or more of the provisions contained in this MBI 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 MBI shall be construed as if such invalid, illegal or unenforceable provision had not been contained herein.

I. Headings and Captions: Any paragraph heading or captions contained in this MBI shall be for convenience of reference only and shall not affect the construction or interpretation of any provisions of this MBI.

J. Counterparts: This MBI may be executed by the parties in any combination, in one or more counterparts, all of which together shall constitute but one and the same instrument.

K. Binding: This MBI shall be immediately, automatically, and irrevocably binding upon the Sponsor and its heirs, successors, assigns and legal representatives upon signing by the Sponsor, the Corps, and DSL even though it may not, at that time or in the future, be executed by the other potential parties to this MBI. The signing of this MBI by EPA, DEQ, ODFW, or the USFWS, or other agency, city or county shall cause the signing agency to become a party to this MBI upon signing, even though all or any of the other potential parties have not signed the MBI.

L. Liability of Regulatory Agencies: The responsibility for financial success and risk to the investment initiated by the Sponsor rests solely with the Sponsor. The regulatory agencies (Corps and DSL) that are parties to this MBI administer their regulatory programs to best protect and serve the public's interest in its wetlands and waterways, and not to guarantee the financial success of mitigation banks, specific individuals, or entities. Accordingly, there is no guarantee of profitability for any individual mitigation bank. Sponsors should not construe this MBI as a guarantee in any way that the regulatory agencies will ensure sale of credits from this Bank or that the regulatory agencies will forgo other mitigation options that may also serve the public interest. Since the regulatory agencies do not control the number of mitigation banks proposed or the resulting market impacts upon success or failure of individual banks, in depth market studies of the potential and future demand for bank credits are the sole responsibility of the sponsor.

M. Grant Program Participation: According to the Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (Guidance) published in the Federal Register on November 28, 1995 by the Corps, EPA, the Natural Resource Conservation Service, USFWS, and the National Marine Fisheries Service, wetlands restored through the Conservation Reserve Program or similar programs cannot be used to generate credits from a mitigation bank. In accordance with the Guidance, Federally-funded wetland restoration projects cannot be used to generate credits within this mitigation bank.

N. Suspension of Credits: The co-chairs may suspend the sale of credits if new information received by the MBRT indicates information in this MBI was falsely presented or due to a breach of this MBI.

O. Sale of Bank Property: If you transfer the title of this property, you must notify the Corps and DSL in writing prior to the transfer of your property.

IN WITNESS WHEREOF, the parties hereto have executed this MBI on the date herein below last written by the Co-Chairs.

Duane A. Drushella, EcoBank LLC Member — Date: 6-27-08

Timothy A. Acker, EcoBank LLC Member — Date: 27JUN08

MITIGATION BANK REVIEW TEAM

By the MBRT Co-Chairs:

Steven Miles
Colonel, Corps of Engineers
District Engineer — Date: 8 July 2008.

Louise Solliday, Director
Oregon Department of State Lands — Date: 7/8/08

Exhibit A

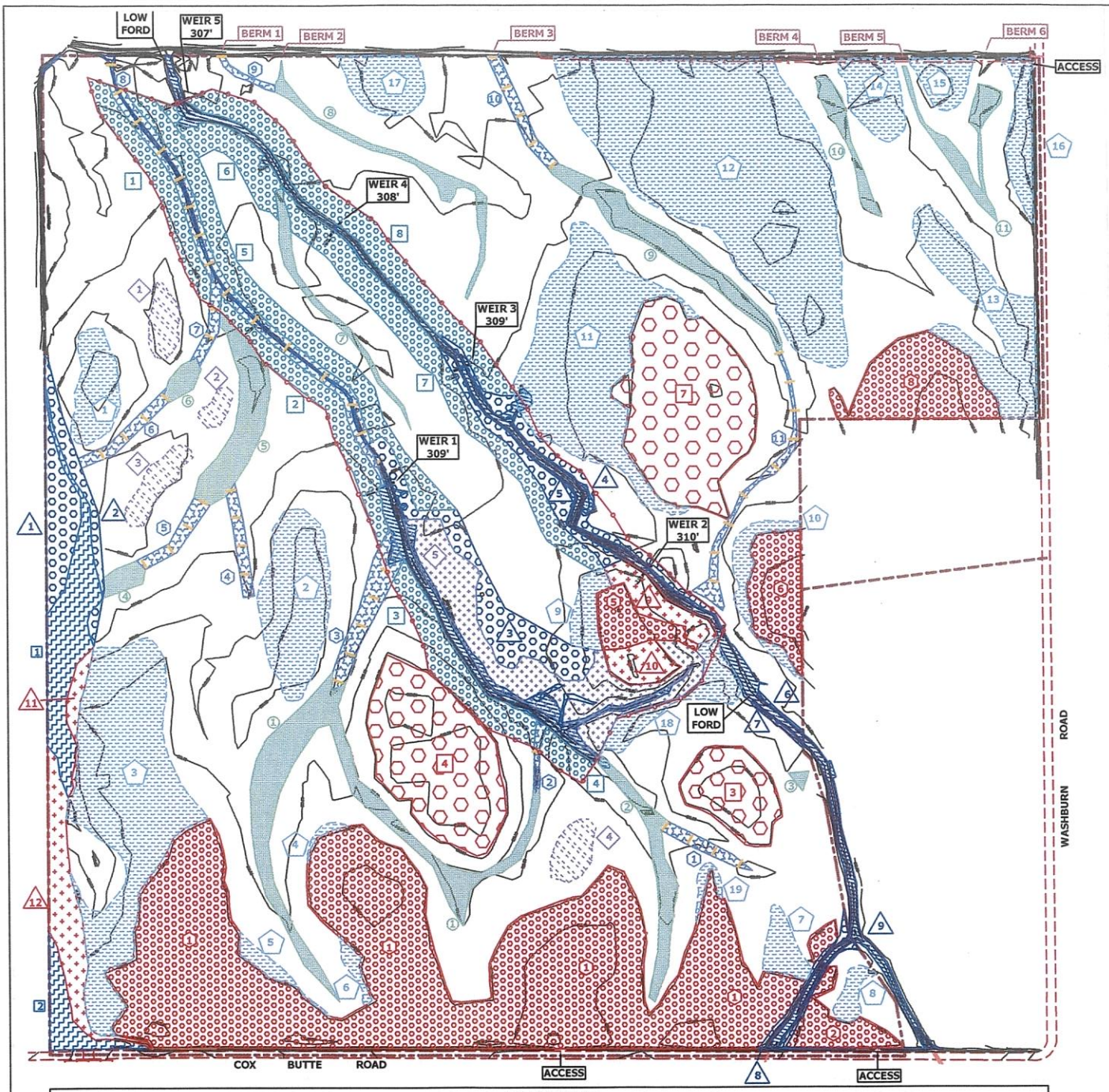
Provide a copy of the tax lot information for all properties this MBI may refer to. If the property is not identified in the MBI, it is not part of the MBI agreement. If future phases may be added later, or additional properties may be acquired later, and you would like them included in this MBI, you must identify the property here.

Phase 1

T15S, R05W Section 11 – tax lot 102

Phase 2

T16S, R05W Section 14 – tax lot 200
T16S, R05W Section 11 – tax lot 901



LEGEND

PROPERTY BOUNDARY

STRAW/COIR WATTLES

ELECTRIC FENCE 5-STRAND

UPLANDS

EXISTING FORESTED UPLAND (2.13 ACS.)

PROPOSED FORESTED UPLAND (14.41 ACS.)

PROPOSED SAVANNA (6.95 ACS.)

WETLANDS & STREAMS

RESTORED PFO (2.31 ACS.)

RESTORED WET PRAIRIE (1.10 ACS.)

CREATED WET PRAIRIE (23.39 ACS.)

ENHANCED PFO (8.25 ACS.)

ENHANCED PSS (3.02 ACS.)

ENHANCED VERNAL POOL (5.80 ACS.)

ENHANCED WET PRAIRIE (60.68 ACS.)

REMAINING PFO (3.79 ACS.)

OHW (1.96 ACS.)

SLOUGH (1.71 ACS.)

0 400 FT.
C.I. 1 FT.

ECOBANK LLC

LONG TOM MITIGATION BANK PHASE I

PROPOSED SITE PLAN MAP

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

EXHIBIT B

Exhibit C
Mitigation Plan

June 21, 2008

EcoBank LLC

LONG TOM

MITIGATION BANK PHASE 1

Exhibit C
MITIGATION PLAN

NOTE: This mitigation plan pertains to Phase 1 of the Long Tom Mitigation Bank only. The detailed mitigation plan for Phase 2 will be presented to the MBRT for approval as an amendment to this instrument if and when development of Phase 2 is desired by the Sponsor.

I. Bank Goals and Objectives

A. Description and quantification of the aquatic resource type and functions for which the mitigation project is intended to compensate.

The Long Tom Mitigation Bank Phase 1 is intended to provide the regulated public with adequate compensatory wetland mitigation for permitted impacts to slope/flats wetlands located within the Willamette Valley Ecoregion in HUC 17090003, and to the extent practicable and allowed by Federal and state rules, provide that mitigation prior to the permitted impacts.

The slope/flats subclass is a composite of the classical HGM slope and flats subclasses. The slope/flats subclass is characterized as wetlands maintained by lateral subsurface groundwater and/or direct precipitation. The rate of water leaving these wetlands is often retarded by natural levees, impervious soil strata, and high local water tables. These wetlands are usually seasonally saturated or shallowly inundated. Slope wetlands characteristically occur at the base of slopes or upslope when associated with spring seeps. Flats wetlands usually occur on the Valley floor. The composite subclass supports PEM, PSS and PFO wetlands with A, B or C water regime codes.

The wetland functions associated with the slope/flats subclass are: water storage and delay, sediment stabilization and phosphorous retention, nitrogen removal, amphibian and turtle habitat, invertebrate habitat support, songbird habitat, wintering and migratory bird support, characteristic vegetation, and primary productivity. The following chart shows the mean scores, upper normal limit scores (mean plus one standard deviation), and lower normal limit scores (mean minus one standard deviation) for the functions based on the reference data set used to develop the *Willamette Valley HGM Guidebook*. Functional scores falling between the upper and lower normal limits can be thought of as "average," "normal," or "what you would expect." Functional scores falling below the lower normal limit could be considered "degraded" for that function. Likewise, functional scores falling above the upper normal limit are "exceptional."

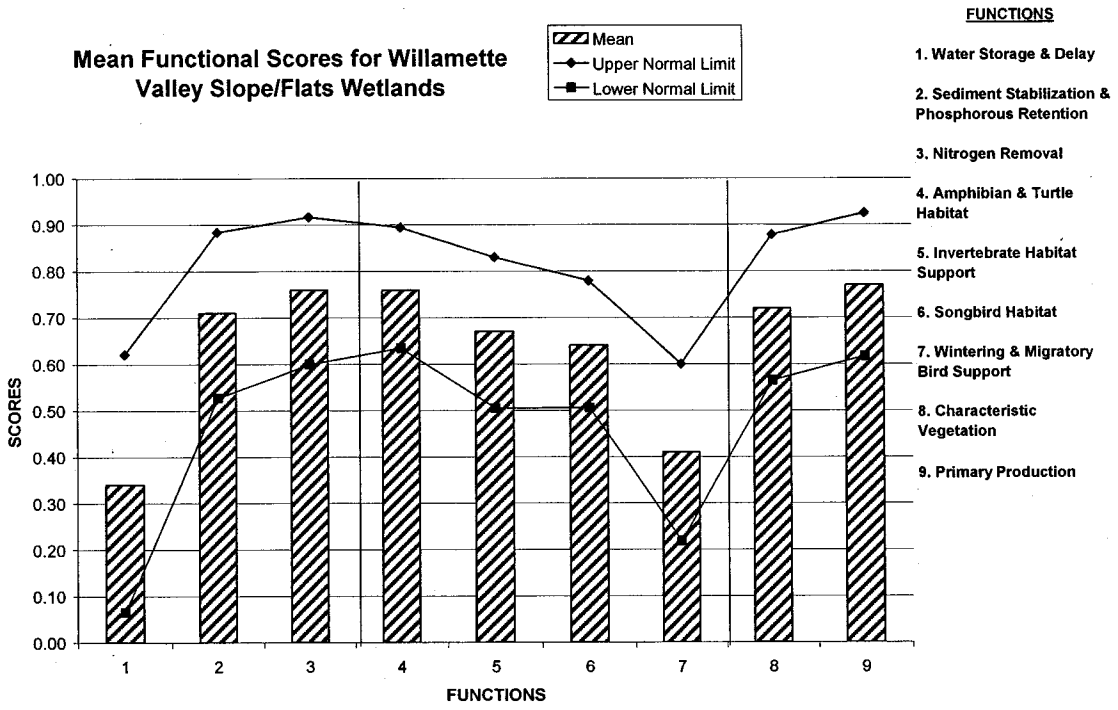


Chart 1. Mean, upper normal limit and lower normal limit for functional scores of Willamette Valley slope/flats wetlands based on the *Willamette Valley HGM Guidebook* reference site data set.

Chart 2 shows the functional lift we believe this plan will achieve by enhancing the existing PEM wetlands by function. The lift profile can be summarized as follows:

Functional lift from normal to exceptional –	Nitrogen Removal Songbird Habitat
Functional lift from degraded to exceptional -	Characteristic Vegetation
Functional lift from degraded to normal -	Invertebrate Habitat Primary Production
Functional lift within normal range -	Sediment Stabilization & Phosphorous Retention
Functional lift within exceptional range -	Wintering & Migratory Bird Support
Functional lift essentially flat -	Amphibian and Turtle Habitat Water Storage & Delay

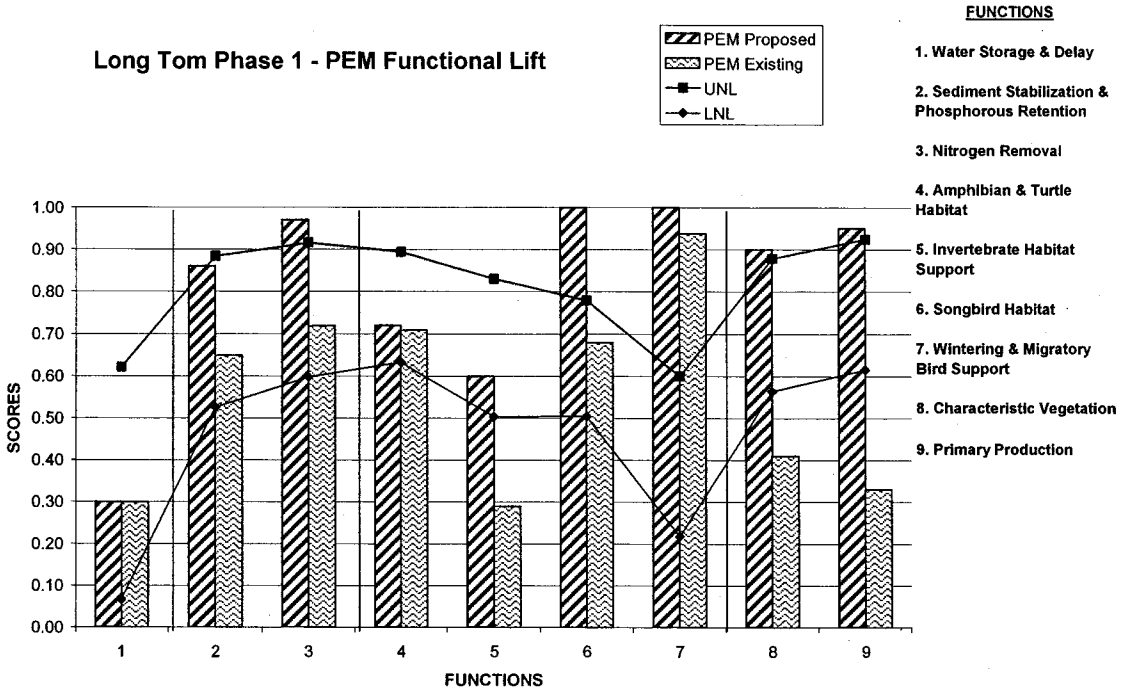


Chart 2. Functional profiles for the existing PEM wetland and post-mitigation project PEM wetland.

The reviewer should be aware that in fact additional water will be stored on-site as a result of this mitigation plan; however, the HGM functional assessment model does not have the resolution necessary to measure the increase.

There is also a relatively small acreage of existing PFO wetland which this plan does not include for enhancement or use for credit production because the Sponsors do not believe enhancement is technically feasible; in other words, the PFO wetland is already in very good shape (on the high end of average) and activities intended to provide functional lift are unlikely to succeed in any reasonable proportion to their cost.

There is, however, some upland forest acreage that used to be wetland and that this plan will restore to wetland status. The following chart shows the functional lift expected for the PFO restoration and is based on the functional scores for the existing PFO wetland.

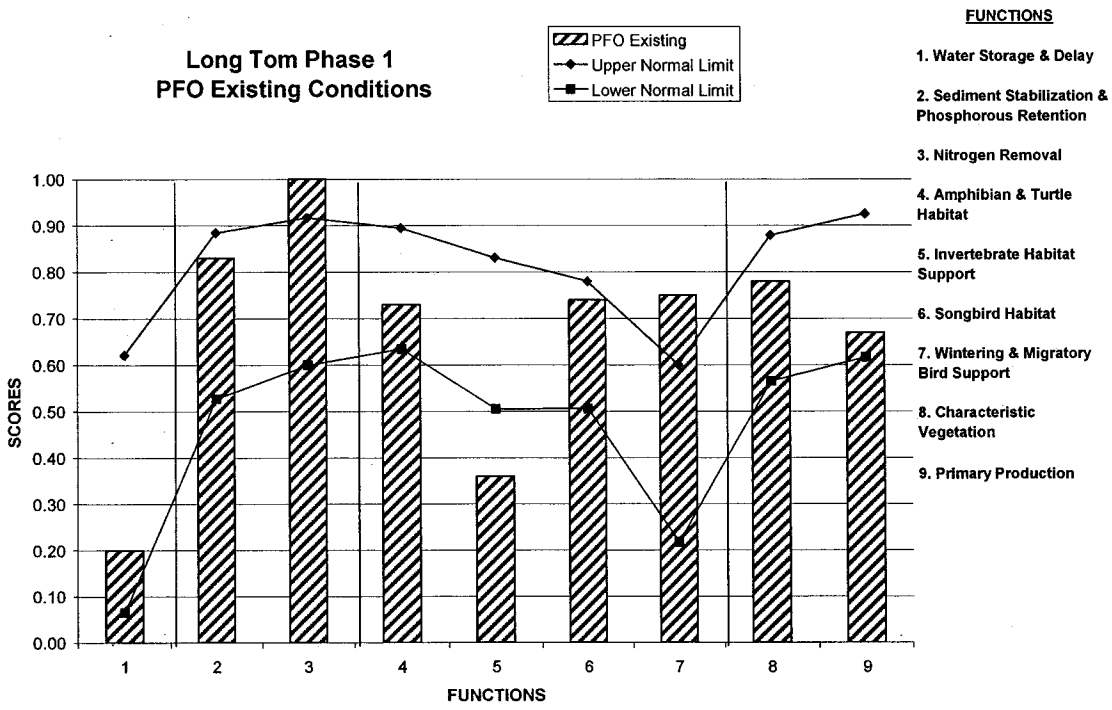


Chart 3. Functional profile for the existing PFO wetland as well as what is expected for the PFO wetland restoration.

In summary, this mitigation plan intends to provide compensatory wetland mitigation for impacts to PEM and PFO/slope/flats wetlands within the functional uniscore range of 0.00 to about 6.00 (degraded through high average). The uniscore for a wetland is defined here as the sum of all the individual functional scores on a subclass basis.

B. Description of the contribution to overall watershed/regional functions that the mitigation site(s) is intended to provide.

This mitigation plan relies on two documents to describe the watershed/regional context in which the mitigation bank will operate: the *Long Tom Watershed Assessment* (Long Tom Watershed Council, 2000), and *The Oregon Conservation Strategy* (ODFW, 2006).

According to the *Long Tom Watershed Assessment*, the mitigation bank is located in the Lower Long Tom sub-basin within the prairie terrace ecoregion. In a 2007 OWEB grant application, the watershed council listed the following as limiting factors in the Long Tom Watershed:

1. Fish passage barriers limit access to habitat and refuge areas.
This mitigation plan recognizes no opportunity to address fish passage.

2. Water quality and riparian zone conditions are degraded.
The filing further describes the particulars of this problem: a) high summer water temperature and low dissolved oxygen levels; b) high nutrient levels; c) high turbidity levels; d) high *E.coli* levels; and e) loss of riparian woody vegetation. This mitigation plan will not contribute to reducing stream temperature or increasing dissolved oxygen because the streams on-site are dry in the summer, and we have no plans to reduce the woody cover associated with the one feature on the property that is perennial – the slough. With regards to nutrients, turbidity and bacteria, we believe the change in land use from agriculture to conservation will have a beneficial effect by eliminating pesticides and fertilizers, soil disturbance caused by periodic plowing and grazing, and manure inputs from grazing sheep on the grass seed fields.

3. Instream habitat and wetlands have been reduced in quality and extent.
In addition to protecting the existing forested wetlands already present on the bank site, this mitigation plan is aimed at converting rye grass fields into emergent and Willamette Valley wetgrass prairie that will function at a better than average level relative to other Willamette Valley wetlands.

4. Upland habitats are threatened in extent and quality.
This plan anticipates that approximately 18% of the bank site will consist of upland capable of being restored into critical upland habitat types including oak savanna/upland prairie and oak/pine woodland.

The Oregon Conservation Strategy shows the mitigation bank site to be just north of the West Eugene Conservation Opportunity Area (WV-23), as well as south of the Finley-Muddy Creek Opportunity Area (WV-22). Both these areas have similar key habitats (grasslands and oak savanna, and wetlands and wet prairie) and similar recommended conservation actions (restore and maintain floodplain wetlands and wet prairie/restore and maintain wetland and riparian habitats along Long Tom corridor, respectively). This plan directly advances those recommendations.

II. Baseline Information – proposed bank site & if applicable, proposed reference site(s)

A. Location

The Long Tom Mitigation Bank Phase 1 is located on Lane County tax lot 102 in the NE¼ Section 26, T15S R05W, W.M. approximately ¼ mile west of the intersection of Cox Butte Road and Washburn Road at N44°14'14.84" and W123°15'15.61" (see figure 2). The bank is located in HUC 17090003 (see figure 3).

The reference site for the proposed PEM wetlands is commonly referred to as the Finley Prairie located on the Finley National Wildlife Refuge in the SW ¼ Section 21, T13S R05W, W.M. south of Finley Road approximately 1/3 mile west of Hwy 99W at N44°25'24.54" and W123°18'42.00".

B. Classification & quantity of wetland resources and stream resources by types

The following table presents the quantity and classification of the existing wetlands, streams and uplands (see figure 1).

TABLE 1. Existing resource quantity by type and classification.

HABITAT TYPE	ACRES	COWARDIN	HGM
Stream (slough)	1.71	R3	Riverine Flowthrough
Stream	1.96	R4	Riverine Flowthrough
Farmed Wetland	77.77	PEME	Slope/Flats
Forested Wetland	3.79	PFOE	Slope/Flats
Farmed Upland	45.85	Agriculture[1/]	
Forested Upland	4.44	Westside Riparian - Wetlands[1/]	
TOTAL	135.52		

[1/] from *Wildlife -habitat relationships in Oregon and Washington*/managing directors, David H. Johnson, Thomas A. O'Neil.— 1st ed.

C. Existing Hydrology

The Long Tom Mitigation Bank Phase 1 is somewhat unique in that it is contained within its own watershed. Except for backwatering off of the slough along the western boundary, the project area is physically separated from surface and groundwater interaction with the surrounding landscape by a large drainage ditch along the northern boundary, and the Washburn Road and Cox Butte Road ditches along the eastern and southern boundaries respectively. The large WRP project immediately south of Cox Butte Road does have a gate valve leading into the eastern-most stream on the bank property, but the WRP operator states that they rarely open it because it is adequate to manage the WRP water levels using other valves adjacent to the Long Tom River. The resulting contributing drainage area is 156.82 acres.

The classical water budget equation is:

$$P + SWI + GWI = ET + SWO + GWO + \Delta S$$

where

P = Precipitation
SWI = Surface water inflow
GWI = Ground water inflow
ET = Evapotranspiration
SWO = Surface water outflow
GWO = Ground water outflow
ΔS = Change in soil water storage

In the case of the Long Tom Bank Phase 1, SWI and GWI tend toward zero for the reasons described above. In addition, since the general direction of drainage over

most of the site is towards the two central channels, we assume any leakage around the perimeter is negligible compared to the amount of water that drains out the channels as SWO; consequently, we assume GWO also tends towards zero. For the purposes of water budgeting, these assumptions leave us with:

$$P = ET + SWO + \Delta S$$

Precipitation is the primary hydrology driver for the Long Tom Mitigation Bank. The soil water storage capacity is primarily a function of soil texture and depth to an imperfectly pervious layer. In our case about 92% of the site is underlain by Coburg silty clay loam and Conser silty clay loam, both of which have similar physical characteristics in terms of depth and available water holding capacity, although the Conser has much lower permeability below 17 inches.

For the purposes of water budgeting we assume that once the upper 17 inches is saturated the next increment of net precipitation either runs off as SWO or displaces water in the soil profile resulting in the same increment of GWO, which must eventually express itself as SWO in the channels.

Note that all measures in the following tables are in inches of equivalent precipitation. "FW Depth" is depth in inches below the surface to free water.

TABLE 2. Long Tom Bank water budget for normal year (1985-86 data).

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
P	4.83	6.31	3.51	6.97	14.22	4.41	1.85	3.21	0.33	0.42	0.04	4.65
ET	2.48	0.92	2.32	1.23	1.22	2.63	3.10	4.68	7.19	6.68	6.50	4.42
NET	2.35	5.39	1.19	5.74	13.00	1.78	-1.25	-1.47	-6.86	-6.26	-6.46	0.23
ΔS	2.35	3.40	3.40	3.40	3.40	3.40	2.15	0.68	0.00	0.00	0.00	0.23
SWO	0.00	4.34	1.19	5.74	13.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00
FW depth	5.25	surface	surface	surface	surface	surface	6.25	13.60	—	—	—	—

Note that during a normal water year the site exhibits wetland hydrology (free water within 12 inches of the surface) by the end of October and consecutively through the end of April. By the end of May the water table is below the 12 inch threshold, and the site dries down over the remainder of the summer. This pattern agrees pretty well with what we observe in the field.

TABLE 3. Long Tom Bank water budget for below normal year (1988-89 data).

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
P	0.20	9.88	3.28	4.24	3.16	7.02	1.24	2.27	0.91	0.52	0.03	1.25
ET	2.43	0.78	0.79	0.57	3.08	3.56	4.87	5.69	6.95	7.09	7.67	5.37
NET	-2.23	9.10	2.49	3.67	0.08	3.46	-3.63	-3.42	-6.04	-6.57	-7.64	-4.12
ΔS	0.00	3.40	3.40	3.40	3.40	3.40	0.00	0.00	0.00	0.00	0.00	0.00
SWO	0.00	5.70	2.49	3.67	0.08	3.46	0.00	0.00	0.00	0.00	0.00	0.00
FW depth	—	surface	surface	surface	surface	surface	—	—	—	—	—	—

In this scenario the bank site achieves wetland hydrology sometime in October and dries out prior to the end of April — still enough to meet jurisdictional wetland criteria but about two months less in duration than a normal year.

TABLE 4. Long Tom Bank water budget for above normal year (1995-96 data).

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
P	5.63	10.18	7.66	9.09	12.04	3.91	6.76	4.63	1.05	0.80	1.55	1.52
ET	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.82	7.53	5.77	4.06
NET	5.63	10.18	7.66	9.09	12.04	3.91	6.76	4.63	-3.77	-6.73	-4.22	-2.54
ΔS	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	0.00	0.00	0.00	0.00
SWO	2.23	10.00	18.00	7.66	9.09	12.04	9.91	6.76	4.63	0.00	0.00	0.00
FW depth	surface	surface	surface	surface	surface	surface	surface	surface	—	—	—	—

In an above normal year the bank site achieves wetland hydrology in October and does not dry down until sometime in June — fully nine months exhibiting wetland hydrology and one to two months longer than in a normal year.

As the water budgets show, wetland hydrology on this site is a seasonal phenomenon starting shortly after the onset of the fall rains in October and persisting until mid- to late spring depending on the year. The wetlands are predominantly saturated soil wetlands. However, about 4% of the site (approximately 6 acres) is vernal pool-type habitat characterized by shallow inundation of 6 inches or less. In addition, the stream channel OHWLs occupy 1.96 acres and winter water depths are 2-3 feet in isolated places. Lastly, the slough

along the western boundary (figure 1 — slough 1 & 2) entails 1.71 acres on-site, and appears from the bank to have at least some open water in excess of 6 feet deep.

It appears that in the past the channels were less incised due to the fact that *Fraxinus latifolia* and *Salix spp.* were able to become established along the streams. If the trend continues, however, there is a risk that the seasonal water table will drop below the threshold for wetland hydrology resulting in a loss of wetland acres.

No water quality analyses have been done to our knowledge on the Long Tom Mitigation Bank site.

D. Existing Vegetation

The following table lists the plant species encountered during the wetland delineation fieldwork.

TABLE 5. Existing vegetation by species, indicator status, dominanve and nativity.

PLANT COMMUNITY	SPECIES	STRATUM	IND. STATUS	DOM.	NATIVITY
Farmed Wetland & Upland	Lolium multiflorum	Herb	FACU	Y	NN
Forested Wetland	Fraxinus latifolia	Tree	FACW	Y	N
	Populus trichocarpa	Tree	FAC	N	N
	Spiraea douglasii	Shrub	FACW	Y	N
	Symphorocarpos albus	Shrub	FACU	Y	N
	Rosa gymnocarpa	Shrub	FAC	Y	NN
	Rosa nutkana	Shrub	FAC	Y	N
	Salix spp.	Shrub	FAC-FACW	Y	N
	Carex obnupta	Herb	OBL	Y	N
	Ranunculus ucinatus	Herb	FAC-	Y	N
	Solanum dulcamara	Herb	FAC	N	NNI
	Phalaris arundinacea	Herb	FACW	Y	NNI

Nativity: N = native, NN = Non-native, NNI = Non-native invasive

TABLE 5 (continued).

PLANT COMMUNITY	SPECIES	STRATUM	IND. STATUS	DOM.	NATIVITY
Forested Upland	Fraxinus latifolia	Tree	FACW	Y	N
	Quercus garryanna	Tree	FACU	Y	N
	Crataegus douglasii	Tree	FAC	N	N
	Cornus nuttallii	Tree	UPL	N	N
	Symphorocarpos albus	Shrub	FACU	Y	N
	Amelanchier spp.	Shrub	FACU	Y	N
	Mahonia aquifolium	Shrub	UPL	N	N
	Rosa gymnocarpa	Shrub	FACU	Y	NN
	Ranunculus ucinatus	Herb	FAC-	Y	N
	Rubus ursinus	Herb	FACU	Y	N
	Tellima grandiflora	Herb	UPL	Y	N
	Gallium aparine	Herb	FACU	N	NN
	Agrostis tenuis	Herb	FAC	Y	NN
	Geum macrophyllum	Herb	FACW-	Y	N
	Festuca arundinacea	Herb	FAC-	N	NN
	Taraxacum officinale	Herb	FACU	N	N
	Rhus diversiloba	Herb	UPL	Y	N
Streams	predominantly unvegetated due to prolonged standing water and dense shade				

Nativity: N = native, NN = Non-native, NNI = Non-native invasive

The predominant plant species currently growing on the Long Tom Mitigation Bank site is annual ryegrass – *Lolium multiflorum*. It occupies just about all the farmed wetland and upland, and is dense and relatively weed-free everywhere except in those places where prolonged seasonal standing water precludes vegetation of almost any kind.

The forested wetland (figure 1 — PFO 1-6) is dominated by *Fraxinus latifolia*. Judging from historic air photos this is a natural stand that is about 80 to 100 years old. There are several large *Populus trichocarpa* live and standing dead trees, as well as large snags and down wood in all stages of decay. The stand appears to be fully stocked, with a well developed understory dominated by *Symphorocarpos albus*, and locally dominated by *Spiraea douglasii*, near the slough and *Rosa spp.* and *Salix spp.* in narrow bands along the channels. The herb stratum is dominated by patchy *Carex obnupta* and *Ranunculus ucinatus*.

The forested uplands (figure 1 — UFOR 1-4) are likewise dominated by a natural, 80-100 year old stand of mixed *Fraxinus latifolia* and *Quercus garryanna*. The *Quercus garryanna* in particular is represented by some very large stems with dominant open crowns. The stand appears to be fully stocked and snags and downed wood are abundant. The understory is dominated by *Symphorocarpos albus*, *Amelanchier spp.*, *Rhus diversiloba*, *Geum macrophyllum*, *Rubus ursinus*, and *Tellima grandifolia*.

The streams (figure 1 — OHW 1-5) are largely unvegetated due to prolonged seasonal standing water and the dense shade of the surrounding forest.

By and large the site is remarkably free of non-native invasive weeds. There are three patches of *Phalaris arundinacea* that warrant mention: two patches at the low water fords crossing the easternmost channel; and where if forms a dominant understory in the forested wetland along the western boundary (figure 1 — PFO 1 & 2). In addition, *Rubus discolor* is present here and there associated with the upland forest along the western boundary (figure 1 — UFOR 1 & 2).

E. Existing Soils

The following table shows the characteristics of interest and the extent of the existing soils at the bank site (see figure 5).

TABLE 6. Existing soils by map unit, drainage class, extent and limitations.

MAP UNIT NAME	DRAINAGE CLASS	% OF SITE	DEPTH TO IMPERVIOUS LAYER (in.)	HYDRIC
Coburg silty clay loam	moderately well drained	48%	>62	NO
Conser silty clay loam	poorly drained	44%	17	YES
Malabon silty clay loam	well drained	5%	>60	NO
Waldo silty clay loam	poorly drained	3%	20	YES
McAlpin silty clay loam	moderately well drained	<1%	>60	NO

Almost half of the site is underlain by Coburg silty clay loam. This moderately well drained soil has no apparent limitations that would render it hydric; however, the engineering and physical characteristics listed in the *Soil Survey* indicate that it is nonetheless prone to a seasonal high water table at about 18 inches. This soil type is dominant in the southern and northeastern portions of the bank site.

Most of the remainder of the site is dominated by Conser silty clay loam. This is a classic hydric soil with a low permeability stratum at about 17 inches below the surface. This soil predominates in the property's north and west sides.

Rounding out the soil picture, the stream substrate for both the channels and slough is native soil (silty clay and clay) and organic muck.

F. Existing wildlife usage

No formal wildlife surveys have been undertaken; however, the Sponsors did have Dave Vesely of Pacific Wildlife Research inspect the site for red-legged frogs. Although the suspect frogs turned out to be bullfrogs, the fieldwork presented an

opportunity for Vesely to become familiar with the property and the operating plan for the bank. While on the property he identified a white breasted nuthatch (*Sitta carolinensis*), an ODFW Conservation Strategy species closely associated with mature oak woodland and savanna. He also shared his opinion that the stream channels within the forested uplands and wetlands, as well as the slough, could provide excellent habitat for red-legged frogs and western pond turtles, although none were observed at the time of his visit (late July 2007).

While working on the site the Sponsors have seen blacktail deer (*Odocoileus columbianus*) and coyote (*Canus latrans*), various species of ducks (*Anas spp.*), snipe (*Gallinago gallinago*) and killdeer (*Charadrius vociferus*).

The Sponsors met with Karen Hans, ODFW STEP Biologist on-site on 20MAR07 as part of their due diligence. The weir proposal was outlined to her at that time, and she indicated that fish use of the streams was unlikely, the proposed weirs would have little or no impact to fish, and whatever negative impact that might occur would be more than compensated for by the net benefit of the project to overall watershed health.

An ORNHIC database search has been initiated but the results have not yet been received.

G. Historic and current land use

The earliest air photos obtainable (1936) show that the bank site has been farmed continuously since at least that time. The crop appears to have always been either small grains or grass seed. There is no evidence of haying or grazing. None of the property is prior converted wetland.

H. Current owners when MBI will be signed

The Long Tom Bank Phase 1 property is currently owned by Dale Bergey. EcoBank LLC, the bank Sponsor, has a land purchase agreement with Bergey to buy the property, and has secured bank financing for that purpose (see exhibit C1). The Sponsor will need documentation from the Corps and DSL (such as a letter of intent) indicating that the MBI is satisfactory in order to finalize the bank loan and close on the property. Upon closing, EcoBank LLC will own the subject property in fee simple and will be free to execute the MBI.

I. Watershed context/surrounding land use

As mentioned earlier, the bank site is located within the Lower Long Tom sub-basin of the Long Tom River watershed. Land use within the watershed is markedly different from that within the Lower Long Tom sub-basin as follows (format – watershed/sub-basin): agriculture – 31%/81%; forestry – 46%/7%; urban – 8%/1%; rural residential – 9%/8%; parks and recreation – 1%/2%; rural industrial – 1%/0%. The Lower Long Tom subbasin is much more agricultural than the watershed as a whole.

In addition, the Lower Long Tom River is DEQ 303(d) listed for summer temperature and summer bacteria.

Historically, the Long Tom Watershed Council estimates that there had been 41,366 acres of wetland in the watershed including: 34,570 acres of wet prairie; 6,164 acres of forested wetland; 322 acres of shrub wetland; and 310 acres of emergent/open water wetlands. They also estimate that there are a total of 17,461 acres of wetlands in the watershed today including: 1,137 acres of riverine wetlands; 6,591 acres of lacustrine wetlands; 5,961 acres of emergent wetlands; 3,207 acres of forested wetlands; and 566 acres of shrub wetlands. If these estimates are accurate, then the Long Tom Mitigation Bank Phase 1 comprises approximately 1% of the emergent wetlands in the watershed, and about 0.1% of the forested wetlands (see figure 4).

The Long Tom Bank is also well positioned to leverage its size by virtue of its adjacency to a completed 300+ acre WRP project located just across Cox Butte Road. Although otherwise surrounded by farmland, the combined 435+ acres of protected wetland and upland habitats is a significant effective size.

Lastly, regarding threats and buffers, the bank site perimeter is bounded by the following land uses:

- Grass seed agriculture and a drainage ditch — 31% of the perimeter
- Cox Butte Road (paved 1-lane with ditch) and WRP — 21%
- Slough — 17%
- Grass seed agriculture and rural residential — 14%
- Washburn Road (paved 2-lane with ditch) and grass seed agriculture — 9%
- Riparian area and creek — 8%

The classic threats from grass seed agriculture are pesticide and fertilizer runoff, and as mentioned previously, the slough, the road ditches, and the large ditch along the northern boundary prevent any runoff from impacting the site along 78% of the bank's perimeter. These features effectively buffer the bank from the likely threats, albeit in an unconventional way relative to what one usually thinks of in terms of buffers. The riparian area and creek pose no threat. That leaves 14% of the perimeter unbuffered relative to the threats posed by rural residential land use (2 dwellings on over 20 acres set back from the bank property 300 feet or more) and grass seed agriculture.

III. Mitigation Site Selection & Justification

A. Site specific objectives: Description of mitigation types, acreages and proposed compensation ratios.

This mitigation plan proposes restore PFO and wet prairie wetlands, create wet prairie wetlands, and enhance the existing farmed wetlands into forested wetland, shrub wetland, vernal pool and wet prairie wetlands. The following table details the

proposed conversions, the existing habitats those conversions are coming from, the proposed mitigation ratios and the resulting credit production (see figure 7a).

TABLE 7. Mitigation types, sources, acreages and proposed ratios.

EXISTING HABITATS	Acres	PROPOSED HABITATS	Acres	Ratio	Credits
Slough	1.71	Slough	1.71	0	0.00
Existing PFO	3.79	Existing PFO	3.79	0	0.00
Existing Creeks	1.96	Existing Creeks	1.96	0	0.00
Existing Forested Upland	4.44	Proposed Forested Upland	2.13	0	0.00
		Proposed PFO - Restored	2.31	1	2.31
Existing Farmed Upland	45.85	Proposed Forested Upland (buffer)	14.12	10	1.41
		Proposed Forested Upland (no credit)	0.29	0	0.00
		Proposed Forested Savanna	6.95	10	0.70
		Proposed PEM - Restored	1.10	1	1.10
		Proposed PEM - Created	23.39	1.5	15.59
Existing Farmed Wetland	77.77	Proposed PFO - Enhanced	8.25	2	4.13
		Proposed PSS - Enhanced	3.02	2	1.51
		Proposed PEM (Vernal Pool) - Enhanced	5.80	2	2.90
		Proposed PEM (Wet Prairie) - Enhanced	60.70	2	30.35
TOTAL	**135.52**		**135.52**		**60.00**

First, the reviewer will note that no changes are anticipated regarding the existing slough, PFO wetlands, and streams, and no credit is proposed for these habitats. Although we expect that the proposed grading that is intended to raise the overall water table will result an expansion of the ordinary high water in the stream channels, this additional water will merely inundate existing PFO wetland. One could argue that, in a technical sense, this would be a conversion from riverine flowthrough to riverine impounding HGM subclass, in this case it is a distinction without a practical difference.

Next, the reviewer will note that a little more than half of the existing forested wetland is slated for restoration to PFO wetland (restored PFO 5 on figure 7a). This area is *Fraxinus* forest laying over hydric soil but did not meet the *'87 Manual* hydrology criterion. We believe the proposed activities to raise the water table will result in this area once again satisfying all jurisdictional wetland criteria, and therefore the mitigation ratio of 1:1 as listed in OAR141-085-0136 for restoration is appropriate. The remainder of the existing forested upland will remain forested upland.

Slightly over half of the farmed upland will be converted into restored or created wet prairie PEM wetland due to water table elevation depending whether the specific area was deficient by virtue of non-hydric soil or not. The remainder of the farmed upland will be converted to oak-pine forested upland and forested oak savanna upland as shown on figure 7a. The proposed new oak-pine forested uplands are

located along the periphery of the bank property and are intended to provide buffer between the bank and grass seed agriculture to the east, wildlife travel corridor along the southern boundary between the slough and the streams along the southeastern boundary, and interspersion of ODFW critical habitats with the proposed wetlands. The *Willamette Valley HGM Guidebook* does consider land use surrounding the wetland assessment unit at various scales, and the proposed upland forests provide a demonstrable gain in the following functions:

- Invertebrate habitat support - +0.07
- Primary Productivity – +0.06

Measured from the wetland/upland boundary, the buffer width is set at one potential tree height for Valley ponderosa pine (180 feet according to *Trees To Know in Oregon*, Oregon State University Extension Service EC-1450, 2005). The remaining small islands totaling 0.29 acre will be planted but will not receive credit.

The *Guidebook* also includes number and distribution of Cowardin vegetation classes in its scoring, and in general, more Cowardin classes and more interspersion are considered good things. Reason dictates that one more vegetation class (albeit upland) interspersed with the Cowardin classes would also result in some wetland functional gain, particularly in regards to species that require both habitat types in close proximity for their life functions. Although the *Guidebook* does not quantify this gain, just because it is not measured does not mean it is not real or significant. Consequently, the sponsors believe that 10:1 is a fair mitigation ratio to apply to these forested upland features because they affect the adjacent wetlands much as do buffers, and this ratio has been customarily applied to buffers by the MBRT in the past.

Lastly, the existing farmed wetland is slated for enhancement into a variety of wetland types. For 78% of the area Willamette valley wet prairie is the target habitat type. Almost 11% (concentrated adjacent to the two streams) is slated for conversion to forested wetland. The plan also calls for about 4% of the farmed wetland to be converted into shrub-dominated wetland strategically located to impede drainage out of the vernal pools, which themselves will occupy the remaining 7% of the farmed wetland area. The sponsors believe that the 2:1 mitigation ratio as listed in OAR141-085-0136 for farmed wetland enhancement is customary and appropriate in this case.

Based on the foregoing, the total credit yield from the Long Tom Mitigation Bank Phase 1 is estimated to be 60.00 credits.

C. Likely future adjacent land uses and compatibility.

The current adjacent land use is a WRP project to the south, grass seed agriculture to the west and north, and rural residential/grass seed agriculture on the two tax lots to the east. It is doubtful the land uses will change to the south, west and north.

The tax lots to the east are more difficult to predict. Historically, the neighboring two lots have been farmed in conjunction with the bank property. It remains to be seen if the farmer continues to work less than 15 acres due to the fixed costs associated with mobilizing equipment and the limited maneuvering room left on the remaining two parcels. The sponsors hope that if our efforts are successful, the neighbors will see the value in adding the undeveloped portions of their properties to the Long Tom Mitigation Bank through an appropriate conservation easement or similar arrangement. Although we have not investigated these properties in any detail, cursory examination shows that the bank wetlands and uplands extend offsite onto the neighboring parcels. Our intention would be to continue the proposed habitat type pattern onto the neighboring parcels if the opportunity presented itself. This would in effect bring the entire effective immediate watershed under common control, and thus eliminate the only real threat to the biological integrity of the bank, and thus the need for any buffer.

The sponsor understands that adding these two parcels would necessitate amending this MBI.

D. Explanation of how design is sustainable and self-maintaining.

The mitigation project design rests on lifting the local seasonal water table up to the top-of-bank of the two existing stream channels through the construction of five steel-reinforced concrete weirs (see figure 6). Throughout their service life the weirs are passive, requiring no operation or maintenance in order to function. Their function is simply to impound water and to release it slowly as overflow in the winter and spring, and through evaporation in the summer and fall. Our expectation is that this will increase the depths and prolong the periods of seasonal inundation and saturation at least to that illustrated earlier in the above-average water budget *every year*. The weirs themselves should remain functional for many decades, and by the time they disintegrate, it could likely be the case that the channels have accreted enough sediment and detritus to have reestablished a more natural channel bottom elevation.

In addition to the weirs, this plan calls for measures to retard drainage from the greater site towards the stream channels and perimeter ditches. These measures include using strategically placed straw/coir wattles and planted shrub thickets in the vernal pool habitats, as well as low earthen berms to plug natural outlets along the site's northern boundary (see figure 7a). The straw/coir wattles are temporary measure to stack up water in the vernal pool areas slated for shrub thicket establishment. The wattles are supposed to function 2-3 years while the shrub thicket forms. After the wattles decompose, the leaves, twigs, and other detritus within the thicket is intended to act dynamically as a natural dam system to check water as it tries to overflow the vernal pool complex – in other words, to plug the outlets.

The earthen berms are intended to do much the same along the northern boundary where existing vernal pools overflow into the deep ditch. The berms are also intended to make use of the surplus soil that will result from backfilling the weirs.

Once installed, all structures included in this mitigation plan will require no human operation or maintenance to function as intended.

E. USFWS and/or NOAA Fisheries ESA species assessment.

To our knowledge, no USFWS or NOAA Fisheries ESA species assessment has been undertaken for the bank site. An ORNHIC database search was conducted and it returned 15 records within a 2 mile radius, but no records for the section in which the bank site is located.

F. SHPO/tribal cultural resource survey

EcoBank LLC contracted Archaeological Investigations Northwest, Inc. (AINW) to conduct a cultural resource survey of the Long Tom Mitigation Bank project area (Phases 1 and 2) in early 2008. The following is an excerpt from the report *Summary and Recommendations* dated 26FEB08 (explanatory notes added in *italics*):

> "AINW completed a records review for the three parcels and an archeological survey for the proposed weirs at two of the three parcels proposed for use as a wetland mitigation bank. Shovel testing was conducted at one of three locations. No cultural materials were identified at the TL901 location *(the smaller of the Phase 2 parcels)*, and AINW recommends no additional investigations there. Artifacts were identified at two of the parcels (TL 102 *(Phase 1)* and TL 200 *(Phase 2 larger parcel)*). **Two isolates (07/1576-1 and 07/1576-2) were recorded at two of the weir locations in parcel TL 102. Since isolates are considered by the SHPO not to be significant resources, no further archaeological work is recommended for the weirs in parcel TL 102 (emphasis added).**"
>
> "Numerous lithic artifacts, including obsidian and CCS flakes, were observed within the field at TL 200 in areas that were not inundated. Most of the proposed weir locations were covered with water from recent heavy rains, and AINW recommends that the weir locations in parcel TL 200 be surveyed when the water recedes."

IV. Mitigation Work Plan

A. Construction Schedule

The following table details the constructions schedule. Reviewers should note that site preparation and broadcast seeing and drilling have already been accomplished in 2007. Additional seed drilling may be necessary in the fall of 2008 to cover any skip. The container stock planting schedule for woody and herbaceous species in any one year will be limited by nursery production capacity constraints.

TABLE 8. Construction schedule.

ELEMENT	TASK	START	END
SITE PREPARATION			
	SHEEP GRAZING	April-07	May-07
	SPRAY	May-07	May-07
	SPRAY	June-07	June-07
	SPRAY	October-07	October-07
PLANTING			
	COMPOSITE DRILL	November-07	November-07
	VERNAL POOL SEED BROADCAST	October-07	October-07
	FOREST SEED BROADCAST	October-07	October-07
	UPLAND SEED BROADCAST	October-07	October-07
	PFO FOREST OVERSTORY	October-08	October-09
	PFO FOREST UNDERSTORY[1/]	October-24	October-25
	PSS SHRUBS	October-10	October-11
	PEM HERBACEOUS PLUGS	October-08	October-10
	UPLAND FOREST OVERSTORY	October-12	October-13
	UPLAND FOREST UNDERSTORY[2/]	October-28	October-29
	UPLAND SAVANNA	October-12	October-12
GRADING			
	WEIRS	October-08	October-09
	WATTLES	October-10	October-10
ANIMAL CONTROL			
	FENCE[3/]	October-08	October-08

[1/]Understory planting contingent on achieving 80% full stocking in overstory.

[2/]Understory planting contingent on achieving 80% full stocking in overstory.

[3/]Fence necessary if plant material <5' tall at time of planting.

B. Proposed Hydrology

The current dominant hydrology driver for the bank site is direct precipitation, and that will continue under the proposed mitigation plan. This plan proposes to construct five steel-reinforced concrete weirs in the existing stream channels at strategic locations for the purpose of impeding drainage from the site and raising the local water table to the bankfull elevation. This will do two things: first, it will impede lateral subsurface drainage of most of the site during the wet months, resulting in slightly deeper inundation of the areas that currently experience inundation, increasing the size of the areas that experience inundation, as well as increasing the area of the site that experiences saturation within the jurisdictional wetland hydrology threshold. Secondly, because the impounded water will act like a reservoir and because it is located inside an intact riparian area, it will be more resistant to evaporation in the spring and early summer. This will have the effect of prolonging the duration of wetland hydrology over most of the site. In addition, the sponsors hope that some of the deeper pools will retain surface water throughout the summer.

The existing wetlands currently drain into the central two stream channels. The streams in turn currently empty into the deep drainage ditch along the property's

northern boundary near the northwest corner. From there the deep drainage ditch (from here on probably a channelized stream) extends north to Ferguson Creek Road. At Ferguson Creek Road there is a dam across the Long Tom River and an irrigation diversion structure. During the wet season the deep drainage ditch flows under Ferguson Creek Road northward and enters the Long Tom River at RM11.5. This connection constitutes a relatively permanent water (tributaries that have continuous flow at least seasonally (e.g. typically 3 months)) necessary for Federal jurisdiction under the Clean Water Act.

To complete the hydrology picture, during the irrigation season the streams on the bank site are dry, or at least not flowing off site. A splash board at Ferguson Road is opened and the water diverted at the Long Tom dam heads east in the south Ferguson Road ditch, eventually coursing through a series of ditches, streams and lakes and entering the Willamette River at RM154.

Regarding hydroperiod, this mitigation plan is intended to manage the direct precipitation, such as it might be in any given year, and deploy it across the site in three general zones: inundation equal to or greater than one foot deep (hereinafter referred to as "deep inundation"), inundation less than one foot deep (hereinafter referred to as "vernal pool"), and saturation within 12 inches of the surface. These zones are in addition to the existing slough, which this plan does not intend to alter in any way. The estimated extent of each of these zones is based on a detailed topographic survey conducted during the summer of 2007 (3" contours), and two assumptions – 1) that the water table represented by the weir spill inverts will extend at that elevation through the surrounding landscape (in other words, this is the elevation one would expect to observe "free water" in a soil pit); and 2) that there will be 2" of saturation above the free water. Using these assumptions the estimates can be summarized as follows: land below 309 feet elevation meets *'87 Manual* wetland hydrology criteria; land above 312 feet elevation should be upland; and land between these elevations will be either wetland or upland depending on location.

Deep inundation will be confined to the existing slough and stream channels behind the weirs. We anticipate maximum depths of 3-4 feet depending on the location to be achieved in November of normal and below-normal precipitation years, and in October of above-normal years. Once the water stacks up to the weir invert elevations it will spill over the weir at velocities consistent with pre-weir conditions. For weirs 2, 3 and 4 the spill drops will not be great because water will be simultaneously backing up downstream. Below weirs 1 and 5, however, the spill will drop onto the natural channel bed, and riprap will be installed to dissipate the energy and thereby avoid bed erosion, scour and undermining the weir footer. This plan anticipates that the duration of the deep inundation will be into July through most years, with some pools remaining inundated with a few inches of water clear through the onset of the next year's fall rains. We estimate that seasonal deep inundation and the open water in the existing slough will cover almost 3% of the bank site.

What we're calling vernal pools is intended to be those areas characterized in the *Willamette Valley HGM Guidebook* that meet all of the following criteria:

i. Herbs are generally shorter than 4 inches and comprise <80% cover during winter or early spring and
ii. Topography is basically flat, and
iii. Inundated to a depth of less than 6 inches for 2 or more continuous weeks , and
iv. Never shaded by trees, shrubs, or buildings, and
v. Not entirely a constructed ditch.

These areas currently manifest themselves in the grass seed fields as bare spots due to prolonged seasonal inundation that precludes dense vegetative cover. We anticipate that the proposed weirs and berms will cause these existing areas to expand and the inundation will deepen to not more than 12 inches (probably more like 6 inches on an area-weighted average basis). Once again we expect the areas to achieve their target hydrology depth in November in normal and above normal years, and in October during below normal years. We further expect the target hydrology to persist into July during normal and above normal years, and through May in below normal years. Water velocities in these areas are negligible because the primary direction is vertical (precipitation down and evaporation up).

The bulk of the proposed wetlands will be dominated saturated soil and localized very shallow ponding. This plan anticipates initiation of wetland hydrology in October in normal and above normal years, and in November during below normal years. We expect the hydrology to persist into July during normal and above normal years, and through May in below normal years. Water velocity concerns in this zone are not applicable.

The potential interaction with groundwater will remain the same as it has been historically except that the interaction may have a longer duration due to the impounding/hydrological dam effect of the weirs. There should be less chance of contamination due to the cessation of active farming.

No known monitoring data exists for the Long Tom Mitigation Bank Phase 1 site.

The existing streams have a soil substrate along with significant amounts of down and overhanging wood, typically not more than 8" in diameter. This wood is present along the length of the channels wherever it is adjacent to existing PFO wetland. When water is present in the channels it appears to move very slowly to almost imperceptively. No other riffles, pools or other noteworthy geomorphic features are present. As mentioned earlier, we expect that the deeper pools may be able to hold water year round once the weirs are built.

Also as mentioned earlier, the weirs, berms, and wattles are designed to operate passively and be maintenance-free. The manufacturer claims that the wattles (including netting) will degrade within 3 years.

C. Proposed Vegetation

Converting a site this large and with this many hydrological zones presents a practical logistical problem given the planting techniques at our disposal. Ideally we would be able to employ a no-till drill with a revolving set of seed boxes that could be switched out on the fly and GPS controlled in order to put exactly the right seed mix in the right spot. Lacking that, it is not practicable to achieve the same result and a compromise must be struck. In this case, the strategy employed was to no-till drill a common seed mix across the entire farmed site (upland and wetland) and let the individual species sort themselves out based on their ability to thrive in the hydrological zone they find themselves in. This will be described below as the "Composite Mix."

In addition, special mixes were broadcast in specific hydrological zones prior to drilling in the composite mix in an attempt to get the right species in the right place and have the drill mechanically press that seed into the soil in one pass. These areas and seed mixes will be described below as "Vernal Pool," "Forested Wetland," and "Forested Upland."

The species composition and proportions within each mix were determined based on the reference site species composition, commercial availability of the desired species, and seeding rates recommended by the City of Eugene in their standard low diversity/high density seed mixes. The reason the standard mix for low diversity was used is that it best reflected the number of species commercially available as seed, and we were comfortable that we would be able to augment the seeding results in the herbaceous stratum with RLC-7 plugs.

The following table details the proposed plant species list by habitat type, stratum, stock type, size, density and source.

TABLE 9. Plant list by habitat type, stratum, stock type, size, density and source.

HABITAT TYPE	ACRES	STRATUM	SPECIES	STOCK TYPE	AGE/SIZE	DENSITY[1/]	SOURCE[2/]
WV Wet Prairie	85.17						
		Herb	Beckmania syzigachne*	seed	N/A	3.27	PNWN
		Herb	Agrostis exarata*	seed	N/A	0.44	PNWN
		Herb	Deschampsia cespitosa*	seed	N/A	0.44	PNWN
		Herb	Cammassia leichtinii*	seed	N/A	0.34	PNWN
		Herb	Carex densa*	seed	N/A	0.33	Heritage
		Herb	Camassia quamash*	seed	N/A	0.33	PNWN
		Herb	Ranunculus orthorhynchus*	seed	N/A	0.33	Heritage
		Herb	Ranunculus occidentalis*	seed	N/A	0.33	Heritage
		Herb	Lotus unifoliatus*	seed	N/A	0.09	Heritage
		Herb	Lotus micranthus*	seed	N/A	0.09	Heritage
		Herb	Periderida oregana*	seed	N/A	0.09	Heritage
		Herb	Sisyrinchium idahoense*	seed	N/A	0.07	PNWN
		Herb	Lupinus polyphyllus*	seed	N/A	0.05	@
		Herb	Geranium oreganum*	seed	N/A	0.05	Heritage
		Herb	Carex unilateralis*	seed	N/A	0.01	@
		Herb	Carex feta*	seed	N/A	0.00	@
		Herb	Carex unilateralis	plug	RLC-7[3/]	35	@
		Herb	Carex feta	plug	RLC-7[3/]	35	@
		Herb	Carex obnupta	plug	RLC-7[3/]	35	@
		Herb	Juncus tenuis	plug	RLC-7[3/]	35	@
		Herb	Juncus accuminatus	plug	RLC-7[3/]	35	@

* Part of composite mix drilled in on 125.91 acres.
[1/] Density for seed is in bulk pounds per acre; density for plugs and rooted cuttings is in stems per acre.
[2/] PNWN = Pacific Northwest Natives, Albany OR; Heritage = Heritage Seedlings, Salem OR; @=Applied Technology, Jefferson

OR. All seed is sourced in the Willamette Valley, including plugs grown from seed. Carex spp. plugs will be grown from seed. Juncus spp. and Geum plugs will be grown from transplants puchased from Balance Restoration Nursery, Lorane OR. Spiraea rooted cuttings will be grown from cuttings taken from on-site, sites in Albany OR, and salvaged from the Battle Creek Golf Couse site in Salem OR. Fraxinus latifolia plugs will be grown from transplants purchased from Balance Restoration Nursery, Fourth Corner Nurseries, Bellingham WA, and/or Lawyer Nursery, Olympia WA. Populus trichocarpa will be grown from seed captured at the Applied Technology nursery.

[3/] RLC-7 = 7 cu. in. Ray Leach Cone; D40 = 40 cu. in. plug; SR3 = 3 gal. Super Roots® pot

TABLE 9. (continued)

HABITAT TYPE	ACRES	STRATUM	SPECIES	STOCK TYPE	AGE/SIZE	DENSITY[1/]	SOURCE[2/]
Vernal Pool	5.80	Herb	Alopecurus geniculatus*	seed	N/A	0.44	PNWN
		Herb	Glyceria occidentalis*	seed	N/A	0.44	PNWN
		Herb	Alisma plantago-aquatica	seed	N/A	3.28	PNWN
		Herb	Plagiobothrys figuratus	seed	N/A	0.86	PNWN
		Herb	Downingia elegans	seed	N/A	0.52	PNWN
		Herb	Eleoacharis palustris	seed	N/A	0.52	PNWN
		Herb	Juncus bufonius	seed	N/A	0.34	PNWN
		Herb	Juncus ensifolius	plug	RLC-7[3/]	103	@
		Herb	Juncus oxymeris	plug	RLC-7[3/]	103	@
Forested Wetland	8.25	Herb	Carex obnupta	seed	N/A	0.36	@
		Herb	Juncus patens	plug	RLC-7[3/]	364	@
		Herb	Geum macrophyllum	plug	RLC-7[3/]	36	@
		Herb	Carex obnupta	plug	RLC-7[3/]	364	@
		Shrub	Spiraea douglasii	r. cutting	D40[3/]	606	@
		Tree	Fraxinus latifolia	plug	D40[3/]	326	@
		Tree	Populus trichocarpa	plug	SR3[3/]	6	@
Shrub Wetland	3.02	Shrub	Spiraea douglasii	r. cutting	D40[3/]	6877	@
Forested Upland	21.36	Herb	Festuca roemeri*	seed	N/A	1.64	PNWN
		Herb	Danthonia californica*	seed	N/A	1.10	PNWN
		Herb	Prunella vulgaris*	seed	N/A	0.44	PNWN
		Herb	Bromus carinatus	seed	N/A	2.48	PNWN
		Herb	Elymus glaucus	seed	N/A	1.12	PNWN
		Herb	Achillea millefolium	seed	N/A	0.75	PNWN
		Herb	Lomatium nudicaule	seed	N/A	0.14	Heritage
		Herb	Asclepias speciosa	seed	N/A	0.05	Heritage
		Herb	Polystichum munitum[5/]	plug	SR3[3/]	100	@
		Shrub	Symphorocarpos albus[5/]	plug	D40[3/]	435	@
		Shrub	Amelanchier alnifolia[5/]	plug	SR3[3/]	5	@
		Tree	Quercus garryanna[4/]	plug	SR3[3/]	13	@
		Tree	Quercus garryanna[5/]	plug	SR3[3/]	400	@
		Tree	Pinus ponderosa[4/]	plug	D40[3/]	2	@
		Tree	Pinus ponderosa[5/]	plug	D40[3/]	75	@
		Tree	Calocedrus decurrens[5/]	plug	D40[3/]	25	@

* Part of composite mix drilled in on 125.91 acres.
[1/] Density for seed is in bulk pounds per acre; density for plugs and rooted cuttings is in stems per acre.
[2/] PNWN = Pacific Northwest Natives, Albany OR; Heritage = Heritage Seedlings, Salem OR; @=Applied Technology, Jefferson

OR. All seed is sourced in the Willamette Valley, including plugs grown from seed. Carex spp. plugs will be grown from seed. Juncus spp. and Geum plugs will be grown from transplants puchased from Balance Restoration Nursery, Lorane OR. Spiraea rooted cuttings will be grown from cuttings taken from on-site, sites in Albany OR, and salvaged from the Battle Creek Golf Couse site in Salem OR. Fraxinus latifolia plugs will be grown from transplants purchased from Balance Restoration Nursery, Fourth Corner Nurseries, Bellingham WA, and/or Lawyer Nursery, Olympia WA. Populus trichocarpa will be grown from seed captured at the Applied Technology nursery.

[3/] RLC-7 = 7 cu. in. Ray Leach Cone; D40 = 40 cu. in. plug; SR3 = 3 gal. Super Roots® pot

[4/]Oak savanna with 13 oaks per acre and 2 pine per acre over 6.95 acres.
[5/] Oak woodland planted at 500 trees per acre over 14.41 acres (80% oak/15% pine/5% cedar) with pine and cedar locations based on

random numbers.

The Willamette Valley Wet Prairie habitat type is proposed as all herbaceous and is predominantly started from seed. Three species of *Carex* and two *Juncus* species

will be plugged in at a rate of 1000 plugs per species per year over the three years following drilling.

Likewise, the vernal pool habitat type is proposed as all herbaceous and will be started primarily from drilled seed. Two additional *Juncus* species will be plugged in at a rate of 600 plugs per species per year over the three years following drilling.

The shrub wetland habitat type will be planted with one-year old rooted cuttings grown in D40 containers. They will be planted on approximately 2 ½ foot centers and it is expected that they will form a thicket at 100% stocking within 4 years.

Both the wetland and upland forested habitat types as proposed here represent departures from the reference site concept. In the classical sense reference sites are supposed to serve as planting templates in regards to species composition and planting density, and this is useful when the plant community dynamics are able to dominate the site within a few growing seasons. Emergent and even shrub wetland communities are examples in point. Forest restoration is a different matter because the species, and particularly densities present at the genesis of a stand, are very different than what exists decades hence when forested functions are being provided. According the *'87 Manual* a woody plant is not a tree until it is 3" d.b.h.; according to Cowardin a forest does not exist until there is at least 30% cover of woody stems equal to or greater than 3" d.b.h. In addition, it is widely known that forest stands often begin with thousands and even tens of thousands of seedling per acre, and that very quickly interspecific competition between seedlings reduces their numbers. This interspecific tree competition is a dominant process within forests, and it is largely what determines living tree diameter and gives rise to snags and down woody debris – the very structures that the *Willamette Valley HGM Guidebook* measures as surrogate components for several functions.

Since reference sites are not particularly useful for a restorationist in determining how many trees to plant, what is a reasonable alternative? Since the 1950's the USDA Forest Service has conducted silvicultural research in the hardwood forest types of the East and Midwest aimed at understanding how trees and stands grow and respond to disturbance. Although their primary focus has been on commercial timber species and developing stocking guides to help foresters determine when to cut and how much to cut, the underlying concepts about stand dynamics can help answer several questions germane to this mitigation plan including:

- How many trees should I plant?
- How many years will it take for the canopy to close and the initiation of snag formation?
- How big will the trees be at canopy closure (and by extension, how big will the associated snags be)?
- How much and how fast will the functional lift rates increase as the residual trees get bigger and more types and quantities of snags and deadwood accumulate?

There are no stocking guides specifically available for *Fraxinus latifolia* or *Quercus garryanna*. Fortunately, the research has shown very little variation in the stocking guides across a wide geographical and silvicultural range including north central mixed hardwoods (oak-hickory-ash dominated), northern hardwoods (New England sugar maple–beech-yellow birch), and southern bottomland hardwoods (oak-hickory-ash). Lacking anything better, we are proposing to use the stocking guide for southern bottomland hardwoods for our proposed forested wetland habitat type, and the north central stocking guide for our proposed forested upland habitat type (excluding oak savanna). These stocking guides are presented below.

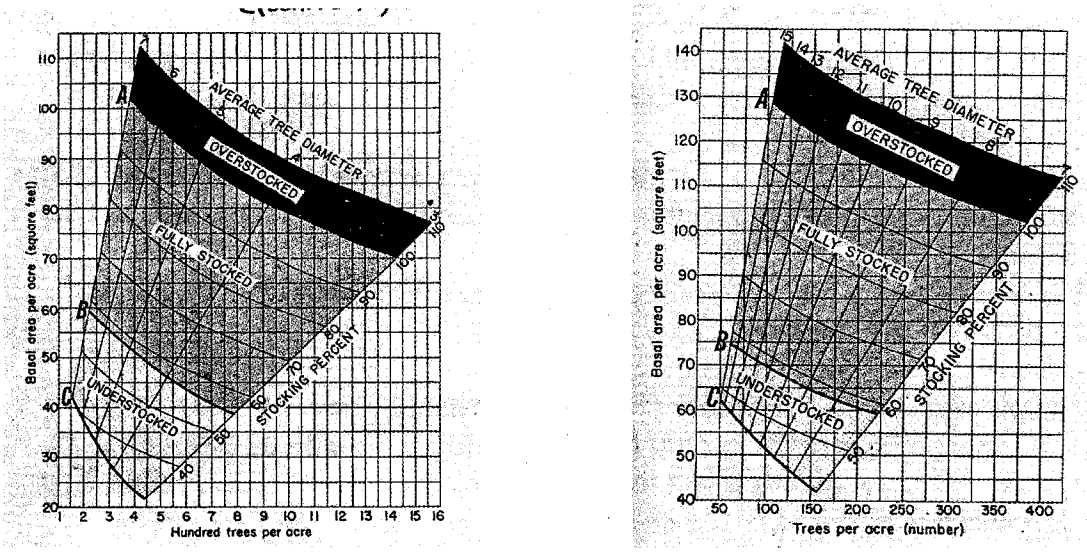


Figure A. North Central hardwood stocking guides A (left) and B (right).

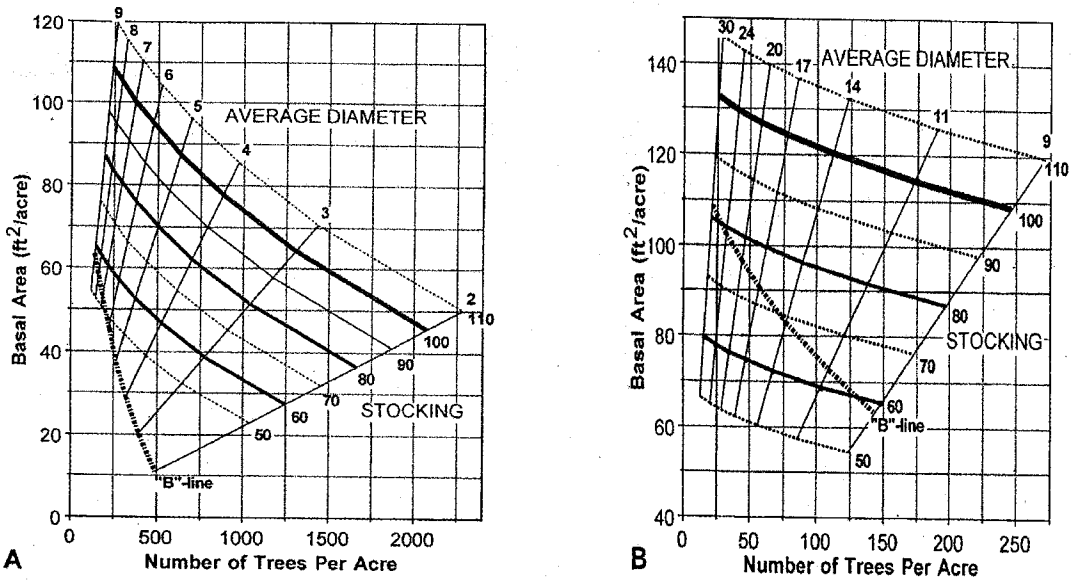


Figure B. Southern bottomland hardwood stocking guides A and B.

Very briefly, these stocking guides work as follows:

1. The vertical lines in the guides are the numbers of trees per acre; the horizontal lines correspond to the basal area per acre ($ft.^2$); the diagonal lines going from the lower left to the upper right are the average tree diameter lines (d.b.h. in inches); and the diagonal lines running from the lower right to the upper left are the percent stocking lines (you may think of percent stocking as roughly percent canopy cover).
2. For example, assume you're using the southern bottomland hardwood stocking guide A, and you plant 500 trees per acre. How big will the trees be when they achieve 100% full stocking (in other words, the earliest time interspecific tree competition will initiate snag formation)? Answer: find 500 trees per acre along the x-axis. Follow that line vertically up until it intersects the 100% full stocking line. From that intersection run parallel to the 6" diameter line. The answer is about 5.8 inches d.b.h.
3. Since 5.8 inches is the average diameter, and since one would expect the snags to form out of the suppressed trees, one can predict the first snags will be less than 5.8 inches d.b.h.
4. A rule of thumb is the more trees you plant, the smaller they are at canopy closure or 100% full stocking.

Foresters managing stands for timber production strive to keep the stand in the "fully stocked" range (see north central hardwood stocking guide above, figure A). They plan their thinnings as the stand approaches 100% full stocking, and when they cut, the residual stand after harvest should be no lower than the "B-line," (roughly 55% for the north central hardwood stocking guide, for example). By doing so they "capture the mortality," meaning that they send to the mill those trees that would otherwise start dying and providing snags and down wood.

Restorationists, on the other hand, want this dead wood to stay on site. A forest stand left to thin itself through interspecific tree competition will grow beyond 100% stocking, and then have an episode of relatively severe mortality where many of the trees in the suppressed and intermediate crown classes succumb. The live stand naturally falls back to around the B-line level of stocking. One can predict the residual trees per acre and residual basal area because the mortality follows down the diameter line. For example, let's say we're on the north central hardwood stocking guide, we're at 225 trees per acre, 110% full stocking and 10" average d.b.h. Suppose that's all the stand can take and it crashes down the 10" diameter line to the B-line at about 125 live trees per acre and 58% full stocking. One hundred trees per acre have died — snags and down wood. The remaining live trees will grow up the 125 trees per acre line as described before, and when they reach 100% full stocking they will average roughly 13.5" d.b.h. The stand will continue this saw tooth pattern of growth and self thinning over and over again, each time killing off those trees in the suppressed and intermediate crown classes, until some sort of catastrophic event occurs and wipes the stand out or natural succession converts the stand to another plant community.

So the question from a compensatory wetland mitigation standpoint becomes:

"How many trees do I need to plant to initiate dead tree formation large enough to count as functional lift as soon as possible?"

The last piece of the puzzle for hardwoods is provided by the following research-based rules of thumb regarding diameter growth —

In 10 years trees of the following diameters	will grow
Less than 6"	3"
6-12"	3.5"
14-18"	4"
20-28"	4.5"
30" or more	4"

(Putnam, J.A., G.M. Furnival, and J.S. McKnight. 1960. *Management and inventory of southern hardwoods*. USDA For. Serv. Agric. Handb. No. 181. Washington, DC. 102p.)

Using the stocking guides and the growth rules of thumb the following chart can be calculated showing years to full stocking by trees per acre.

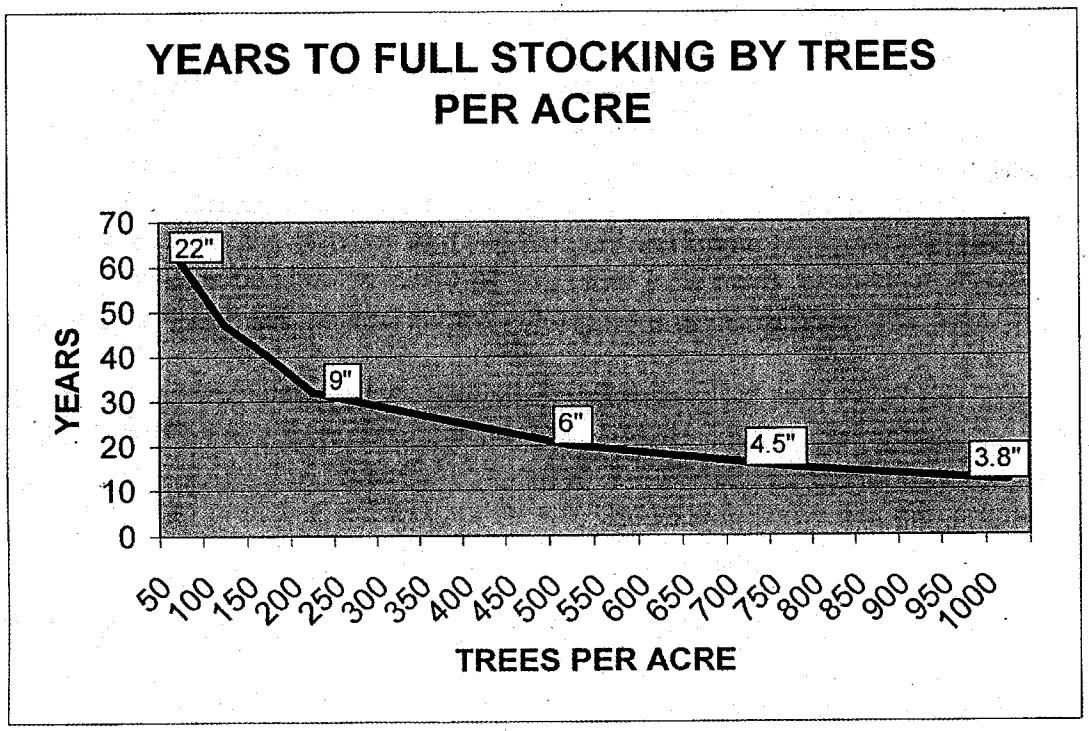


Figure C. Years to full stocking by trees per acre based on the southern bottomland hardwood stocking guides and Putnam's 10-year diameter growth rules of thumb. Diameters shown are average stand d.b.h.

Figure C shows several things. First, it shows that if your objective is minimum 4" snags (the minimum snag size recognized by the *Willamette Valley HGM Guidebook*), then the average d.b.h. at the time of crown closure (i.e. full stocking) needs to be greater than 4" because the trees that are going to die first are the suppressed and intermediate crown classes, and their diameters will be on the low end of the diameter distribution. This means you're probably going to need to be at an average of about 6", or about 500 tree per acre at time of planting. More trees than that and the snag diameters will probably be less than 4"; less trees than that and it's going to take more time to achieve crown closure.

Secondly, there appears to be a range of planting densities between about 500 trees per acre and 200 trees per acre where the slope of the curve is very flat – a ten year difference in wait time literally cuts the required number of trees in half. From a business standpoint, this has important cost and profitability ramifications.

Lastly, at planting densities less than 200 trees per acre the slope of the curve becomes very steep, and the time to crown closure becomes generational in magnitude, and the temporal loss of forest function may be in the range of unacceptability. At 48 trees per acre *Fraxinus latifolia* just barely achieves crown closure without any prospect of subsequent mortality because it has reached its characteristic crown spread. Less than 48 trees per acre and the stand will never achieve 100% stocking and the only snags and down wood that would occur would be from catastrophic events such as lightning strikes.

Based on the foregoing analysis, this mitigation plan is based on a 500 tree per acre planting standard because we believe it optimizes planting cost versus canopy closure rate, the initiation of snag and down wood formation, and consequently, functional lift. All tree plantings will be in rows 10 feet apart to facilitate ATV-based site preparation spraying and weed control. Within row spacing will vary depending on area as explained below. Even so it will take 20 years at least to achieve canopy closure, with natural snag formation taking who knows how many years after that.

With that said, the Long Tom Mitigation Bank presents an opportunity to contribute to the body of science regarding forested wetland restoration. Because the proposed forested wetland enhancement areas are naturally separated in to four zones by the existing streams, we are proposing to test the validity of the stocking guides and Putnam's rules of thumb by stratifying the tree planting as follows:

Enhanced PFO areas 1, 2, 3 and 4 — 200 trees per acre at within row spacing of 21.5'
Enhanced PFO areas 6 and 7 — 300 trees per acre at within row spacing of 14.5'
Enhanced PFO area 8 — 400 trees per acre at within row spacing of 11.0'
Enhanced PFO area 5 — 500 trees per acre of 8.5'.

This experimental design will result in a weighted average planting density of 326 trees per acre. The independent variable will be planting density;
the dependent variables will be years to 100% stocking, d.b.h. at 100% stocking, initiation of snag formation, d.b.h. of first snags.

The reviewer will also note that we are proposing planting the forested wetland understory 17 years after planting the trees. This is our estimate (using the methods explained above) of when the stand will achieve 80% full stocking (assuming 500 trees per acre planting density). We contend that the understory will survive and expand better under canopy than if it were planted at the time the overstory trees are put in. This is also a testable hypothesis, and we can plant the entire understory at the triggering event of enhanced PFO area 5 achieving 80% full stocking. The remaining areas will be at less than 80% full stocking, and it will be able to be seen if there is any difference in cover of the planted understory species based on overstory stocking at time of planting. In addition, it will be useful to find out if the differences, if any, persist as the stands grow toward full stocking.

The proposed forested upland habitat types (oak savanna and oak forest) contain Willamette Valley ponderosa pine, and a brief explanation of why is appropriate here.

Willamette Valley ponderosa pine (*Pinus ponderosa*) is a genetically distinct race adapted to the mild wet winters and dry summers of the Willamette Valley. Although its best development is on well drained river terraces and is commonly associated with *Populus trichocarpa*, it tolerates heavy clay soils and prolonged seasonal saturation. Though never a dominant forest type, scattered remnant stands and individuals, university pollen studies, and sawmill records from the earliest white settlements attest that it was once much more prevalent than it is today. Because it was virtually extirpated by the time the state of the environment had become of concern, its past role in the larger landscape ecology is rarely speculated upon, and its conservation and restoration is hardly ever mentioned in conservation strategies. It is unknown whether there were ever any wildlife-habitat relationships associated with Valley pine, or whether any such linkages could be reestablished. Yet one can only speculate that had its demise been witnessed by this generation of conservationists it would be a listed species of some kind today.

Thanks largely to the efforts of the Willamette Valley Ponderosa Pine Conservation Association, genotypes from across the Willamette Valley have been preserved and pine seed is becoming available. Several nurseries in the valley are producing seedlings and plantations are being planted, primarily for timber production on sites too wet to support Douglas-fir, but interest in its use for carbon sequestration and conservation is increasing. Consequently, the Sponsors believe the Long Tom Mitigation Bank Phase 1 presents us with an opportunity to bring Valley pine back into the mix, and reviewers will find it specified as a 20% associate species in both the proposed savanna and forested upland habitat types. Due to its rapid early height growth it can be expected to overtop neighboring *Quercus garryanna* stems;

however, by scattering the pine as individuals this should not pose a threat to the oak stand as a whole.

The proposed savanna habitat type planting density is specified at 15 trees per acre based on recommendations by Bruce Campbell (*Restoring Rare Native Habitats in the Willamette Valley*, 2004), with an 80%/20% oak/pine split. The trees will be roughly 54' apart. In this type we anticipate the possibility of killing (by felling, girdling or herbicide injection) trees as necessary to keep stocking at less than 25% (Larsen, Eric M. and John T. Morgan. 1998. *Management recommendations for Washington's priority habitats – Oregon white oak woodlands*. Washington Department of Fish & Wildlife. Olympia WA. 51p). Assuming 40' crown diameters at maturity for *Quercus garryanna* (*Reference Guide*. Undated. J. Frank Schmidt & Son Company. Boring OR. 76p), this would leave approximately 9 trees per acre.

Similarly, the proposed forested upland habitat type is also an 80%/20% oak/pine split with a planting density of 500 trees per acre. Planting rows will be 10' between rows and the trees will be 8.5' apart within the rows. In this type we anticipate the possibility of limited non-commercial thinning intended to promote relatively widely spaced, heavily branched "open-form" oaks. As with the proposed forested wetland, we anticipate that it will take approximately 17 years to achieve the 80% stocking that we believe will be conducive to successfully planting the specified shade-tolerant understory shrub and herb strata.

D. Planned Habitat Features
None

E. Planned Buffer
This topic was addressed earlier in section III.A., and that explanation is repeated here.

The proposed oak-pine forested uplands are located along the periphery of the bank property and are intended to provide buffer between the bank and grass seed agriculture to the east, a wildlife travel corridor along the southern boundary between the slough and the streams along the southeastern boundary, and interspersion of ODFW critical habitats with the proposed wetlands. The *Willamette Valley HGM Guidebook* does consider land use surrounding the wetland assessment unit at various scales, and the proposed upland forests provide a demonstrable gain in the following functions:

- Invertebrate habitat support - +0.07
- Primary Productivity – +0.06

Measured from the wetland/upland boundary, the buffer width is set at one potential tree height for Valley ponderosa pine (180 feet according to *Trees To Know in Oregon*, Oregon State University Extension Service EC-1450, 2005). The remaining small islands totaling 0.29 acre will be planted but will not receive credit.

In addition, the *Guidebook* does include number and distribution of Cowardin vegetation classes in its scoring, and in general, more Cowardin classes and more interspersion are considered good things. Reason dictates that one more vegetation class (albeit upland) interspersed with the Cowardin classes would also result in some wetland functional gain, particularly in regards to species that require both habitat types in close proximity for their life functions. Although the *Guidebook* does not quantify this gain, just because it is not measured does not mean it is not real or significant. Consequently, the Sponsors believe that 10:1 is a fair mitigation ratio to apply to these forested upland features because they affect the adjacent wetlands much as do buffers, and this ratio has been customarily applied to buffers by the MBRT in the past. The physical characteristics of those areas are described in detail in Section IV.C.

No other features such as interpretive signs, trails, etc. are envisioned. The Sponsors do intend to install steel farm gates at the access points, and to sign the perimeter fence against trespass. In addition, when the current perimeter sheep fence is ready for replacement it will be replaced by a 3-wire high tensile fence.

V. Vegetation Performance Standards

EcoBank will submit one post-construction wetland delineation report reresenting a normal precipitation year for MBRT approval to certify acres achieving *'87 Manual* wetland criteria. Any shortfalls in the acreages projected in this plan to be gained from restoration or creation will be prorated according to the respective ratios as shown in Exhibit D.

For our purposes here "normal" is defined as the cumulative water year precipitation up to the time of the delineation fieldwork falling within the ±30% range for the same months for the Eugene Airport station as published by WETS.

Credits in excess of the advance credits will be released upon achievement of the minimum performance standards set forth below by habitat type.

For the purposes of these vegetation performance standards, relative plant cover per stratum will be calculated at each sample plot as follows:

(Percent areal cover of species *x*)/(Total percent areal cover of all species)*100

A. Emergent/Herbaceous wetland management units

These standards shall apply to mapped enhanced vernal pool and restored, created and enhanced wet prairie habitat types.

1. The areas shall be wetland as determined using the *'87 Manual* and applicable guidance and supplements as of 31DEC07.
2. A minimum of 55% of the mean relative plant cover for the habitat type as a whole (including substrate) is comprised of native species. Relative plant

cover is determined by dividing the percent cover of each species in a sample by the total percent cover of all the species in the sample. Mean relative percent cover by habitat type is the sum of the sample point native cover percentages divided by the number of samples in that habitat type. Plant nativity shall be as set forth in *Species Compositions of Willamette Valley Vegetation Types* prepared by Kathy Pendergrass, dated August 11, 2003; and

3. No more than 15% mean relative percent cover by habitat type as a whole is comprised of non-native invasive species as set forth in Exhibit C1; and
4. The moisture index as calculated in Marshall, appendix VII, is equal to or less than 3.0; and
5. For FACW-dominated PEM communities, a minimum of 10 wet prairie cohort species as set forth in Exhibit C2 be present in the pertinent sample plots by year 5.

B. Forested wetland management units

These standards shall apply to mapped restored PFO and enhanced PFO habitat types.

1. The areas shall be wetland as determined using the *'87 Manual* and applicable guidance and supplements as of 31DEC07; and
2. A minimum of 55% of the mean relative plant cover for all strata of the habitat type as a whole (including substrate) is comprised of native species; and
3. No more than 15% mean relative percent cover by habitat type as a whole is comprised of non-native invasive species; and
4. The moisture index of the herbaceous and shrub strata is equal to or less than 3.0; and
5. The mean tree d.b.h. for the largest 85 percent of the stems shall be at least 3"; and
6. By the end of six full calendar years after planting there shall be a minimum of 160 free-to-grow trees per acre.
7. No more than 5% of the live tree stem count shall be comprised of non-native tree species.

C. Shrub wetland management units

These standards shall apply to the mapped enhanced PSS habitat type.

1. The areas shall be wetland as determined using the *'87 Manual* and applicable guidance and supplements as of 31DEC07; and
2. A minimum of 55% of the mean relative plant cover for all strata of the habitat type as a whole (including substrate) is comprised of native species; and
3. No more than 15% of the mean relative percent cover for all strata of the habitat type as a whole is comprised of non-native invasive species; and

4. The moisture index of the herbaceous and shrub strata is equal to or less than 3.0.

D. Upland savanna management units

These standards shall apply to the mapped proposed savanna habitat type.

1. The areas shall be upland as determined using the *'87 Manual* and applicable guidance and supplements as of 31DEC07; and
2. A minimum of 55% of the mean relative plant cover for all strata of the habitat type as a whole (including substrate) is comprised of native species; and
3. No more than 15% of the mean relative percent cover for all strata of the habitat type as a whole is comprised of non-native invasive species; and
4. The moisture index of the herbaceous stratum is greater than 3.0; and
5. There shall between 15 and 25 live trees per acre at least 3" d.b.h. and free-to-grow, and at least 9 of which shall be *Quercus garryanna*. Free-to-grow is here defined as trees that are at least 5' tall with at least one-third of the tree height in live crown and which has not been damaged to the extent that continued height growth or survival is in doubt.

E. Upland forest management units

These standards shall apply to the mapped proposed forested upland habitat type.

1. The areas shall be upland as determined using the *'87 Manual* and applicable guidance and supplements as of 31DEC07; and
2. A minimum of 55% of the mean relative plant cover for all strata of the habitat type as a whole (including substrate) is comprised of native species; and
3. No more than 15% mean relative percent cover for all strata by habitat type as a whole by non-native invasive species; and
4. The moisture index of the herbaceous stratum is greater than 3.0; and
5. The mean tree d.b.h. for the largest 85 percent of the stems shall be at least 3"; and
6. By the end of six full calendar years after planting there shall be a minimum of 160 free-to-grow trees per acre.
7. No more than 5% of the live tree stem count shall be comprised of non-native tree species.

VI. Hydrology Performance Standards

The minimum standard for wetland hydrology success shall be inundation or saturation/free water within 12" of the surface for 14 consecutive days within the growing season. Growing season is here defined as the time between the last date of 28°F or lower in the spring and the earliest date of 28°F in the fall five years out of ten. For the Long Tom Mitigation Bank Phase 1 this would be March 7th through November 24th. Areas that meet or exceed this standard are wetland (assuming the jurisdictional

criteria for vegetation and soils are also met); areas that do not are upland despite meeting the jurisdictional criteria for vegetation and soils.

VII. Site Maintenance

A. Maintenance Plan & Schedule

This plan anticipates immediate browsing pressure from deer (*Odocoileus columbianus*) on the forested plantings. We are prepared to counter this threat in two ways. First, the nursery stock for the PFO plantings were started in 2007. An unusually wet fall precluded planting, and the trees will be carried over at the nursery for planting in the fall of 2008 by up-potting them from D40 plugs to SR3 containers. It is altogether likely that the trees could be 5' or taller by the time they are planted, and as such the terminal bud would be beyond the reach of most deer. On the other hand, if this scenario is overly optimistic, we have budgeted to construct a 5-wire electric fence with a solar charger (based on an ODFW design) to go around the proposed PFO zones (see figure 7a). This fence would remain operational until the trees are free-to-grow. It would then be removed and re-built to protect subsequent upland forest plantings. Upland savanna plantings will be individually caged using hardware cloth and wooden stakes.

Beaver (*Castor canadensis*) sign has been observed on the subject property, but it is old. Should beaver return and threaten to degrade the wetlands below standards, trapping would likely be the remedy we employ.

Nutria (*Myocastor coypus*) sign has not been observed, but they are so ubiquitous that we have to give them due consideration. Nutria can be problematic on herbaceous plantings, particularly on herbaceous plugs soon after planting and before they root in the native soil. Fortunately the plug planting density is not great and nutria would have to be lucky to bump into a fresh plug here and there. Vigilance and trapping and/or shooting will be necessary if this threat materializes and the damage is unbearable.

Geese (*Branta canadensis*) could be challenging on newly drilled areas. If damage is observed we will resort to hunting pressure as practicable, and harassment techniques commonly employed by grass seed farmers in the area.

Lastly, mice (*Peromyscus maniculatus*) and voles (*Microtus canicaudus*) can wreak havoc on young tree plantations by girdling seedlings. We are fortunate in that the existing wetland and upland forests are rich in snags, providing raptors with plentiful perch sites. In addition, we anticipate doing strip site preparation and subsequent weed control to limit herbaceous cover immediately around the seedlings. In the event this threat becomes problematic we will resort to physical barriers such as hardware cloth exclosures.

All proposed plantings will take place in the fall; consequently, no supplemental irrigation is anticipated. Planting failures will be analyzed for root cause and re-

planting scheduled for the earliest opportunity commensurate with the root cause analysis, and species/stock type availability.

B. Invasive Species Control Plan

Invasive plant species will be a perennial problem. We recognize that propagules will be transported in by waterfowl, terrestrial animals, and by flood events that bring water on site from outside the property. Since it is impossible to keep all invasive species out, our control plan rests on two actions:

1. Work to eradicate existing populations. *Phalaris arundinacea* is currently present in the stream channels where forested overstory is lacking, and as a dominant understory in existing PFO areas 1 and 2. The control strategy is to mow these areas as soon in the year as conditions permit, mow repeatedly as necessary to keep the height down, and then to spray with glyphosate during the stage known as "late-green." This stage is the time when the plant is still green just before seasonal dieback.

   In addition, *Rubus discolor* is present in patches within the existing forested uplands. Here again the strategy is to cut the plants before flowering and to spray the sprouts in the fall with metsulfuron or another appropriately labeled herbicide.

2. Vigilance – early detection – prompt action. It cannot be predicted when or where non-native invasives will strike; consequently, the Sponsors are prepared to exercise constant vigilance. This means that in addition to timely patrols in early spring, late spring and mid- summer specifically for the purpose of spotting weeds early, we will keep our eyes open whenever we are on the property for any purpose. When weeds are noticed they will be dealt with promptly – by hand pulling on the spot if the infestation is small, or by marking for subsequent spraying if necessary.

By working from a posture of zero-tolerance to eradicate existing non-native invasive populations, and by exercising vigilance – early detection – prompt action, we believe we can effectively manage non-native invasives and consistently score below the 15% cover threshold.

VIII. Monitoring Plan

A. Data to be collected and reported, how often and for what duration

The monitoring plan is designed to provide the MBRT with objective data and analysis necessary to determine if and when credits may be released due to the achievement of performance standards. The monitoring plan consists of two elements: vegetation monitoring and hydrology monitoring (see figure 7b).

Vegetation — Vegetation monitoring will consist of annual measurement of 130± permanent fixed plots located on a systematic grid commencing from a random starting point.

The herbaceous stratum will be sampled by an independent third party botanist. Sampling will occur in mid-May of each year. The sample will be a 1 sq. meter quadrat placed such that the southwest corner of the quadrat touches the permanent plot monument (in other words, the quadrat is sampling the northeast area around the monument). The observer will estimate by eye and record the relative percent cover of all species rooted in the quadrat. In addition, the observer will note all species present but not otherwise recorded between sample quadrats.

The shrub stratum will be sampled by an independent third party botanist. Sampling will occur in mid-May of each year. The sample will be a 10 sq. foot circle located with the permanent plot monument placed in the center. The observer will estimate by eye the relative percent cover of all shrub species rooted in the circle. In addition, the observer will note all shrub species present between sample points.

The tree stratum will be sampled by EcoBank LLC. Sampling will occur in late July of each year. The sample will consist of a 37.2' radius circle (0.10 acre) centered on the permanent plot monument. The observer will measure percent cover using a hemispherical densitometer placed at plot center. The observer will also record the species, measure the d.b.h., and note the state (live, snag by class, or down wood by class) of all trees rooted within the sample plot.

The controlling metric of interest will be the mean percent relative cover of native plant species in all strata by habitat type. Using the controlling metric of interest, the number of samples will be adjusted to achieve a minimum of 10% sampling error at the 67% confidence interval for all strata within each habitat type. For monitoring purposes vernal pool and wet prairie samples will be combined.

In the event statistical analysis indicates additional samples are required to achieve the target sampling error, the additional sample points will be established using a four-step procedure. The first step will be to generate a list of random numbers from 1 to 130 standing for the existing sample points. The second step will be to generate a list of random numbers from 37.2 to 170.8 (this is the range of distances between sample points such that two adjacent forest sampling points cannot overlap). The third step is to generate another list of random numbers consisting of 1, 2, 3 and 4, standing for north, east, south and west respectively. With the three lists side-by-side, select the first numbers from each list — this 3-number combination indicates the existing sample point, how far to offset the new sample point from it, and which direction from the existing sample point to offset the new sample point. Repeat this process by going down the list until the new number of samples is achieved, making certain the new sample points fall within the habitat type(s) of interest. Set new monuments, do the fieldwork and re-run the statistics to verify that the new expanded sample satisfies the sampling error threshold.

Annual monitoring reports shall be due by June 1st of each year commencing with 2009, and shall continue for 3 years following final credit release and the signing of a long-term steward. Herbaceous and shrub data shall be current; tree data shall be

from the previous summer. The reports shall include analysis (in graphical form whenever feasible) indicating the current vegetation status and trends of each habitat type relative to the performance standards listed above. Current year raw plot vegetation data shall be included as an appendix.

Hydrology — Hydrology monitoring will consist of daily measurement of shallow groundwater at 55 electronic self-monitoring wells located so as to provide the objective data necessary to prove whether wetland hydrology has become established at proposed areas of wetland restoration and creation (see figure 7b). In addition, the well data will be critical to support the upland/wetland boundary in the certifying wetland delineation.

The wells will measure and store daily measurements of the depth below the surface to free water. We shall assume a saturated capillary fringe of 2" above the free water. The data will be downloaded at least monthly. In addition to the well data, monthly water depth measurements will be recorded at each of the weirs.

The data will be analyzed and presented in each monitoring report as a drawing with a hydrology layer on top of the base topography showing lines of maximum inundation and saturation for at least two consecutive weeks. Depth classes shall be as follows:

Saturation between 12" and the surface
Saturation at the surface
1-3" inundation
3-24" inundation
2-6' inundation
>6' inundation

Hydrology monitoring will commence upon completion of weir construction and will continue until the new wetland delineation is concurred with by DSL. Once the new delineation is approved the wells will be pulled and used on other projects.

The new wetland delineation report will be submitted at such time as the Sponsors believe that the bank is hydrologically stable and the vegetation is on a trajectory to success. The Sponsors will not file the new wetland delineation report until all wetland plantings have been completed (except for the enhanced PFO understory), have been monitored for at least 3 years, and the minimum performance standards for emergent/herbaceous wetland management units and shrub wetland management units have been met for three consecutive years.

Permanent Photo Points — At least one permanent photo point will be established for each of the following habitat types:

- Proposed forested upland
- Proposed savanna upland

- Restored PFO wetland
- Enhanced PFO wetland
- Enhanced PSS wetland
- Enhanced PEM vernal pool wetland
- Enhanced PEM wet prairie wetland

The photo points will be determined during first year monitoring and will be located at the vegetation monitoring sample points that most closely represent the mean native relative native plant cover for the respective habitat type.

Wetland Delineation — Reviewers will note certain discrepancies between the wetland delineation of existing conditions and the proposed conditions map. Specifically, those discrepancies consist of areas along Cox Butte Road and between the U11 area on the site map (figure 1) and the proposed forested upland area 8 on the Exhibit B map (figure 7a). In both instances the delineation is calling certain areas farmed wetland while the post-project projection is calling these areas upland. Since nothing in the mitigation plan is designed to convert existing wetland into upland, either the delineation is wrong or the post-project projection is wrong.

Since the practical effect of this discrepancy is simply an adjustment to the final number of credits, we believe the post-project wetland delineation will remedy the current uncertainty if it can be agreed to that all upland areas existing post-project had to also exist currently as uplands.

IX. Adaptive Management Plan

A. Identification of potential challenges that pose a risk to project success.

The Sponsors consider the following challenges to be within the realm of possibility and warrant contingency planning:

- Drought – particularly during early plant establishment
- Flood
- Wildfire
- Earthquake
- Vandalism

B. Discussion of potential remedial measures in the event mitigation does not meet performance standards in a timely manner.

- Drought — spring droughts are not uncommon in the Willamette Valley. Fall planting is specified in this mitigation plan as a means to directly avoid the losses that can be incurred due to unpredictable spring droughts. As the water budgets show, and experience has verified, it only takes about 10 inches of cumulative rainfall in the fall for wetlands to become fully charged, and it would be an unusual winter indeed that did not have at least that rainfall amount. That fact, coupled with the effect of the weirs extending the period when wetland hydrology prevails should prevent

catastrophic losses due to drought. If those measures do not prevent losses, then the Sponsors will simply have to re-plant.

- Flood — catastrophic floods are also not uncommon. The most likely effect is that the Willamette and Long Tom Rivers would back up onto the site temporarily, depositing a lot of weed seeds wherever the floodwaters reached. This could create a land manager's worst weed nightmare: a low level but widespread infestation by one or more non-native invasive species. In these situations spot spraying is not feasible, and the Sponsors will likely have to site prep. spray the affected areas and re-plant if the problem exceeds the success thresholds.
- Wildfire — wildfires can be caused by intentional or accidental human activity or from natural causes such as lightning strikes. Fortunately, all of the habitat types on the bank site that would be subject to burning are fire types. The hazard would be if the fire burned before the planted trees achieve sufficient bark thickness to be able to withstand burning. Total loss would trigger re-planting; partial loss could be analyzed using the stocking guides and a decision made by the Sponsors in conjunction with the MBRT whether re-planting and at what density would be desirable or not.
- Earthquake — earthquakes would be problematic only to the extent that they could damage the weirs. If the stresses involved are more than the concrete and steel can handle, the most likely effect is that the weirs would crack and no longer hold back water. Since the weirs are integral to the site hydrology, they would have to be promptly repaired or re-built.
- Vandalism — the Sponsors recognize that large wet sites out in the middle of no where are tempting for off-road vehicle enthusiasts. This problem can be particularly troublesome in situations where the property in questions appears vacant or abandoned. We intend to deter that temptation through 4 mechanisms: 1) gates and fences kept in good repair; 2) well maintained signage; 3) not allowing garbage to build up; and 4) frequent presence on the property. In the event the property is breached, we will have to make a case by case determination on whether to re-grade and re-plant the damaged area, or let nature heal it.

C. Description of procedures to allow for modifications of performance standards if mitigation projects are meeting mitigation goals, but in unanticipated ways.
Section VIII.C. of this MBI provides the means by which the MBI (including the performance standards) can be modified. The Corps, DSL or the Sponsors can initiate the modification process by notifying the other parties of their desire to do so and the nature of the proposed modification. Modifications can only take effect if all three parties agree.

X. Financial Assurances

A. For each of the following, identify party(ies) responsible to establish and manage the financial assurance, the specific type of financial instrument, the method used to estimate assurance amount, the date of establishment, and the release and forfeiture conditions:

1. **Construction phase**
2. **Maintenance**
3. **Monitoring**
4. **Remedial measures**
5. **Project success**

EcoBank LLC shall be the party responsible for establishing and managing the financial assurance associated with all the phases listed above as well as all credit sales made prior to DSL and Corps certification.

Total estimated project cost information is presented in Exhibit C3. Evidence of access to sufficient financial resources necessary to implement this plan is presented in Exhibit C4.

B. Types of assurances

EcoBank LLC will secure all advance credits using instruments allowed under OAR 141-085-0176. The amount of the financial security will be set by DSL based on the greater of the statewide average for in lieu of mitigation or the cost of mitigation bank credits within the Long Tom Mitigation Bank's service area, as specified in OAR 141-085-0176(5).

In order to minimize financial assurance costs, EcoBank LLC is also proposing that the advance credits released to the Sponsors be held in a virtual draw account, and that financial securities will be procured and presented to DSL as the credits are actually sold. For example, if the MBRT approves an advance release of 30% of the projected credit yield, the draw account would have 18.00 credits in it (0.30*60.00 credits=18.00 credits). Prior to any sales, EcoBank LLC could "draw" credits (say 5.00 credits, for example) by presenting DSL with a security instrument sufficient to cover the entire value of those credits. Those credits would then be available to EcoBank LLC for immediate sale or use. As credit sales materialize, EcoBank LLC would continue to draw blocks of credits, up to the cumulative maximum of 18.00, in whatever size blocks it deems necessary; however, no credits would ever be available for sale or use unless adequately secured.

C. Schedule by which financial assurance will be reviewed and adjusted to reflect current economic factors.

According to OAR 141-085-0176(5) the amount of financial security shall be set annually by DSL. EcoBank LLC is proposing to create a secured bank interest-bearing money market account for the purpose of holding cash deposits that may from time to time be required to "top off" the surety bond amounts in order that the surety bonds plus the cash are adequate to secure the used advance credits.

Once the MBRT determines the mitigation project to be in compliance with the performance standards based on approved annual monitoring reports, DSL shall reduce the required financial security amount to that necessary to cover the remaining monitoring and maintenance based on EcoBank's estimated costs for

these tasks. The type of financial security going forward from that point shall be as per OAR 141-085-0176(1)(d).

D. Process for implementing the financial assurance.

DSL may execute the financial assurances at any time it determines that the credits achieved on the ground (according to the performance standards set forth in this plan) are insufficient to cover the credits sold or otherwise used to compensate for permitted impacts. In the case of surety bonds DSL files a claim with the bonding company. In the case of bank accounts DSL makes demand to the bank to withdraw cash. The proceeds would then be used by DSL to purchase other bank credits to cover the permitted impacts.

XI. Long-Term Protection

A. Long-Term Protection Mechanism

EcoBank LLC has entered into a nonbinding letter of intent with the Legacy Land Conservancy whereby Legacy has agreed to accept a perpetual conservation easement covering the entire Long Tom Mitigation Bank Phase 1 property upon satisfaction of certain conditions (see Exhibit C5). In addition, it is the intent of both EcoBank LLC and the Legacy Land Conservancy that EcoBank will donate fee simple title for the subject property to Legacy once all credits have been sold.

B. Long-Term Protection Entity

The Legacy Land Conservancy is an Oregon non-profit corporation and 501(c)(3) tax-exempt organization whose mission is to acquire, manage, and conserve significant natural habitats and open spaces for the benefit of fish, wildlife, water quality, flood control, education, and aesthetic values. It also engages in activities that increase society's knowledge and skill in the arts and sciences of natural resource conservation. Legacy was incorporated in 1999, and currently holds a conservation easement over approximately 12 acres of wetlands and uplands near Adair Village, Oregon.

C. Endowment

EcoBank will deposit a percentage of credit sale proceeds into a separate interest-bearing bank account for the purpose of funding an endowment for the long-term stewardship of the Long Tom Mitigation Bank Phase 1 property. A portion (the amount as negotiated between the long-term steward and EcoBank LLC) will be donated with the conservation easement; the remainder of the negotiated amount will be donated as part of the fee-simple donation when the bank is closed.

EXHIBITS

EXHIBIT C1 – Non-native Invasive Plant Species

COMMON NAME	FAMILY	SCIENTIFIC NAME
Velvetleaf	Malvaceae	Abutilon theophrasti
Biddy-Biddy	Zygophyllaceae	Acaena novae-zelandiae
Russian knapweed	Asteraceae	Acroptilon repens
Jointed goatgrass	Poaceae	Aegilops cylindrica
Ovate goatgrass	Poaceae	Aegilops ovata
Barbed goatgrass	Poaceae	Aegilops triuncialis
Quackgrass	Poaceae	Agropyron repens
Camelthorn	Fabaceae	Alhagi pseudalhagi
Meadow foxtail	Poaceae	Alopecurus pratensis
Ragweed	Asteraceae	Ambrosia artemisiifolia
Skeletonleaf bursage	Asteraceae	Ambrosia tomentosa
Common bugloss	Boraginaceae	Anchusa officinalis
False brome	Poaceae	Brachypodium sylvaticum
Lens podded white top	Brassicaceae	Cardaria chalapensis
White top (Hoary cress)	Brassicaceae	Cardaria draba
Hairy white top	Brassicaceae	Cardaria pubescens
Musk thistle	Asteraceae	Carduss nutans
Plumeless thistle	Asteraceae	Carduus alanthoides
Italian thistle	Asteraceae	Carduus phycnocephalus
Slender flowered thistle	Asteraceae	Carduus tenuiflorus
Smooth distaff thistle	Asteraceae	Carthamus baeticus
Woolly distaff thistle	Asteraceae	Carthamus lanatus
Purple starthistle	Asteraceae	Centaurea calcitrapa
Diffuse knapweed	Asteraceae	Centaurea diffusa
Iberian starthistle	Asteraceae	Centaurea iberica
Spotted knapweed	Asteraceae	Centaurea maculosa
Short fringed knapweed	Asteraceae	Centaurea nigrescens
Meadow knapweed	Asteraceae	Centaurea pratensis
Yellow starthistle	Asteraceae	Centaurea solstitialis
Squarrose knapweed	Asteraceae	Centaurea virgata
Rush skeletonweed	Asteraceae	Chondrilla juncea
Western waterhemlock	Umbelliferae	Circuta douglasii
Canada thistle	Asteraceae	Cirsium arvense
Bull thistle	Asteraceae	Cirsium vulagre
Old man's beard	Ranunculaceae	Clematis vitalba
Poison hemlock	Apiaceae	Conium maculatum
Field bindweed	Convolvulaceae	Convolvulus arvensis
Common Crupina	Asteraceae	Crupina vulgaris
Houndstongue	Boraginaceae	Cynoglossum officinale
Yellow nutsedge	Cyperacea	Cyperus esulentus
Purple nutsedge	Cyperaceae	Cyperus rotundus
French broom	Fabaceae	Cytisus monspessulanas
Scotch broom	Fabaceae	Cytisus scoparius
Portuguese broom	Fabaceae	Cytisus striatus
Cutleaf teasel	Dipsacaceae	Dipsacus laciniatus
South American waterweed(Elodea)	Hydrocharitaceae	Elodea (=egeria)densa
Giant horsetail	Equietaceae	Equisetum telmateia
Leafy spurge	Euphorbiaceae	Euphorbia esula
Halogeton	Chenopodiaceae	Halogeton glomeratus
English ivy	Araliaceae	Hedera helix
Texas blueweed	Asteraceae	Helianthus ciliaris
Spikeweed	Asteraceae	Hemizonia pungens

COMMON NAME	FAMILY	SCIENTIFIC NAME
Giant hogweed	Apiaceae	Heracleum mantegazzianum
Orange hawkweed	Asteraceae	Hieracium aurantiacum
Yellow hawkweed	Scrophulariaceae	Hieracium floribundum
Mouse ear hawkweed	Asteraceae	Hieracium pilosella
King devil hawkweed	Asteraceae	Hieracium piloselloides
Meadow knapweed	Asteraceae	Hieracium pratense
Hydrilla	Hydrocharitaceae	Hydrilla verticillata
St.Johnswort (Klamath weed)	Hypericaceae	Hypericum perforatum
Yellow-flag Iris	Iridaceae	Iris Pseudacorus
Dyers woad	Brassicaceae	Isatis tinctoria
Kochia	Chenopodiaceae	Kochia scoparia
Perennial pepperweed	Brassicaceae	Lepidium latifolium
Dalmatian toadflax	Scrophulariaceae	Linaria dalmatica
Yellow toadflax	Scrophulariaceae	Linaria vulgaris
Purple loosestrife	Lythraceae	Lythrum salicaria
Pennyroyal	Lamiaceae	Mentha pulegium
Eurasian watermilfoil	Haloragaceae	Myriophyllum spicatum
Matgrass	Poaceae	Nardus stricta
Scotch thistle	Asteraceae	Onopordum acanthium
Small broomrape	Orobanchaceae	Orobanche minor
Wild proso millet	Poaceae	Panicum miliaceum
African rue	Caltrop	Peganum harmala
Reed canarygrass	Poaceae	Phalaris arundinacea
Japanese knotweed	Polygonaceae	Polygonum cuspidatum
Himalayan knotweed	Polygonaceae	Polygonum polystachyum
Giant knotweed	Polygonaceae	Polygonum sachalinense
Sulfur cinquefoil	Rosaceae	Potentilla recta
Kudzu	Fabaceae	Pueraria lobata
Creeping yellow cress	Brassicaceae	Rorippa sylvestris
Himalayan blackberry	Rosaceae	Rubus discolor(prcerus)
Mediterranean sage	Lamiaceae	Salvia aethiopis
Tansy ragwort	Asteraceae	Senecio jacobaea
Milk thistle	Asteraceae	Silyburn marianum
Silverleaf nightshade	Solanaceae	Solanum elaegnifolium
Buffaloburr	Solanaceae	Solanum rostratum
Johnsongrass	Poaceae	Sorghum halepense
Common cordgrass	Poaceae	Spartina alterniflora
Smooth cordgrass	Poaceae	Spartina anglica
Dense-flowered cordgrass	Poaceae	Spartina densiflora
Saltmeadow cordgrass	Poaceae	Spartina patens
Spanish broom	Leguminosae	Spartium junceum
Austrian peaweed	Fabaceae	Sphaerophysa salsula
Dodder	Cuscutaceae	Suscuta spp.
Medusahead rye	Poaceae	Taeniatherum canput-medusae
Saltcedar	Tamaricaceae	Tamarix ramosissima
PunctureVine	Zygophyllaceae	Tribulus terrestris
Coltsfoot	Asteraceae	Tussilago farara
Gorse	Fabaceae	Ulex europaeus
Spiny cocklebur	Asteraceae	Xanthium spinosum
Syrian bean caper	Zygophyllaceae	Zygophyllum fabag

In addition to those species listed here, non-native invasive plant species shall also include any species designated by the Oregon Department of Agriculture Noxious Weed Control Program, March 2008 revision or later.

EXHIBIT C2 – Willamette Valley Wet Prairie Plant Cohort

Species name	Common name	Wetland Indicator	Perennial annual/bi-	Wet Prairie
Agrostis exarata	spike bentgrass	FACW	Peren.	X*
Allium amplectens	slimleaf onion	NOL*	Peren.	X
Aster curtus	Curtus' aster	NOL*	Peren.	X
Aster hallii/chilensis ssp. Chilensis	Hall's aster/Pacific aster	FAC	Peren.	X*
Barbarea orthoceras	wintercress	FACW+	Bi/Peren	X
Boisduvalia densiflora	dense spike-primrose	FACW-	Annual	X*
Brodiaea coronaria	harvest brodiaea	NOL*	Peren.	X*
Brodiaea (Triteleia) hyacinthina	hyacinth brodiaea	NOL*	Peren.	X
Calandrinia ciliata	red maids	NOL*	Annual	X
Camassia leichtlinii	tall camas	FACW-	Peren.	X
Camassia quamash	common camas	FACW*	Peren.	X
Cardamine penduliflora	Willamette V. bittercress	OBL	Peren.	X
Carex aurea	golden sedge	FACW+	Peren.	X
Carex densa	dense sedge	OBL	Peren.	X*
Carex echinata	muricate sedge	NOL*	Peren.	X
Carex feta	green-sheath sedge	FACW	Peren.	X
Carex pachystachya	thick-headed sedge	FAC	Peren.	X
Carex unilateralis	one-sided sedge	FACW	Peren.	X*
Centaurium muhlenbergii	monterey centaury	FACW	Annual	X
Centunculus minimus	chaffweed	FACW	Annual	X
Danthonia californica	California oatgrass	FACU*	Peren.	X*
Deschampsia cespitosa	tufted hairgrass	FACW	Peren.	X*
Deschampsia danthonioides	Annual hairgrass	FACW-	Annual	X
Deschampsia elongata	slender hairgrass	FACW-	Peren.	X
Dodocatheon hendersonii	broadleaf shooting star	NOL*	Peren.	X
Downingia elegans	showy downingia	OBL	Annual	X
Downingia yina	Willamette downingia	OBL	Annual	X
Eleocharis acicularis	needle spike-rush	OBL	Annual	X
Epilobium ciliatum	hairy willow-herb	FACW-	Peren.	X
Epilobium paniculatum	autumn willow-herb	NOL*	Annual	X
Erigeron decumbens var. decumbens	Willamette Daisy	NOL*	Peren.	X
Eriophyllum lanatum	wooly sunflower	NOL*	Peren.	X*
Gnaphalium purpureum	purple cudweed		Ann/bi	X
Grindelia intergrifolia	Willamette V. gumweed	FACW	Peren.	X*
Haplopappus racemosus	racemed goldenweed	FAC*	Peren.	X
Horkelia congesta	shaggy horkelia	NOL*	Peren.	X
Isoetes nutalli	Nuttall's quillwort	OBL	Peren.	X

Species name	Common name	Wetland Indicator	Perennial annual/bi-	Wet Prairie
Juncus bufonius	toad rush	FACW	Annual	X
Juncus tenuis	slender rush	FACW-	Peren.	X*
Lindernia anagallidea	false-pimpernel	OBL	Annual	X
Lomatium nudicaule	barestem desert-parsley	NOL*	Peren.	X*
Lotus formosissimus	seaside lotus	FACW+	Peren.	X*
Lotus pinnatus	meadow deervetch	FACW	Peren.	X
Lotus purshianus	Spanish-clover	NOL*	Annual	X*
Lupinus polyphyllus	bigleaf lupine	FAC+	Peren.	X
Luzula campestris	field woodrush	NOL*	Peren.	X*
Madia glomerata	cluster tarweed	FACU+	Annual	X
Microseris laciniata	cut-leaved microseris	NOL*	Peren.	X*
Microsteris gracilis	pink microsteris	FACU	Annual	X
Mimulus guttatus	common monkey-flower	OBL	Ann/per.	X
Montia fontana	water chickweed	OBL	Annual	X
Montia linearis	narrow-leaved montia	NOL*	Annual	X*
Navarretia squarrosa	skunkweed	NOL*	Annual	X
Orthocarpus bracteosus	rosy owl-clover	NOL*	Annual	X
Orthocarpus hispidus	hairy owl-clover	FACU-	Annual	X
Panicum occidentale	western witchgrass	FACW	Peren.	X*
Perederidia oregana	Oregon yampah	NOL*	Peren.	X
Perideridia gairdneri	yampah or false-carraway	FAC*	Peren.	X
Plagiobothrys figuratus	fragrant popcorn-flower	FACW	Annual	X*
Plagiobothrys scouleri	Scouler's popcorn-flower	FACW	Annual	X
Polygonum douglasii	douglas knotweed	FACU	Annual	X
Potentilla gracilis	slender cinquefoil	FAC	Peren.	X*
Prunella vulgaris var. lanceolata	self-heal	FACU+	Peren.	X*
Ranunculus occidentalis	western buttercup	FAC	Peren.	X
Ranunculus orthorhynchus	straight beaked buttercup	FACW-	Peren.	X*
Rosa nutkana	Nootka rose	FAC	Peren.	X
Sanquisorba occidentalis	Annual burnet	NOL*	Ann./bi	X
Saxifraga oregana	bog saxifrage	FACW+	Peren.	X
Sidalcea cusickii	Cusick's checker-mallow	NOL*	Peren.	X
Sisyrinchium angustifolium	blue-eyed grass	FACW-	Peren.	X*
Sisyrinchium hitchcockii	Hitchcock's blue-eyed grass	NOL*	Peren.	X
Spiranthes romanzoffiana	ladies-tresses	FACW	Peren.	X

Species name	Common name	Wetland Indicator	Perennial annual/bi-	Wet Prairie
Viola adunca	early blue violet	NOL*	Peren.	X
Wyethia angustifolia	narrow-leaf mule's ears	FACU	Peren.	X
Zigadenus venenosus	death camas	FACU*	Peren.	X
Wyethia angustifolia	narrow-leaf mule's ears	FACU	Peren.	X
Zigadenus venenosus	death camas	FACU*	Peren.	X

Wetland Indicators all came from Reed (1988) and Supplement (1993), *NOL = not on the list

X* = important matrix species to include in seeding

EXHIBIT C4

Willamette
COMMUNITY BANK

March 4, 2008

Corrie Veenstra
U.S. Army Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

RE: EcoBank, LLC

Dear Corrie:

Please be advised that Willamette Community Bank has issued a formal commitment letter to loan a requisite sum of money to finance the above referenced wetlands mitigation bank project. Our commitment is contingent upon the proper issuance of all regulatory licenses and permits designating said project as the Long Tom Mitigation Bank.

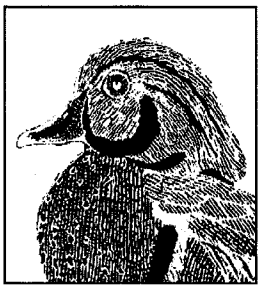
Our Bank is fully committed to this project and we believe the project has been thoroughly researched by Duane Drushella and Tim Ackers. Additionally, our loan commitment was based on our own independent analysis. After our due diligence and understanding of the financing needs, our loan structure will then provide funding, per their submitted budget, through June 2011.

We respectfully request your earliest wetlands mitigation bank approval so that all parties can move forward with final consummation. It is my understanding that a hearing is scheduled for April 3, 2008; we would like to close and fund on or before April 30, 2008 pending receipt of the contingency so recited.

If I can answer any questions, please do not hesitate to contact me at 541-926-9000 Ext. 316.

Kindest Regards,

Dave Wood
President & CEO
Willamette Community Bank
Office - 541-926-9000 - ext. 316
Cell - 541-971-7878
dwood@wcbalbany.com



EcoBank LLC

38863 Scravel Hill Road NE
Albany OR 97322-9554
Phone 541-327-3427
Fax 800-680-2817
Cell 503-871-5472
www.OregonMitigationCredits.com

LETTER OF INTENT

EcoBank LLC and Legacy Land Conservancy

Recitals

1. The proposed Long Tom Mitigation Bank ("the property") entails 135 acres of wetland restoration, creation and enhancement, and upland restoration. The proposed project intends to retire the existing agricultural use of the property and to convert it to a natural state.

2. Legacy Land Conservancy ("Legacy") is a non-profit land trust whose mission is to acquire land and to manage and protect it in a natural state.

3. The US Army Corps of Engineers ("Corps") and the Oregon Department of State Lands ("DSL") regulate the approval and operation of wetland mitigation banks in Oregon. As part of their regulations, these agencies may require sponsors of wetland mitigation banks to provide perpetual protection of mitigation bank land through the use of conservation easements.

4. Both EcoBank LLC ("EcoBank") and Legacy understand that Corps and DSL requirements for permanent protection are in a state of flux, and the final disposition of those requirements is unknown at this time.

5. Regardless of Corps and DSL requirements, EcoBank wishes to provide the property with perpetual care, maintenance and protection in order to ensure that its conservation values endure.

6. The purpose of this letter of intent is to document an understanding between EcoBank LLC and Legacy wherein EcoBank agrees to donate a conservation easement to Legacy, and Legacy agrees to accept the conservation easement.

7. Both EcoBank and Legacy may rescind this agreement at any time prior to the conservation easement donation if either determines that executing the donation is no longer in their best interest.

8. Timothy A. Acker is a part owner of EcoBank and is also a member of the Legacy board of directors as well as treasurer. Both EcoBank and Legacy understand that this presents a conflict of interest.

Terms of Conservation Easement Donation

1. The above recitals are incorporated herein.

2. To remedy the conflict of interest described above, Timothy A. Acker agrees to recuse himself from Legacy board discussions and voting on matters relating to this conservation easement. Mr. Acker will be available to provide the board with factual information regarding specifics relating to the ongoing operation and protection of the property.

3. EcoBank agrees to donate to Legacy a conservation easement entailing all development and agricultural operating rights incumbent in the property.

4. EcoBank shall execute the donation as soon as practicable once the following conditions are met:

    a. all financial encumbrances are lifted from the property, and
    b. Corps and DSL regulations and policies regarding permanent protection have been made legally effective through implemented rules and regulations, and
    c. Corps and DSL have certified that EcoBank has satisfied all conditions relating to the ecological performance of the property, and
    d. all the costs associated with perpetual management and care of the property can be reasonably estimated to the mutual satisfaction of both EcoBank and Legacy.

5. A cash endowment shall be included in the donation for the purpose of providing Legacy with the financial wherewithal to faithfully execute its responsibilities as holder of the conservation easement. The amount of the endowment shall be negotiated between EcoBank and Legacy, and it is agreed by both parties that the sum shall be based on reasonable estimates of the costs of owning and maintaining the property in a natural state, the costs of protecting the property from trespass and adverse possession, and to provide Legacy with a profit proportional to the risk it is undertaking and the uncertainties associated with a perpetual responsibility. EcoBank agrees to provide this endowment of its own free will, without compulsion by Legacy, the Corps, or DSL.

Accepted:

EcoBank LLC

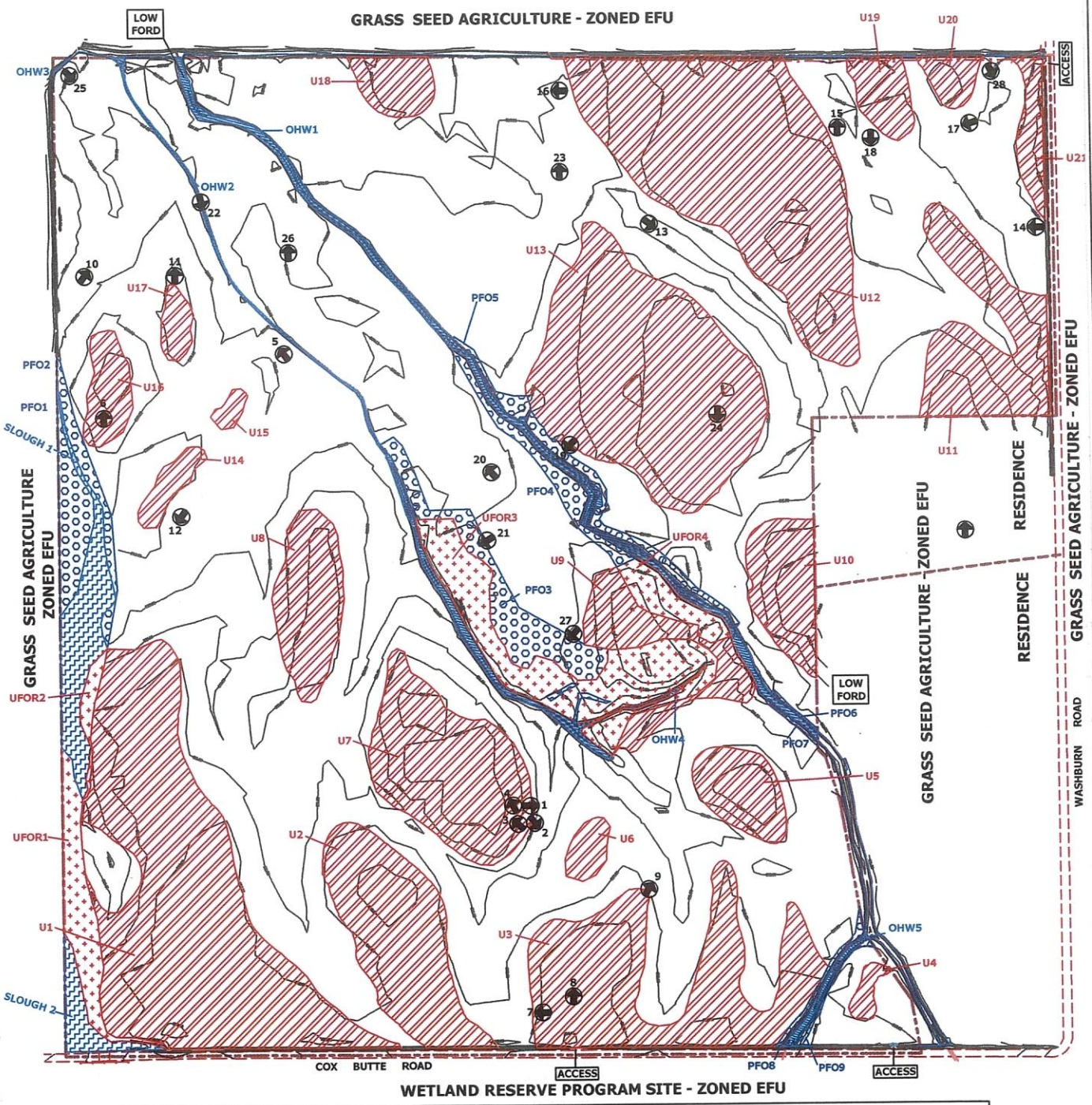
Duane A. Drushella, Managing Partner

Date: 1-25-08

Legacy Land Conservancy

Tom Sanderson, President

Date: 1/25/08



LEGEND

PROPERTY BOUNDARY

SITE PHOTO POINTS

UPLANDS

FARMED UPLANDS (45.85 ACS.)

FORESTED UPLAND (4.44 ACS.)

WETLANDS & STREAMS

FARMED PEM (77.77 ACS.)

PFO (3.79 ACS.)

OHW (1.96 ACS.)

SLOUGH (1.71 ACS.)

0 400 FT.

ECOBANK LLC

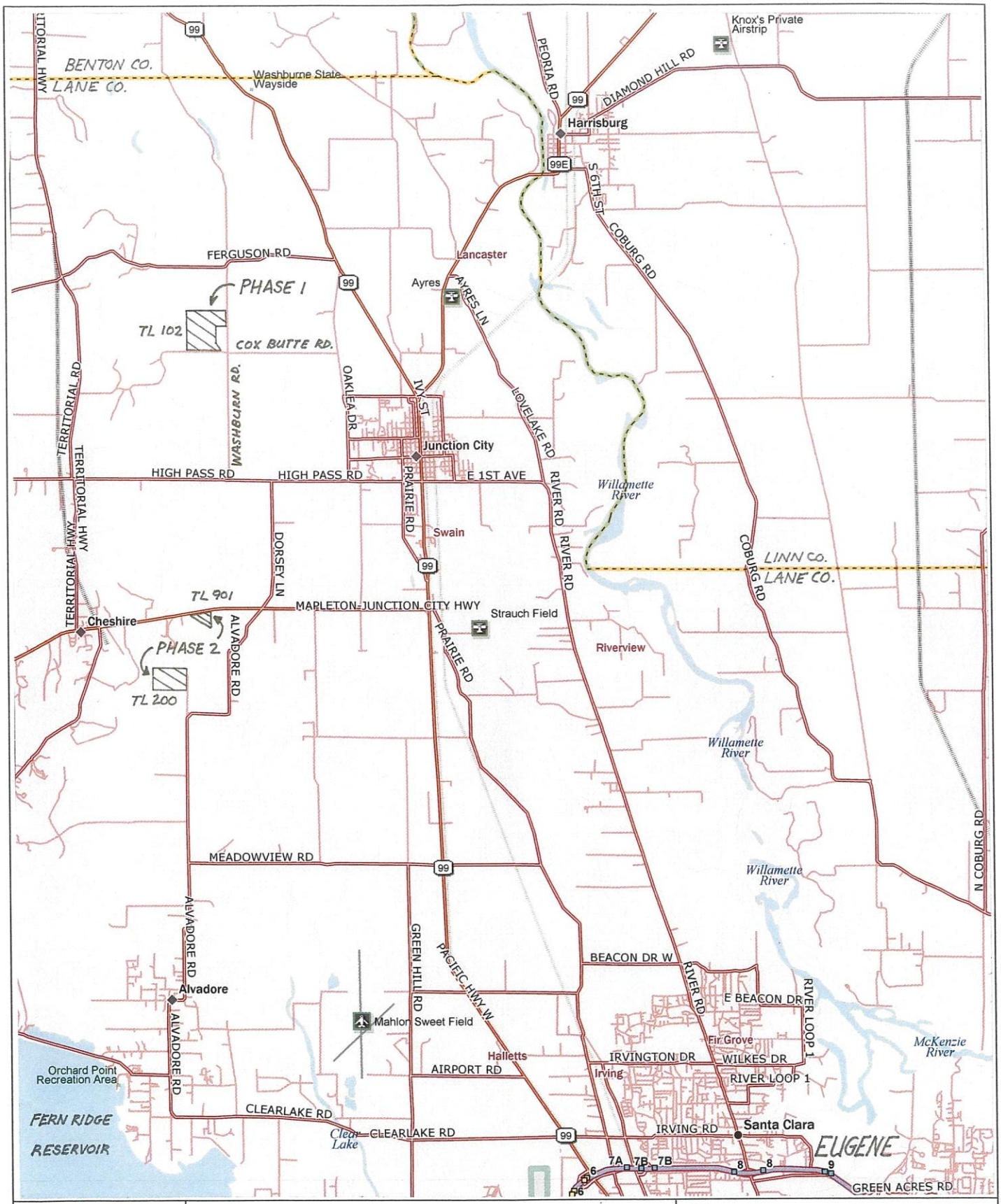
LONG TOM MITIGATION BANK PHASE I

SITE MAP

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 1

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net



0 1.58 MI.

ECOBANK LLC

LONG TOM MITIGATION BANK PHASE I

VICINITY MAP

Applied Technology
Wetlands & Forestry Consultants
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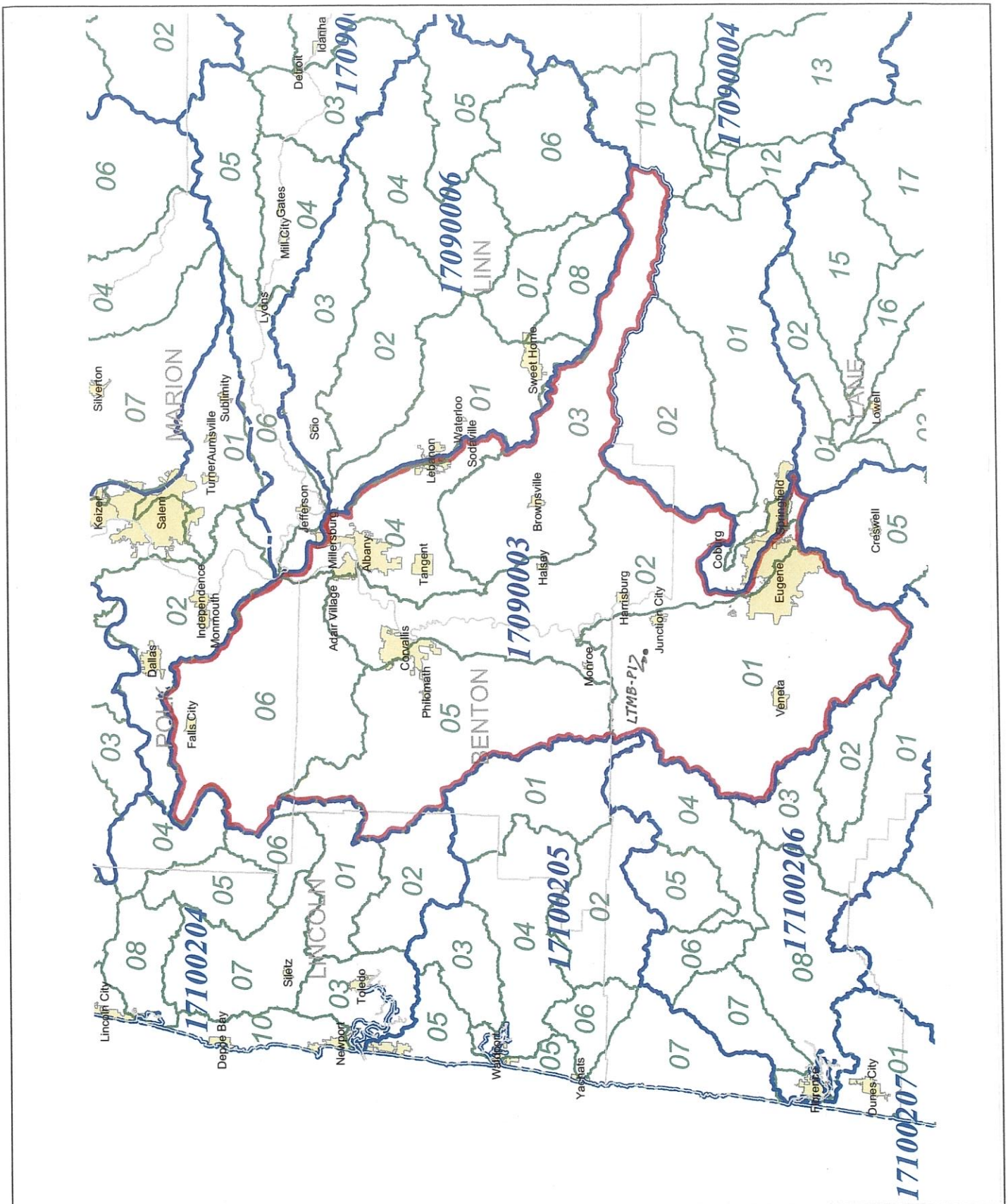
Albany OR 97322-9554 atwetlands@comcast.net

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 2



0 14 MI.

ECOBANK LLC

LONG TOM MITIGATION BANK PHASE I

WATERSHED MAP

Applied Technology
Wetlands & Forestry Consultants
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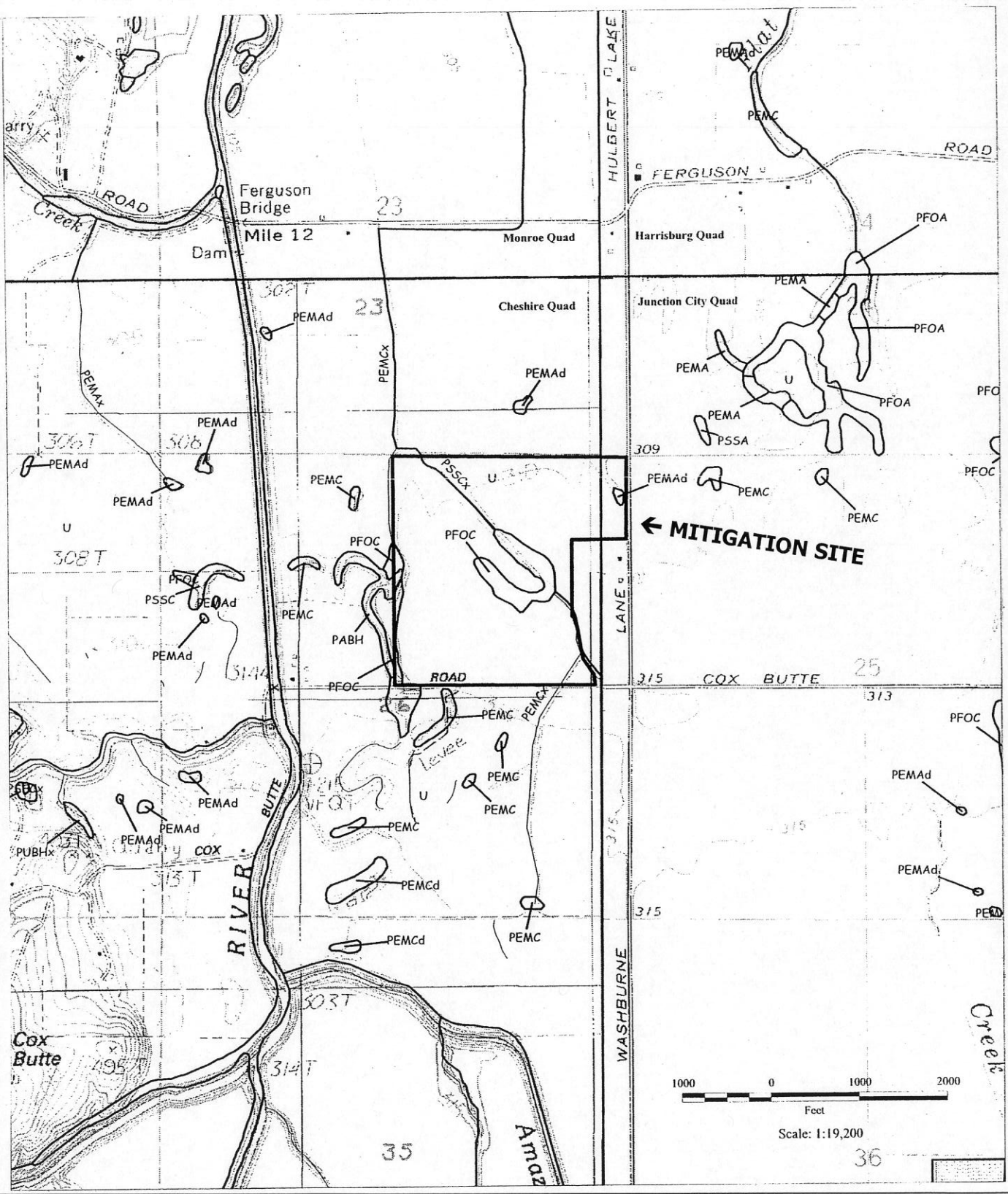
Albany OR 97322-9554 atwetlands@comcast.net

NE 1/4 SEC. 26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 3



ECOBANK LLC

LONG TOM MITIGATION BANK PHASE I

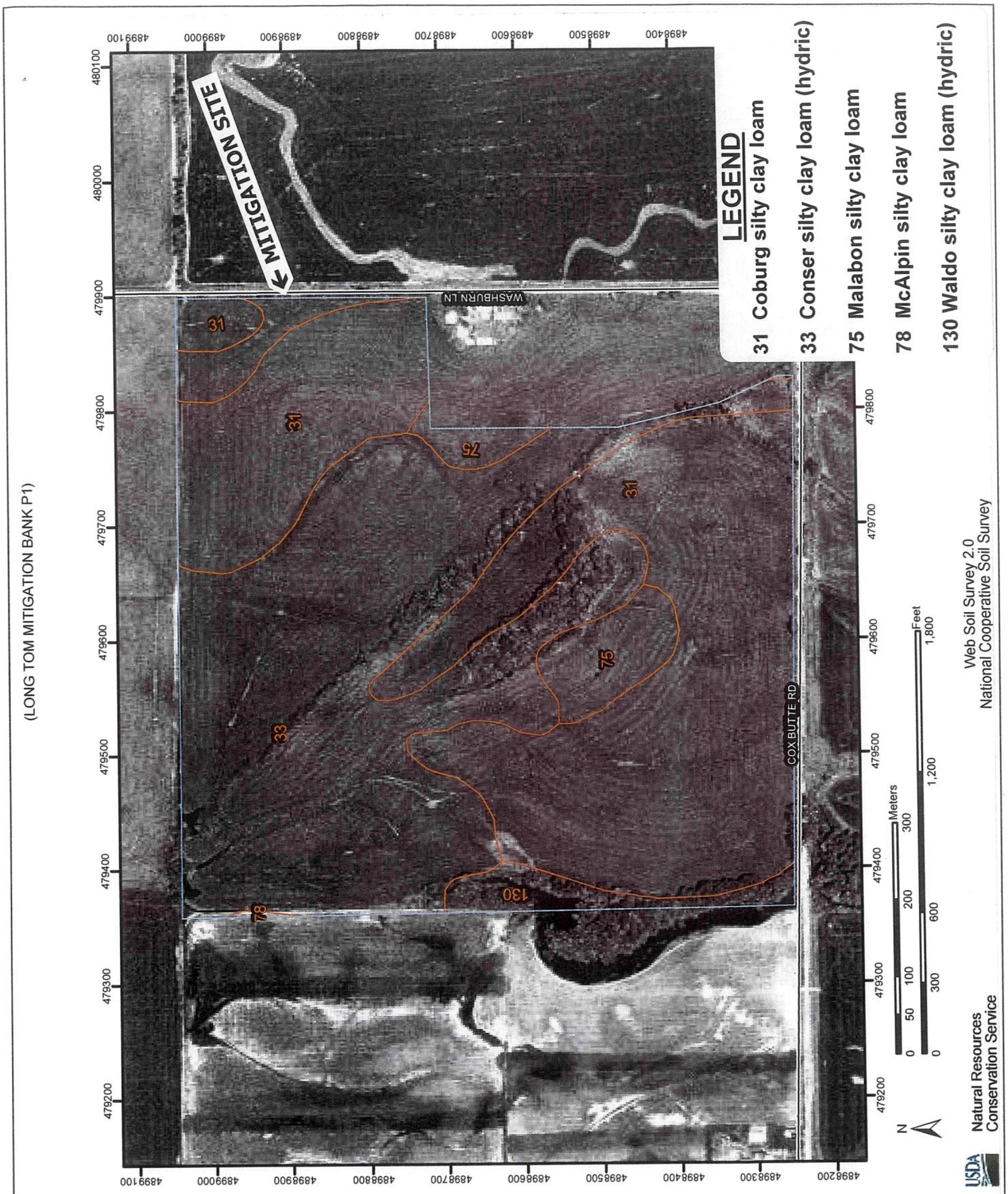
Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

0 1560 FT.

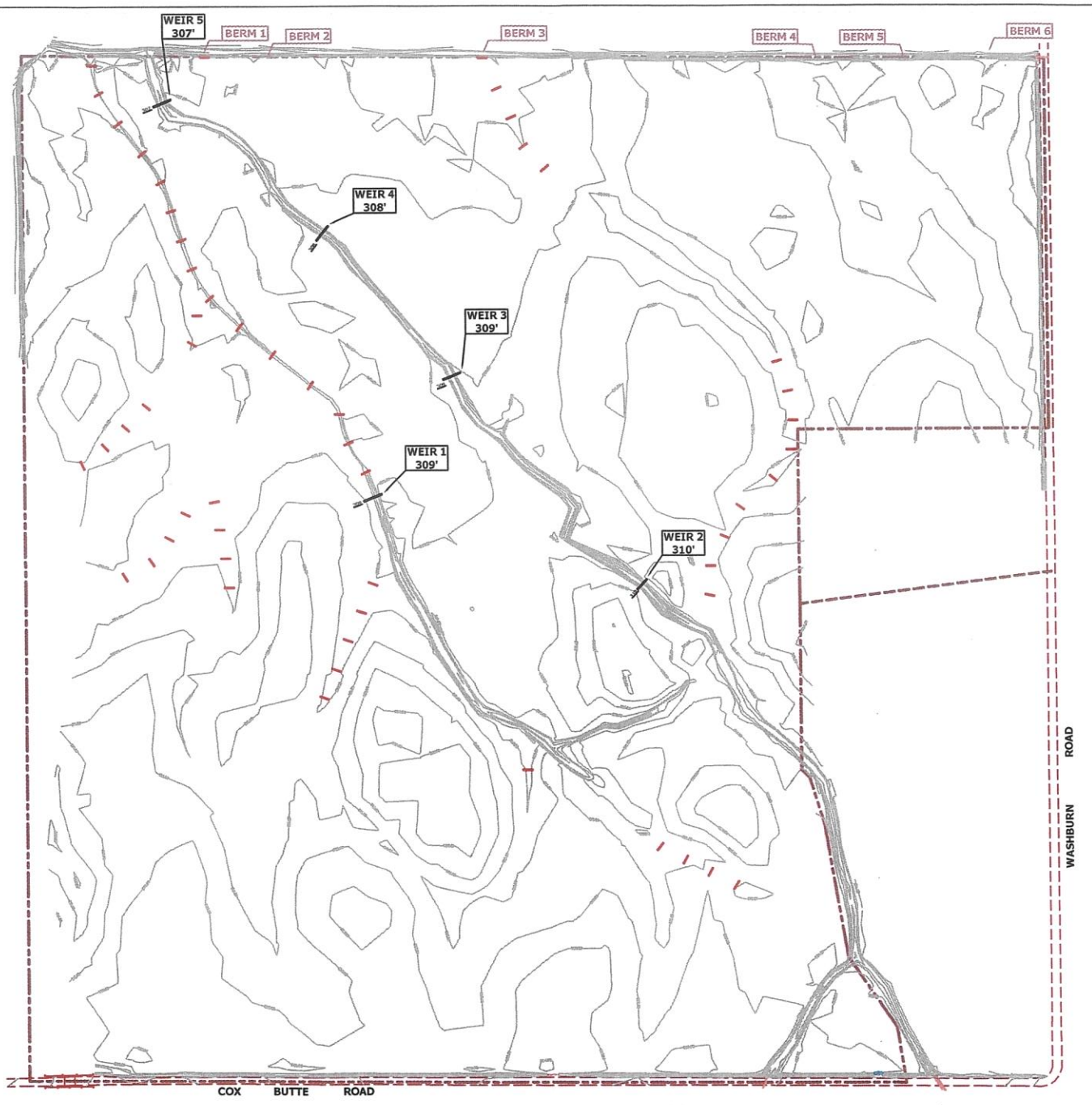
NATIONAL WETLAND INVENTORY MAP

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 4



0 574 FT.	ECOBANK LLC LONG TOM MITIGATION BANK PHASE I	**Applied Technology** *Wetlands & Forestry Consultants* 38863 Scravel Hill Road NE Phone/Fax (541) 327-3427 Albany OR 97322-9554 atwetlands@comcast.net
	SOIL SURVEY MAP SOIL SURVEY OF LANE COUNTY AREA, OREGON USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY 1.1	NE 1/4 SEC.26 T15S R05W, W.M. LANE COUNTY, OREGON
		FIGURE 5



LEGEND

PROPERTY BOUNDARY

STRAW/COIR WATTLES

WEIR (ELEVATION-FT.) — WEIR 1 309'

EARTHEN BERM — BERM 3

ACTIVITY	PERM. FILL	TEMP. REMOVAL	TEMP. FILL	ACS.
WEIR 1	27 cu. yds.	27 cu. yds.	-0-	0.006
WEIR 2	31 cu. yds.	31 cu. yds.	-0-	0.004
WEIR 3	25 cu. yds.	25 cu. yds.	-0-	0.004
WEIR 4	24 cu. yds.	24 cu. yds.	-0-	0.004
WEIR 5	30 cu. yds.	30 cu. yds.	-0-	0.005
TOTAL	137 cu. yds.	137 cu. yds.	-0- cu. yds.	0.023
WATTLES (54)	-0- cu. yds.	-0- cu. yds.	18 cu. yds.	0.020
BERMS (6)	36 cu. yds.	-0- cu. yds.	-0- cu. yds.	0.010
GRAND TOTAL	173 cu. yds.	137 cu. yds.	18 cu. yds.	0.053

0 400 FT.
C.I. 1 FT.

ECOBANK LLC

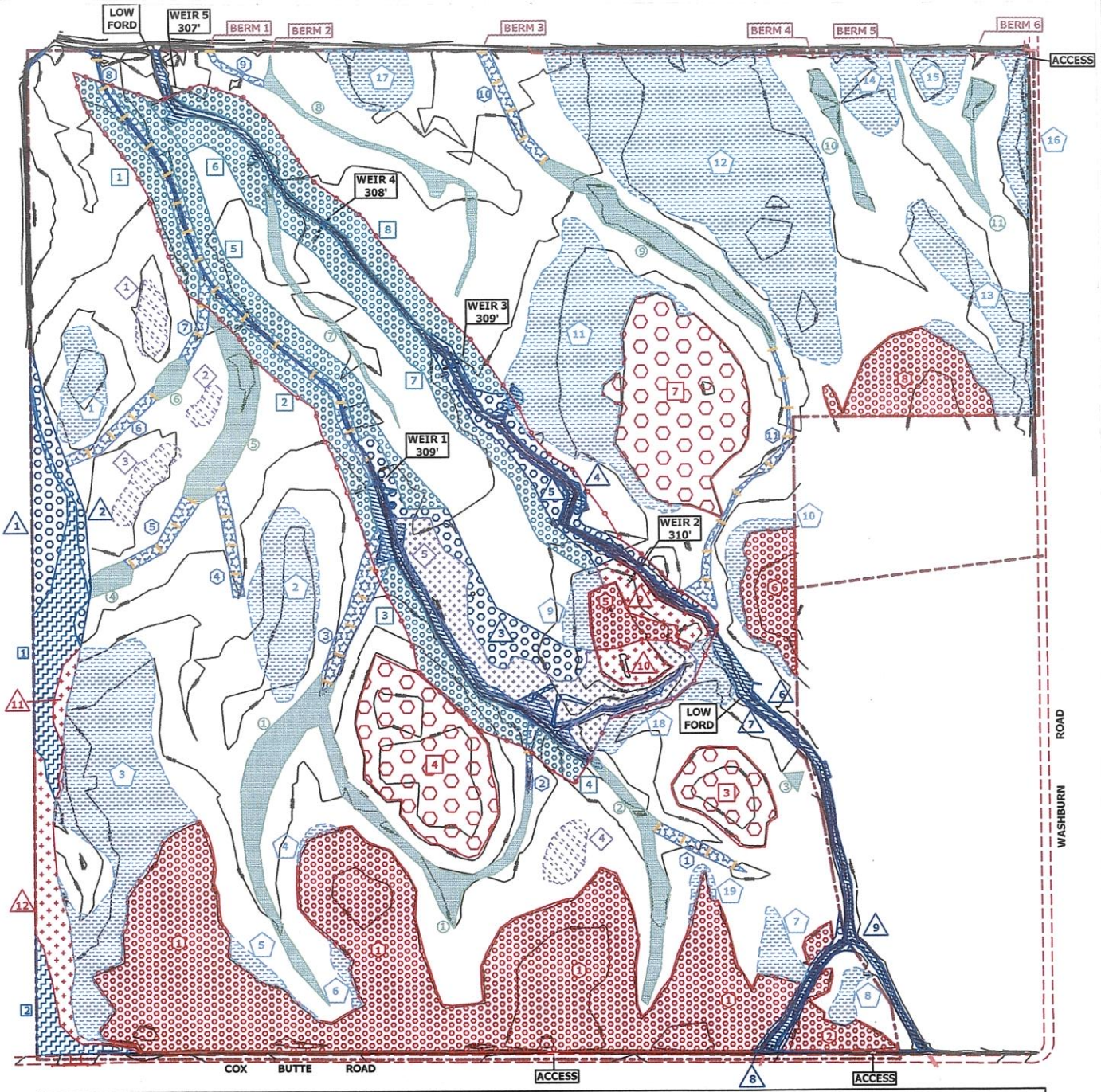
LONG TOM MITIGATION BANK PHASE I

GRADING PLAN MAP

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

NE 1/4 Sec.26
T15S R05W, W.M.
Lane County, Oregon

FIGURE 6



LEGEND

PROPERTY BOUNDARY

STRAW/COIR WATTLES

ELECTRIC FENCE 5-STRAND

UPLANDS

EXISTING FORESTED UPLAND (2.13 ACS.)

PROPOSED FORESTED UPLAND (14.41 ACS.)

PROPOSED SAVANNA (6.95 ACS.)

WETLANDS & STREAMS

RESTORED PFO (2.31 ACS.)

RESTORED WET PRAIRIE (1.10 ACS.)

CREATED WET PRAIRIE (23.39 ACS.)

ENHANCED PFO (8.25 ACS.)

ENHANCED PSS (3.02 ACS.)

ENHANCED VERNAL POOL (5.80 ACS.)

ENHANCED WET PRAIRIE (60.68 ACS.)

REMAINING PFO (3.79 ACS.)

OHW (1.96 ACS.)

SLOUGH (1.71 ACS.)

0 400 FT.
C.I. 1 FT.

ECOBANK LLC

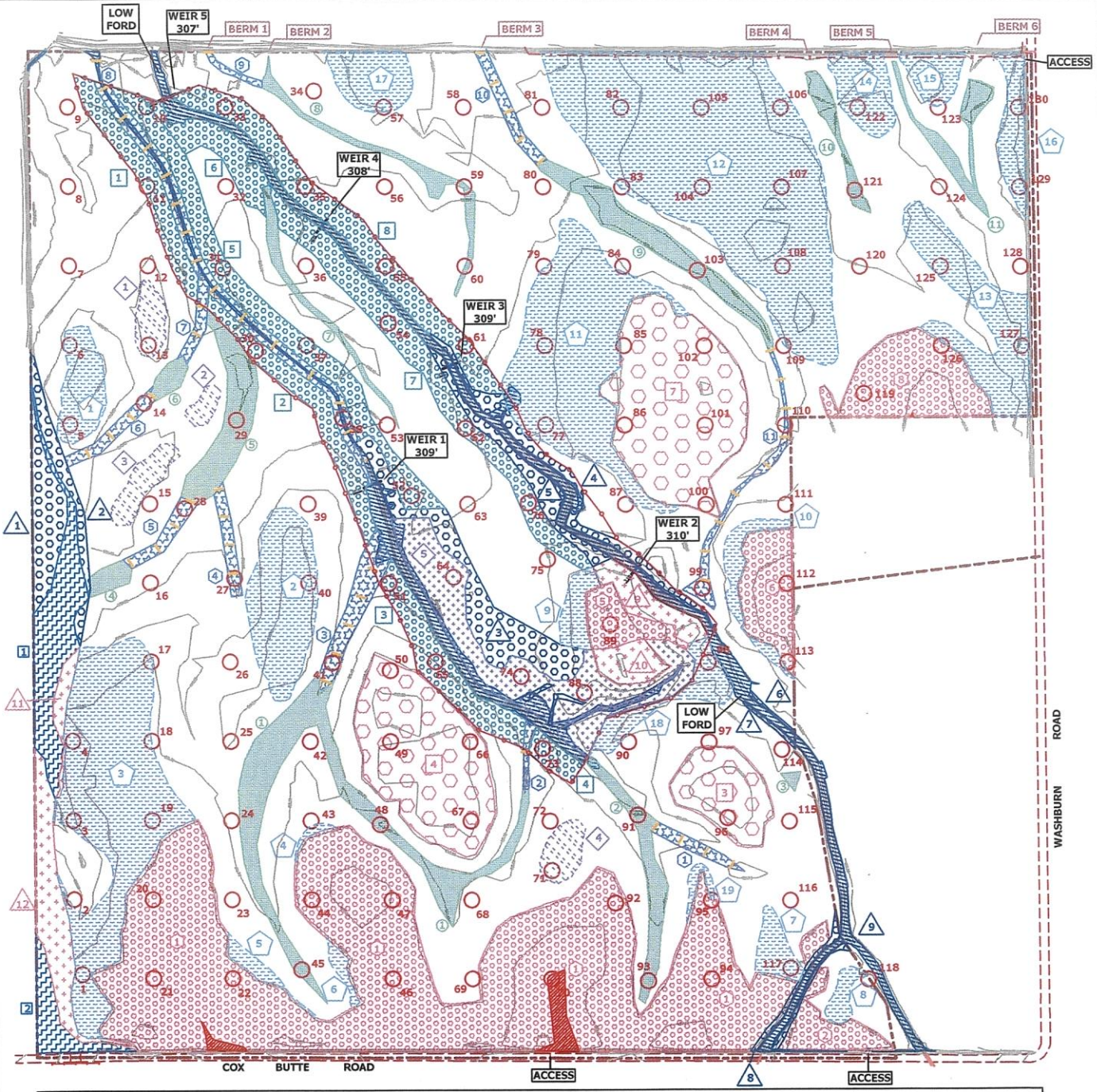
LONG TOM MITIGATION BANK PHASE I

PROPOSED CONDITIONS MAP

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

NE 1/4 Sec.26
T15S R05W, W.M.
Lane County, Oregon

FIGURE 7A



LEGEND

PROPERTY BOUNDARY

STRAW/COIR WATTLES

ELECTRIC FENCE 5-STRAND

VEGETATION MONITORING POINT

UPLANDS

EXISTING FORESTED UPLAND (2.13 ACS.)

PROPOSED FORESTED UPLAND (14.12 ACS.)

PROPOSED SAVANNA (6.95 ACS.)

WETLANDS & STREAMS

RESTORED PFO (2.31 ACS.)

RESTORED WET PRAIRIE (1.10 ACS.)

CREATED WET PRAIRIE (23.39 ACS.)

ENHANCED PFO (8.25 ACS.)

ENHANCED PSS (3.02 ACS.)

ENHANCED VERNAL POOL (5.80 ACS.)

ENHANCED WET PRAIRIE (60.70 ACS.)

REMAINING PFO (3.79 ACS.)

OHW (1.96 ACS.)

SLOUGH (1.71 ACS.)

PROPOSED FORESTED UPLAND NOT AVAILABLE FOR CREDIT AS BUFFER (0.29 AC.)

0 400 FT.
C.I. 1 FT.

ECOBANK LLC

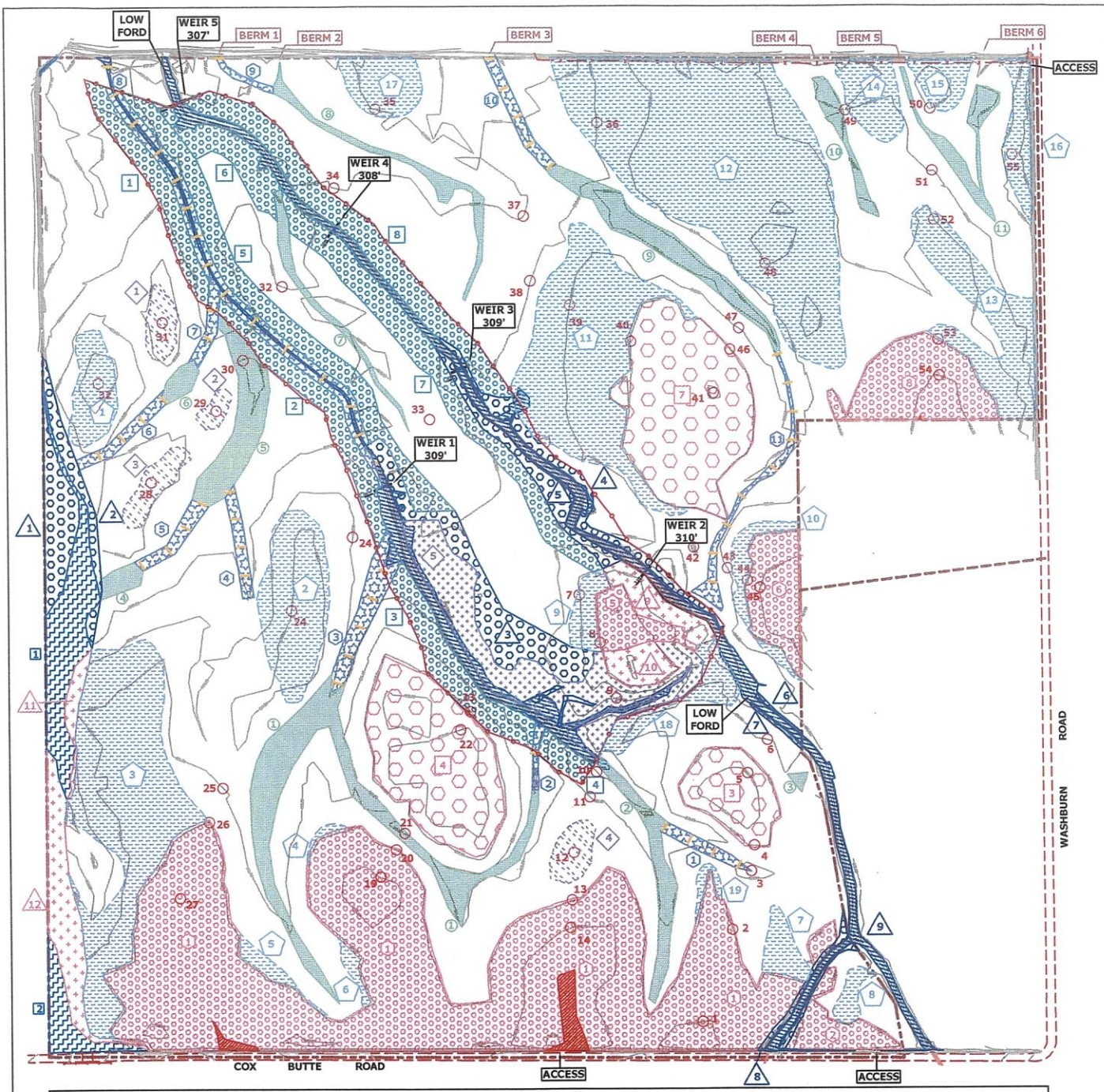
LONG TOM MITIGATION BANK PHASE I

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

MONITORING MAP ~ VEGETATION

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 7B



LEGEND

PROPERTY BOUNDARY

STRAW/COIR WATTLES

ELECTRIC FENCE 5-STRAND

HYDROLOGY MONITORING WELL

UPLANDS

EXISTING FORESTED UPLAND (2.13 ACS.)

PROPOSED FORESTED UPLAND (14.12 ACS.)

PROPOSED SAVANNA (6.95 ACS.)

WETLANDS & STREAMS

RESTORED PFO (2.31 ACS.)

RESTORED WET PRAIRIE (1.10 ACS.)

CREATED WET PRAIRIE (23.39 ACS.)

ENHANCED PFO (8.25 ACS.)

ENHANCED PSS (3.02 ACS.)

ENHANCED VERNAL POOL (5.80 ACS.)

ENHANCED WET PRAIRIE (60.70 ACS.)

REMAINING PFO (3.79 ACS.)

OHW (1.96 ACS.)

SLOUGH (1.71 ACS.)

PROPOSED FORESTED UPLAND NOT AVAILABLE FOR CREDIT AS BUFFER (0.29 AC.)

0 400 FT.
C.I. 1 FT.

ECOBANK LLC

LONG TOM MITIGATION BANK PHASE I

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38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
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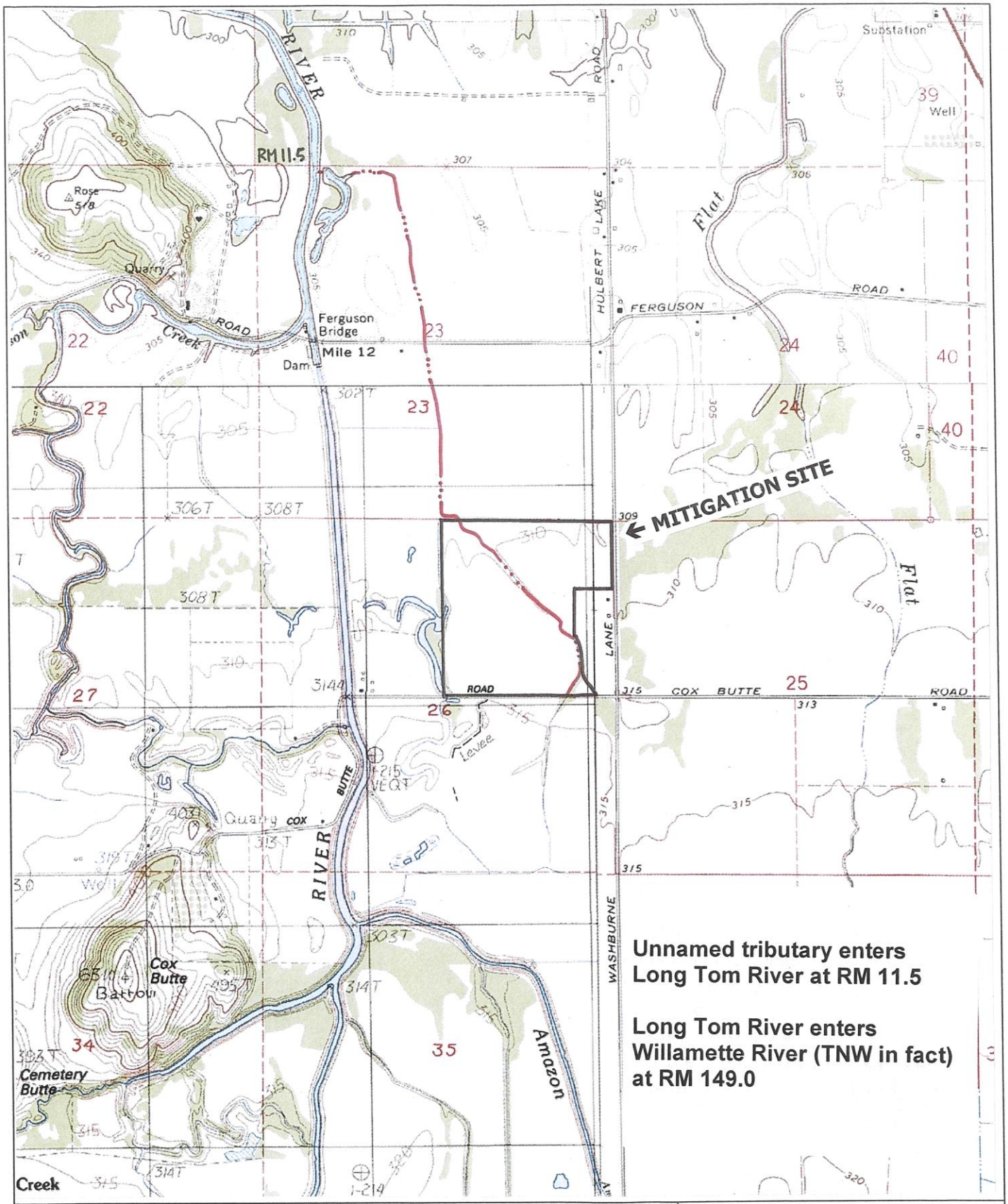
MONITORING MAP ~ HYDROLOGY

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 7c



0 2000 FT.

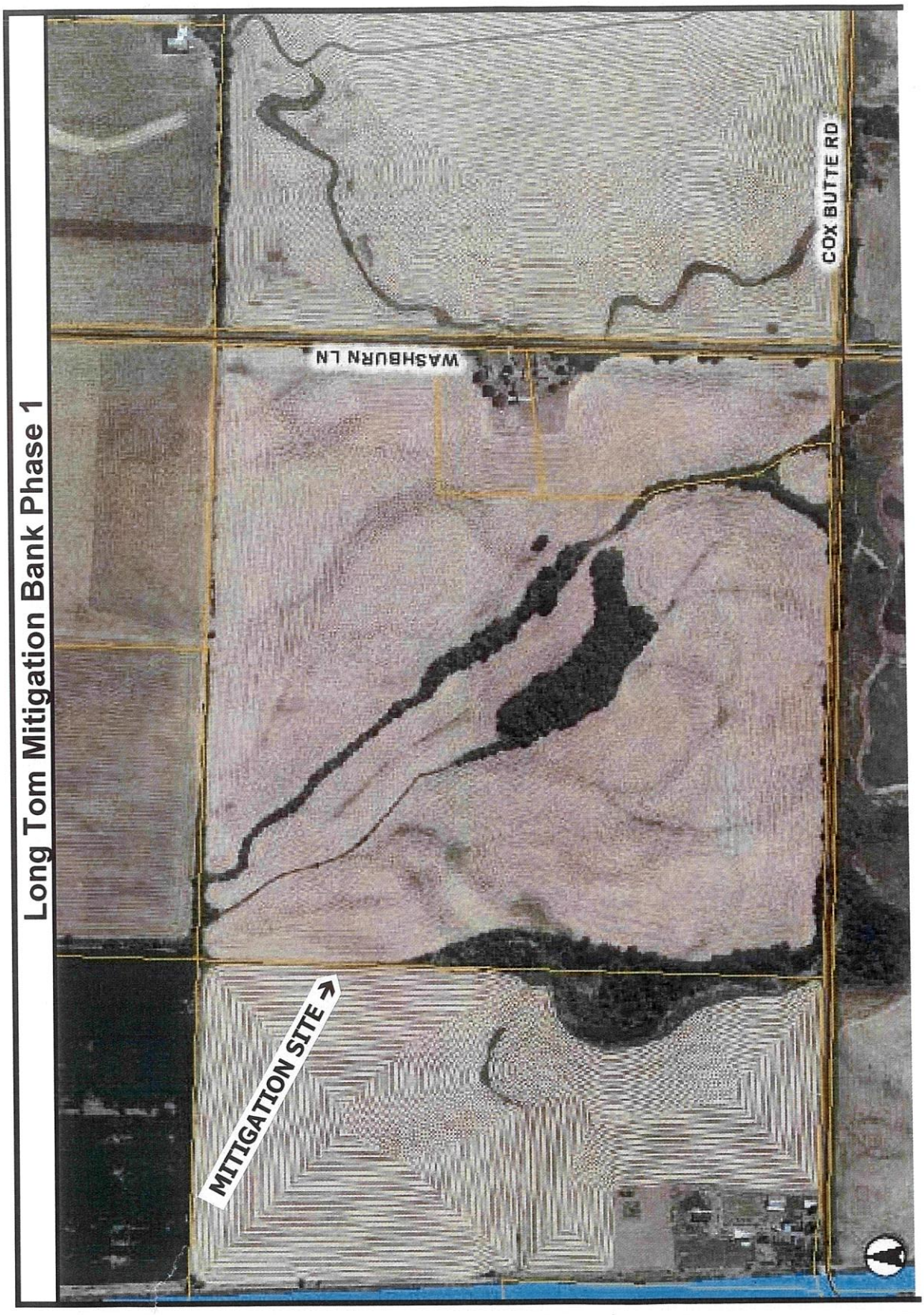
ECOBANK LLC
LONG TOM MITIGATION BANK PHASE I

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

WATERS OF U.S. CONNECTIVITY MAP

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 8



0 635 FT.

ECOBANK LLC
LONG TOM MITIGATION BANK PHASE I

Applied Technology
Wetlands & Forestry Consultants
38863 Scravel Hill Road NE Phone/Fax (541) 327-3427
Albany OR 97322-9554 atwetlands@comcast.net

SITE AIR PHOTO
SEPTEMBER 2005
LANE COUNTY PUBLIC WORKS DEPARTMENT

NE 1/4 SEC.26
T15S R05W, W.M.
LANE COUNTY, OREGON

FIGURE 9

FIGURE 10

GROUND-LEVEL SITE PHOTOGRAPHS

Photo 1: View looking to southeast taken 10/29/06

Photo 2: View toward south end of property taken 10/29/06

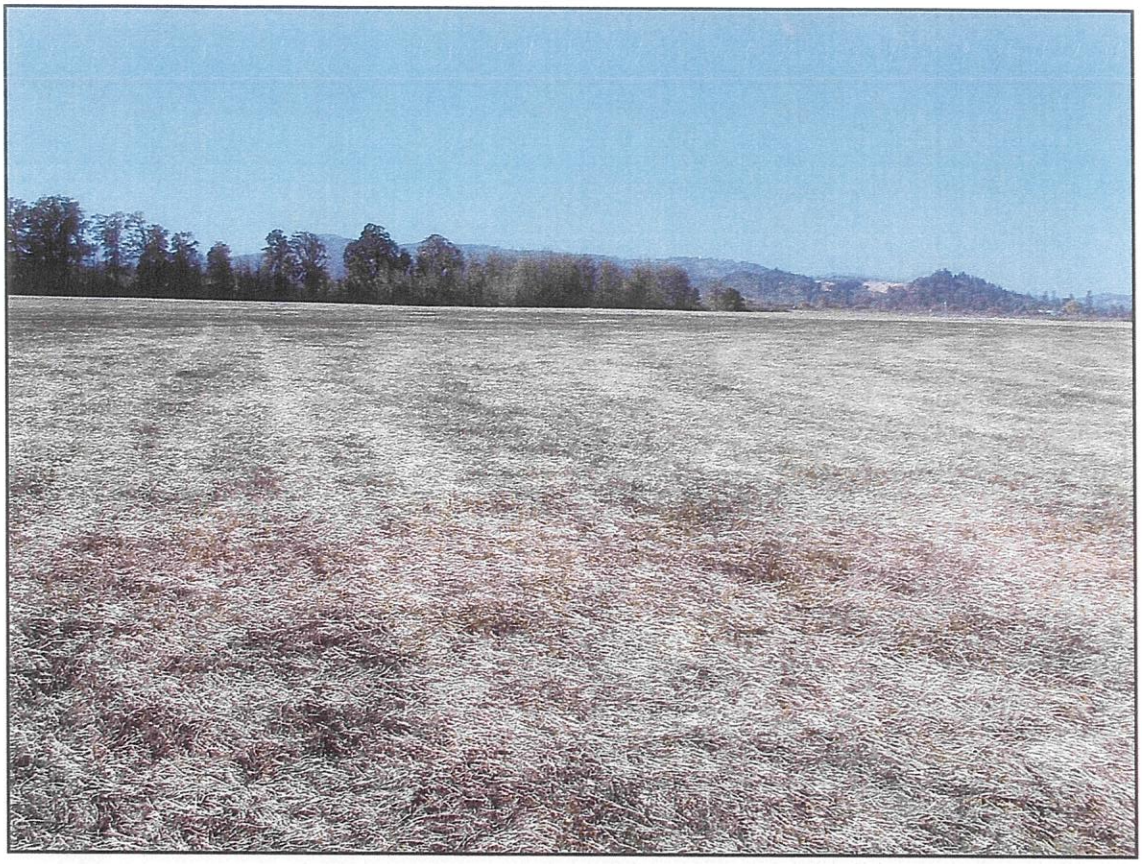


Photo 3: View of northwest property corner taken 10/29/06

Photo 4: View along central ash swale taken 10/29/06

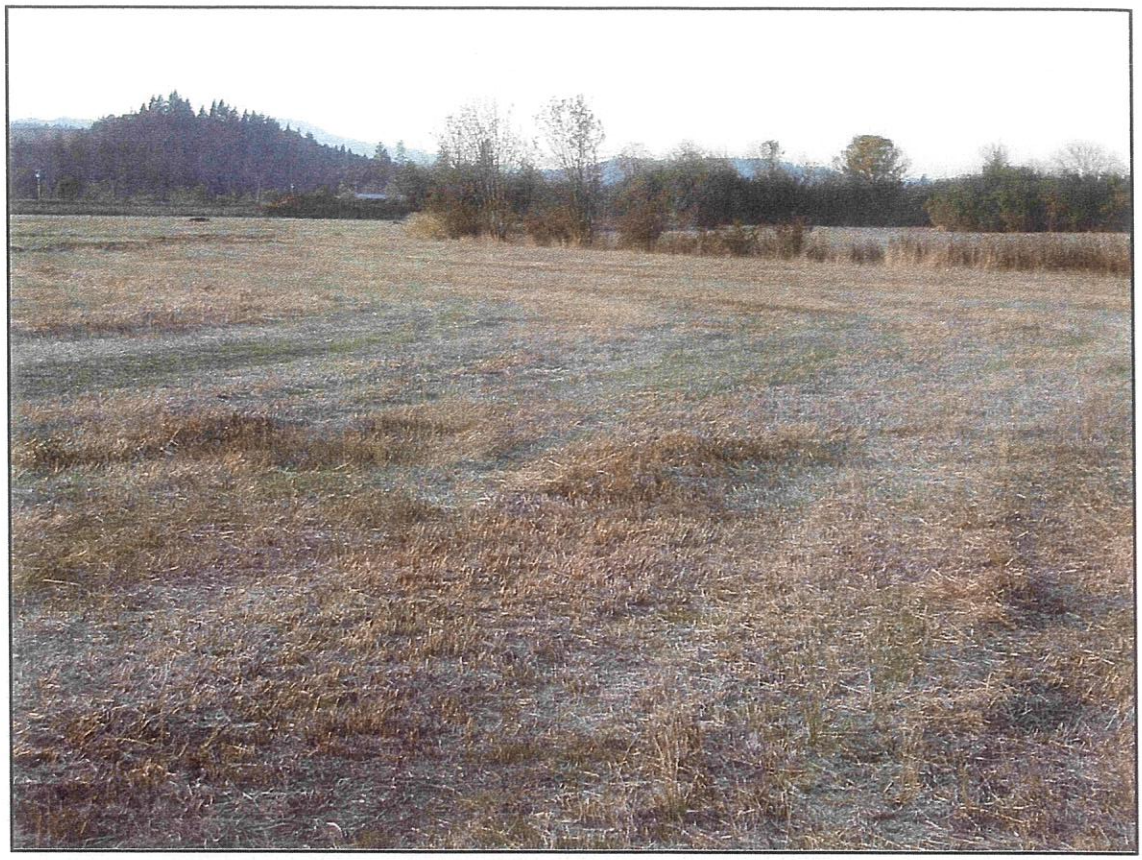


Photo 5: View of north end of drainage channel taken 10/30/06

Photo 6: Western property boundary taken 10/30/06

Photo 7: Southwest corner of property taken 11/19/06

Photo 8: View of central ash swale taken 11/19/06

Photo 9: Southeast end of property taken 11/19/06

Photo 10: Low-lying area near northwest end of property taken 11/19/06

Photo 11: Low-lying area at northwest end of property taken 11/19/06

Photo 12: Looking to southwest from north end of property taken 11/19/06

Photo 13: Looking south from northwest corner taken 3/15/07

Photo 14: View from east side looking west taken 3/15/07

Photo 15: View from center of east field looking north taken 3/15/07

Photo 16: View from center of east field looking west taken 3/15/07

Photo 17: Looking to northwest from east field taken 3/15/07

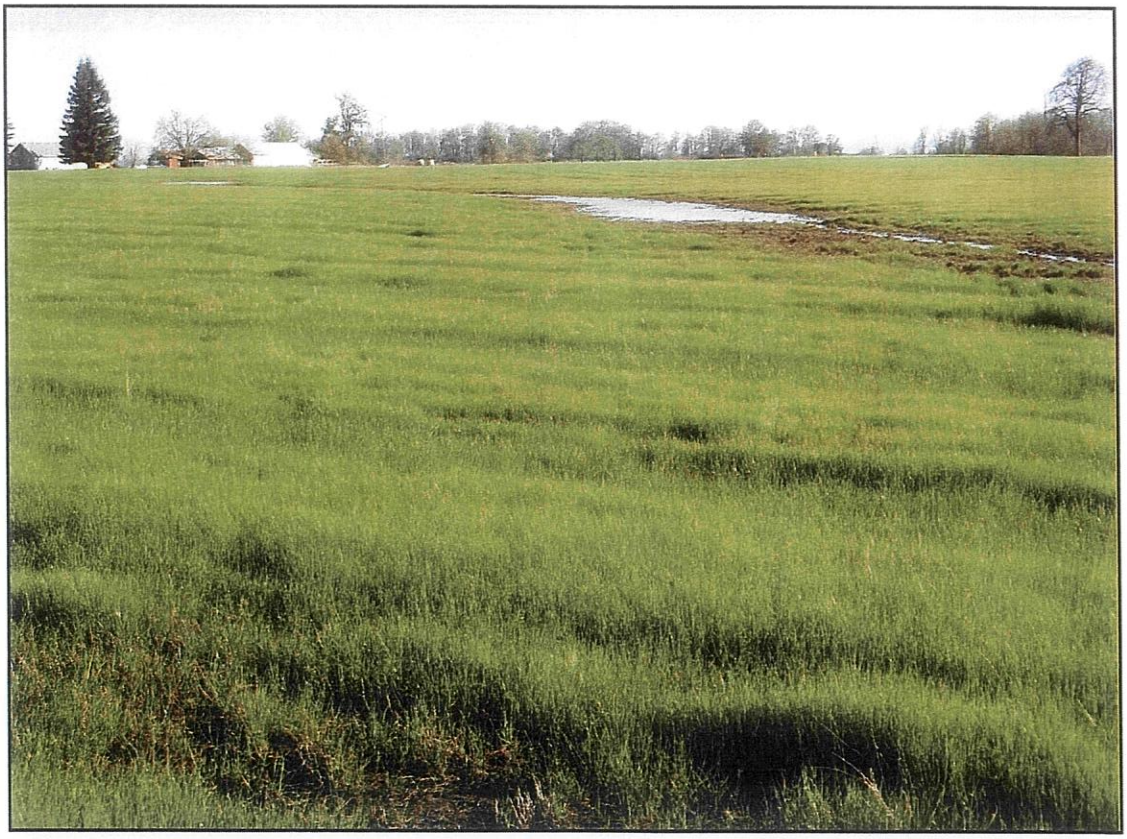


Photo 18: Looking south toward farm on east side of property taken 3/15/07

Photo 19: Ash swale in center of property on 3/15/07

Photo 20: Central field looking south on 3/15/07

Photo 21: Forested drainage near property center on 3/16/07

Photo 22: Drainage channel looking north on 3/16/07

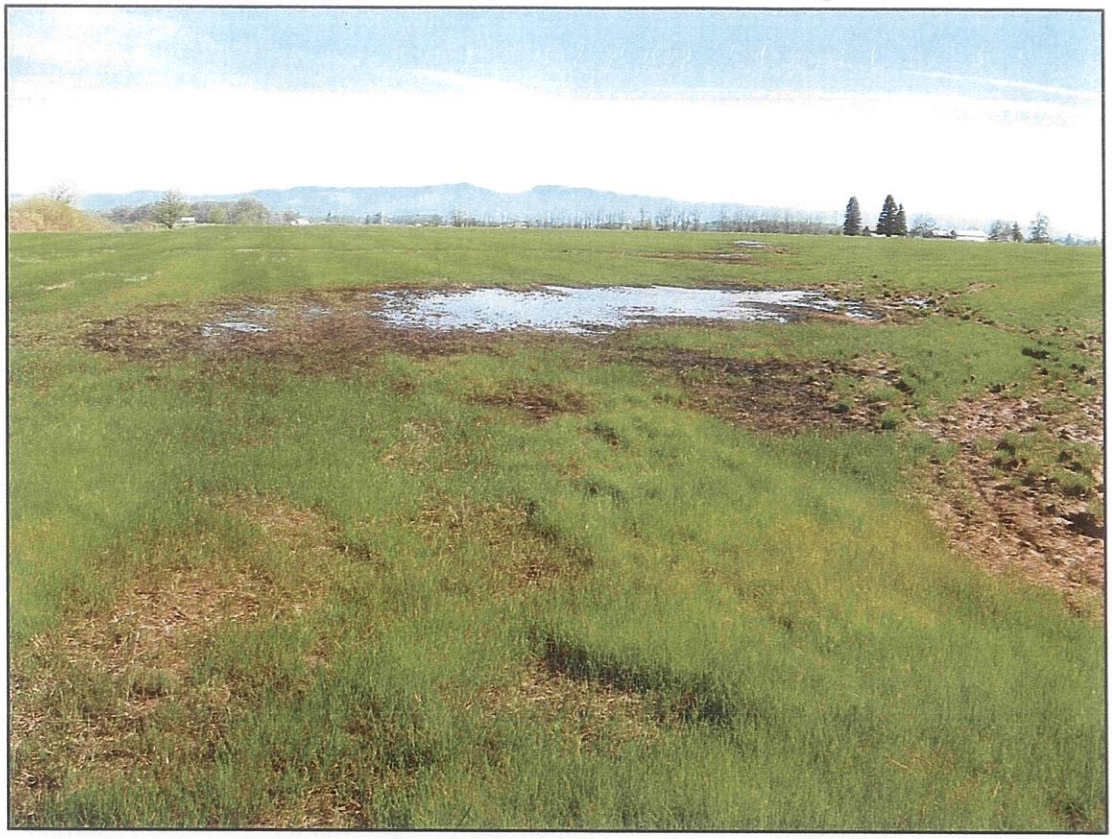


Photo 23: East field looking north on 3/16/07

Photo 24: Looking toward south end of forested drainage on 3/16/07

Photo 25: Looking south from northwest property corner on 3/28/07

Photo 26: Looking north in central field on 3/28/07

Photo 27: South end of ash swale on 3/28/07

Photo 28: Looking to southeast from center of east field on 3/28/07

Exhibit D

Crediting and Debiting Procedure for the Bank

Crediting Methods

The Oregon Department of State Lands mitigation ratios for mitigation banks will be used to establish the number of credits available at a mitigation bank. These ratios can be found at: OAR 141-85-0425

Generally, the ratios are as follows (in acres of existing:credits):

Creation (uplands with non-hydric soil conversion to wetlands) 1.5:1

Cropped wetland conversion to wetlands 2:1

Restoration (uplands with hydric soil conversion to wetland) 1:1

Enhancement 3:1

Credit Table

Method	Area (acres)	Ratio	Credits
Creation	23.39	1.5:1	15.59
Restoration	3.41	1:1	3.41
Enhancement	77.75	2:1	38.89
Preservation	0.00	10:1	0.00
Buffer	21.08	10:1	2.11
Total	125.63		60.00

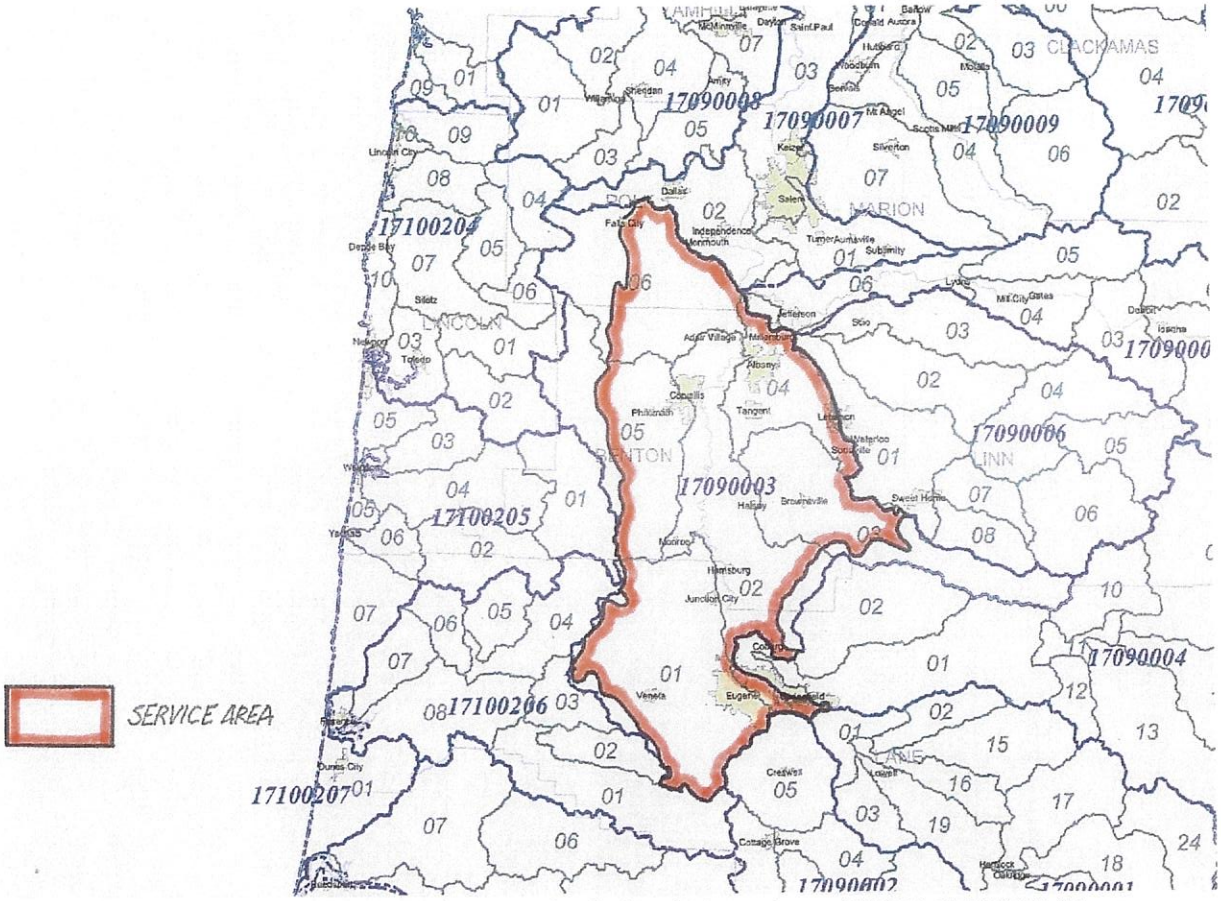
Directions for the credit table:

1. Make a separate Credit Table for each phase of the bank
2. If you are proposing different credit ratios for the different habitat types, distinguish between the habitats and make sure these numbers match the numbers on Exhibit B site plan.

Credit Release Schedule

# Credits Available	% Credits released	# Credits released	Performance Standard	Est. Date
60.00	15%	9.00	1. MBI Approved 2. Deed Restriction Recorded 3. Corps/DSL permits issued and activated 4. Document that site prep. has been initiated 5. Commensurate financial security posted	2008
51.00	15%	9.00	1. As-builts submitted/approved 2. Commensurate financial security posted	2008
42.00	55%	33.00	1. '87 Manual hydrology documented/approved 2. Post-construction wetland delineation approved 3. PEM & Vernal pool standards met	2012
9.00	15%	9.00	1. Conservation easement donated 2. PFO wetland standards met 3. Upland forest standards met 4. Upland savanna standards met	2018

Exhibit E
Service Area Map and Description



The Long Tom Mitigation Bank service area includes that portion of HUC 1709003 (Upper Willamette Watershed) that lies within the Willamette Valley Ecoregion. It includes all or a portion of the following incorporated cities: Eugene, Springfield, Coburg, Veneta, Junction City, Harrisburg, Monroe, Halsey, Brownsville, Sodaville, Lebanon, Tangent, Philomath, Corvallis, Albany, Millersburg, Adair Village, and Falls City. No elevation limitation is proposed other than that embodied in the limits of the Willamette Valley Ecoregion.

Exhibit F

DRAFT

DECLARATION OF COVENANTS AND RESTRICTIONS FOR THE LONG TOM MITIGATION BANK PHASE 1

THIS DECLARATION made this _____ day of _____, 2008, by EcoBank LLC, ("Declarant").

RECITALS

1. WHEREAS, Declarant is the owner of the real property described in Exhibit "A" attached hereto and by this reference incorporated herein as the "Property", and desires to create restore and enhance thereon wetlands and uplands to be maintained in accordance with the [Permit Number] approved by the Oregon Department of State Lands ("Department");

2. WHEREAS, Declarant desires to provide for the preservation and enhancement of the wetland values of the Property and for the maintenance and management of the Property and improvements thereon, and to this end desires to subject the Property to the covenants, restrictions, easements and other encumbrances hereinafter set forth, each and all of which is and are for the benefit of the Property.

NOW, THEREFORE, the Declarant declares that the Property shall be held, transferred, sold, conveyed and occupied subject to the covenants, restrictions, easements and other encumbrances hereinafter set forth in this Declaration.

ARTICLE 1
DEFINITIONS

1.1 "Declaration" shall mean the covenants, restrictions, and all other provisions set forth in the Declaration of Covenants and Restrictions.

1.2 "Declarant" shall mean and refer to EcoBank LLC, its successors or assigns.

1.3 "Removal fill permit" shall mean the final document approved by the Department that formally establishes the wetland mitigation and stipulates the terms and conditions of its construction, operation and long-term management.

1.4 "Property" shall mean and refer to all real property subject to this Declaration, as more particularly set forth in Exhibit "A".

ARTICLE 2
PROPERTY SUBJECT TO THIS DECLARATION

The real property which is and shall be held, transferred, sold, conveyed and occupied subject to this Declaration is located in Lane County, Oregon and is more particularly described in Exhibit "A". (*Exhibit "A" should be a survey and legal description.)

ARTICLE 3
GENERAL PLAN OF DEVELOPMENT

Declarant currently manages the site for the purpose of wetland mitigation. Current management is in accordance with Permit Number _____.

ARTICLE 4
USE RESTRICTIONS AND MANAGEMENT RESPONSIBILITIES

The Property shall be used and managed for wetland mitigation purposes in accordance with Permit Number _____. Declarant and all users of the Property are subject to any and all easements, covenants and restrictions of record affecting the Property.

1. All removal, destruction, cutting, trimming, mowing, alteration or spraying with biocides of any vegetation in the Property, shall be for the purpose of maintaining and improving the natural habitats located in the Property.
2. There shall be no agricultural, commercial, or industrial activity undertaken or allowed in the Property; nor shall any right of passage across or upon the Property be allowed or granted if that right of passage is used in conjunction with agricultural, commercial or industrial activity.
3. No domestic animals shall be allowed on the Property.
4. There shall be no filling, excavating, dredging, mining or drilling; no removal of topsoil, sand, gravel, rock minerals or other materials, nor any dumping of ashes, trash, garbage, or of any other material, and no changing of the topography of the land

of the Property in any manner, except in accordance with activities authorized in removal-fill permits.

5. There shall be no construction or placing of buildings, mobile homes, advertising signs, billboards, or other advertising material, or other structures on the Property, except for fencing and signage necessary to secure the Property.

ARTICLE 5

RESOLUTION OF DOCUMENT CONFLICTS

In the event of any conflict between this Declaration and Permit Number _____, the permit shall control.

IN WITNESS WHEREOF, the undersigned being Declarant herein, has executed this instrument this _____ day of _____, 2008.

EcoBank, LLC
Linn County, Oregon

By: _____
Duane Drushella

Title: Partner

STATE OF OREGON)
) ss:
County of_____)

This instrument was acknowledged before me on _____(*date*) by _____(*name of person*) as _____(*title*) of (*Your firms name*) _____of _____County, Oregon.

_____
Signature of Notarial Officer

My Commission Expires: _____

Exhibit "A"

Real property in the County of Lane, State of Oregon, described as follows:

THE NORTHEAST ONE-QUARTER OF SECTION 26, TOWNSHIP 15 SOUTH, RANGE 5 WEST OF THE WILLAMETTE MERIDIAN, IN LANE COUNTY, OREGON.

EXCEPT: BEGINNING AT THE NORTHEAST CORNER OF SECTION 26, TOWNSHIP 15 SOUTH, RANGE 5 WEST OF THE WILLAMETTE MERIDIAN; THENCE ALONG THE EAST LINE OF SAID SECTION 26, SOUTH 00° 03' 20" EAST 1319.99 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER OF SAID SECTION 26, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID EAST LINE AND RUNNING SOUTH 82° 44' 26" WEST 650.01 FEET; THENCE SOUTH 00° 03' 20" EAST 429.31 FEET; THENCE SOUTH 46° 41' 04" EAST 27.54 FEET; THENCE SOUTH 17° 14' 00" EAST 125.05 FEET; THENCE SOUTH 9° 35' 02" EAST 349.12 FEET; THENCE SOUTH 33° 54' 57" EAST 218.48 FEET; THENCE SOUTH 8° 44' 11" EAST 144.59 FEET TO A POINT ON THE EAST/WEST CENTER SECTION LINE OF SAID SECTION 26; THENCE ALONG THE EAST/WEST CENTER SECTION LINE OF SAID SECTION 26, SOUTH 89° 44' 34" EAST 386.59 FEET TO THE ONE-QUARTER CORNER COMMON TO SECTION 26 AND SECTION 25 IN TOWNSHIP 15 SOUTH, RANGE 5 WEST OF THE WILLAMETTE MERIDIAN; THENCE ALONG THE EAST LINE OF THE NORTHEAST ONE-QUARTER OF SAID SECTION 26, NORTH 00° 03' 20" WEST 1319.99 FEET TO THE TRUE POINT OF BEGINNING, ALL IN LANE COUNTY, OREGON.

ALSO EXCEPT: BEGINNING AT THE NORTHEAST CORNER OF SECTION 26, TOWNSHIP 15 SOUTH, RANGE 5 WEST OF THE WILLAMETTE MERIDIAN; THENCE ALONG THE EAST LINE OF SAID SECTION 26, SOUTH 00° 03' 20" EAST 1319.99 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER OF SAID SECTION 26, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID EAST LINE AND RUNNING SOUTH 82° 44' 26" WEST 650.01 FEET; THENCE NORTH 00° 03' 20" WEST 449.00 FEET; THENCE NORTH 89° 56' 40" EAST 644.88 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 26; THENCE ALONG SAID EAST LINE SOUTH 00° 03' 20" EAST 367.49 FEET TO THE TRUE POINT OF BEGINNING, ALL IN LANE COUNTY, OREGON.

Tax Parcel Number: 1742320

EcoBank LLC

38863 Scravel Hill Road NE
Albany OR 97322-9554
Phone 541-327-3427
Fax 800-680-2817
Cell 503-871-5472
www.OregonMitigationCredits.com

Exhibit G

Statement of Sale of Credit for Long Tom Mitigation Bank

Date: _____

No. of Credits Sold: _____

Impact Acres: _____

Impact Linear Feet: _____

Permittee Name: _____

Corps Permit Number: _____

DSL Permit Number: _____

Project Name: _____

Impact HUC: _____

By selling these credits to _____

EcoBank LLC is now the party responsible for fulfilling the mitigation responsibility associated with Corps permit # _____ **and DSL permit #** _____**.**

LONG TOM MITIGATION BANK PHASE 1 CREDIT LEDGER

Exhibit H

Beginning credit balance: 60.03

Permittee Name	Corps No.	DSL No.	Project Name	Impact HUC	Impact Acs.	Date	No. Credits Sold		Credit Balance
Example	2008-1234	RF-1234	Example	17090005	1.50	3/10/08	1.50		58.53
Example 2	2008-1235	RF-1235	Example 2	17090006	0.35	3/10/08	0.35		58.18