

MEMORANDUM OF AGREEMENT

BETWEEN

**U.S. ARMY CORPS OF ENGINEERS
U.S. FISH AND WILDLIFE SERVICE
U.S. ENVIRONMENTAL PROTECTION AGENCY
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON DIVISION OF STATE LANDS
U.S. BUREAU OF LAND MANAGEMENT
AND
CITY OF EUGENE**

TO

**ESTABLISH A COMPREHENSIVE MITIGATION BANKING PROGRAM
TO IMPLEMENT THE WEST EUGENE WETLANDS PLAN**

PURPOSE

The parties to this Memorandum of Agreement (the "Agreement") have participated in the development and adoption of the West Eugene Wetlands Plan (the "Plan").¹ As a result of the work culminating in the Plan, it was discovered that the West Eugene area includes 1,307 acres of wetlands. The Plan, which is described in more detail in Appendix A, addresses the competing needs for development and wetlands preservation in the west Eugene area. The Plan identifies areas appropriate for wetlands alteration and preservation, establishes standards for development, preservation, and mitigation of wetlands, identifies sites appropriate for development, preservation, and mitigation of wetlands, and describes the processes to be followed to implement the Plan.

The Plan includes the mitigation analysis for the entire West Eugene area, concluding that the most effective way to achieve no net loss of wetland resources is to avoid impact. Therefore, the Plan calls for the protection of over 75% of the 1,307 wetland acres from wetland impact -- relying on acquisition, comprehensive plan designations, zoning techniques and buffering requirements to ensure protection. Less than 25%, or 288, of the 1,307 acres of wetlands were found to be of lower value, and therefore, could be recommended for development. Because loss of even these lower valued wetlands must be compensated for, the Plan calls for the creation of a system of restored and enhanced wetlands to compensate for the loss of the wetlands on the 288 acres. (See Appendix B.)

¹The City of Eugene ("Eugene") and Lane County approved the Plan through approval of adopting ordinances. The U.S. Army Corps of Engineers ("the Corps") and the U.S. Environmental Protection Agency approved the Plan, and adopted the designations for wetlands included in the Plan as advance identification of wetland sites for fill or protection. The Oregon Division of State Lands ("DSL") approved the Plan as a Wetlands Conservation Plan. These approvals incorporate and ratify the standards for wetlands alteration, restoration, creation, enhancement, preservation, and development described in the Plan.

An integral part of the Plan is the establishment of a comprehensive Mitigation Banking Program for the creation of a number of separate wetlands mitigation bank sites, and the certification and sale of mitigation credits from those wetlands mitigation bank sites.² The Mitigation Banking Program includes (1) restoring, creating and enhancing wetland mitigation sites, (2) monitoring and maintenance services for those sites, (3) obtaining, selling and accounting for mitigation credits, and (4) performing other ancillary functions. The purpose of this Agreement is to establish the comprehensive mitigation banking program contemplated by the Plan.

GOALS

The primary goals of the Mitigation Banking Program (and of the individual mitigation bank sites to be created through the Program) are described in detail in Appendix B. These goals are summarized as follows:

"Mitigation is the process used by federal and state agencies for determining whether wetlands may be developed (impacted) and, if so, under what conditions. The decision-making process is hierarchial where each level of criteria must be satisfied prior to proceeding to the next. The process is structured so that priority consideration is given to *avoiding* wetland impact. If it can be shown there is an unavoidable *need* to impact wetlands, the process then attempts to *minimize* the extent of the impact and sets out requirements to *compensate* for wetland losses in the form of *enhancement, restoration or creation* of wetland resources. * * *

"Compensation is targeted for areas where the prospects for success are the highest, most beneficial to the ecological landscape and require little, if any, on-going maintenance. These areas are located on historic wetlands, disturbed agricultural wetlands and in areas adjacent to existing waterways. Enhancement and restoration, therefore, will be the primary methods for compensating for wetland losses. Mitigation efforts will concentrate on reestablishing historic wetland types and habitats that naturally occur in the area, while also creating opportunities for other wetland types such as marshes and ponds.

"The Plan approaches mitigation in a comprehensive manner where resulting efforts not only satisfy federal and state wetland law but achieve other

²The Mitigation Banking Program is a crucial part of the scheme to provide mitigation for development impacts contemplated in the Plan. This Program, however, is not the only means by which mitigation will occur in the West Eugene area. Mitigation for some impacted sites may be performed by the developers of those sites as concurrent or advance mitigation within the context of the standard permit process. Those efforts will not be part of this Mitigation Banking Program, nor governed by any of the provisions contained in this Agreement. The City of Eugene also may undertake mitigation projects on behalf of (i.e., as an agent for) developers, again as either concurrent or advance mitigation within the context of the standard permit process. Where the City undertakes such work, and to the extent that credits are certified for that mitigation project in excess of the number needed to compensate for the loss of wetlands caused by the developer's work, the credits may be added to Mitigation Banking Program's ledger after approval by the Corps and DSL.

community needs and objectives such as providing additional flood control storage, water quality enhancement features, improved wildlife habitat and education and recreation needs.

"The Plan utilizes the wetland mitigation bank concept as the primary means for implementing the mitigation program. With this approach, mitigation efforts are planned as a whole where the most suitable sites are identified, acquired and restored in advance of wetland impact. This concept not only benefits the natural resource system by planning for the restoration of the Amazon Creek basin, but it also benefits the users of the bank -- the development community. The bank system performs the mitigation requirements for individual users where the details of compensation are preplanned, constructed and maintained by a public or private nonprofit agency. To satisfy individual impact requirements, users simply have to buy mitigation credits from the bank, thus eliminating uncertainty and saving valuable time and resources. Because the bank is planned and developed as a whole, the details of mitigation can be incorporated into the existing environment, resulting in a more logical and natural system. The bank is proposed to have sufficient capacity to serve the mitigation needs of the West Eugene Wetland Study Area and the community as a whole."

DEFINITIONS

Certified Credits. Wetlands mitigation credits which are available for sale after the Corps and DSL certify the credits following the completion of the hydrological and vegetative work at a mitigation bank site.

Creation. Conversion of a non-wetland site into a wetland site by excavation, diking and flooding, or conversion of a deepwater site by filling.

Credit Certification. A formal determination by the Corps and DSL that mitigation bank credits are available for compensatory mitigation purposes. Credits may be certified when mitigation site improvements, including hydrologic and vegetative work, have been completed.

Enhancement. Altering the physical characteristics of an existing wetland such that it permanently improves one or more specific wetland functions and values. The improvements may be to soils, water, or plants. Enhancement may improve a particular wetland value at the expense of other values. For example, diking an area to create a marsh environment for waterfowl nesting may flood a grassy wetland and reduce habitat for small rodents such as mice and voles. Because impacts associated with individual projects that propose to use bank credits will, in virtually all cases, be permanent, only enhancement that results in permanent improvement of a wetland's functions values will generate credits.

Financial Guarantee Funds. Monies set aside by the Program in order to ensure that adequate funds will be available to monitor and maintain individual mitigation bank sites, and to perform necessary remedial measures, during the monitoring period. The monies set aside

shall equal 20% of the estimated cost of performing the mitigation work.

Jurisdictional Wetland. A wetland determined to be subject to requirements of the federal Clean Water Act or Oregon's fill and removal statute.

Ledger. Document to be used in the accounting of credits and debits. Ledger will be maintained by Eugene and reviewed by MBRT.

Mitigation Bank Site. The geographic location of created, restored, enhanced, or in exceptional circumstances, preserved wetlands which serve as the physical resource used to generate bank credits.

Monitoring. A specific program of data collection which documents the physical, chemical, and biological characteristics of the mitigation bank wetlands, for the purpose of determining compliance with performance standards.

Plan. The West Eugene Wetlands Plan, adopted by the City of Eugene and Lane County through approval of adopting ordinances, and approved by both the Corps and DSL.

Restoration. Re-establishing wetland conditions in areas that were wetland in historical times, but which have been modified such that they are now considered non-wetland. Restoration converts previous wetland sites back to functional and jurisdictional wetlands. The restoration may return a missing or damaged wetland function to achieve a desired outcome; for example, removing an agricultural crop and planting native seeds to produce a wet prairie grassland.

Uncertified credit. A limited number of mitigation credits which may be sold following approval by the Corps and DSL of the mitigation improvement plan, but prior to implementation of that plan. Such credits can be sold only during the initial stage of this Agreement, in order to monetize the bank.

GENERAL MANAGEMENT/OPERATION OF PROGRAM

The Parties to this Agreement, with the exception of City of Eugene ("Eugene") and the Bureau of Land Management ("BLM"), shall constitute the Mitigation Bank Review Team ("MBRT"). The MBRT shall review the operations of the bank, the mitigation plans for individual sites to be included in the bank, monitoring reports, accounting reports and remedial measures. The MBRT shall advise the Corps and DSL on whether to approve conceptual and detailed mitigation plans, and when requested by the Corps, DSL or Eugene, on the certification of mitigation credits for a particular bank site. Within the budgetary and other resource limitations of the members of the MBRT, the MBRT also shall provide advice to Eugene and the Wetlands Executive Team, or its representatives, as requested.

Eugene will operate the West Eugene Wetlands Mitigation Banking Program (the "Mitigation Banking Program" or the "Program"). A Wetlands Executive Team (the "WET") shall provide management direction to Eugene regarding the coordinating aspects of the Mitigation Banking Program. WET shall consist of Eugene, BLM and The Nature

Conservancy ("TNC"), until such time as the membership changes pursuant to the Memorandum of Understanding (the "MOU") agreed to by Eugene, BLM and TNC. WET will advise the City on an annual programmatic direction for the Mitigation Banking Program, including scheduling mitigation improvement projects and monitoring the success of the mitigation program.

Eugene shall provide the day-to-day administration of the Mitigation Banking Program. The Program shall be funded through a dedicated fund (the "Fund") to be established by Eugene. All monies and assets of the Program shall be placed in the Fund. Property acquired by BLM shall not become part of the Fund. Monies include cash obtained from the sale of credits, as well as grants, donations, and contributions from governmental and non-governmental entities. All funds and assets in the Fund shall be used to carry out the obligations created by this Agreement and implement the Plan. Those obligations include funding mitigation bank projects (including costs/expenses of Eugene staff); monitoring, maintenance and remediation of mitigation banks; and other expenses of Eugene, BLM or TNC related to implementation of this Agreement (including preparation of reports and accounting of mitigation credits).

In order to ensure that adequate funds will be available to monitor and maintain individual mitigation bank sites, and to perform remedial measures where necessary, the sales price for a mitigation credit shall be established at an amount not less than the sum of the following: (a) the estimated cost of performing the work to create that mitigation bank credit (i.e., the cost of development and implementation of the plans for individual mitigation sites); and (b) an amount equal to at least 20% of that estimated cost. The additional 20% shall be set aside to be used to monitor, maintain and, where necessary, undertake remedial measures on bank sites. If monies nevertheless are insufficient to perform all of the requirements of this Agreement, Eugene shall seek additional funding. Nothing in this Agreement, however, shall require Eugene to expend funds other than those funds belonging to the Fund, or to incur staff or other costs except to the extent funds are available from the Fund to pay for those costs.

INDIVIDUAL MITIGATION BANK SITES

General Process To Establish Certified Credits From Mitigation Bank Sites

The areas within which mitigation projects will occur in conjunction with the Mitigation Banking Program are described herein and shown on Map 1 in Appendix C. These areas include the Long Tom River watershed and its tributary stream, Amazon Creek, as shown in Appendix C. The areas are consistent with the West Eugene Wetlands Plan, Study Area shown on Map No. 2 in the 1992 West Eugene Wetland Plan and the U.S. Bureau of Land Management's acquisition plan for the area along the Long Tom River north of Fern Ridge Dam. Individual mitigation bank sites will be owned by Eugene, BLM or TNC, or permanent conservation easements will be obtained by one of these entities to ensure permanent control of the sites.

Mitigation bank credits can be established in one of three ways. First, Eugene (or its partners in the Mitigation Banking Program) may undertake wetlands mitigation work on its own, and then seek certification of credits by the Corps and DSL. In this event, Eugene shall

provide to the Corps and DSL documentation about the site prior to the mitigation work, and subsequent to completion of hydrologic and/or vegetative improvements, to demonstrate the increase in wetland values. Based on that documentation and a site visit, if requested, the Corps and DSL shall decide on the certification of mitigation bank credits for that site.

The second manner of establishing mitigation bank credits is for Eugene -- as part of a concurrent or advance mitigation work within the context of a standard permit process -- to create more credits than are needed to compensate for the loss of wetlands authorized by the permit. Prior to completion of the mitigation work, Eugene shall notify the Corps and DSL of Eugene's expectation that the mitigation work will create more credits than needed. If such notice is provided, and to the extent that the Corps and DSL certify excess credits, those excess credits shall be added to the Mitigation Banking Program's ledger for sale.

Finally, mitigation bank credits can be established through the following five step process. The process begins with project identification in the three-year capital improvement plan ("CIP"). Eugene, in conjunction with its WET partners, shall annually submit this CIP to the MBRT, either as part of the annual report or separately. The CIP shall identify the individual mitigation bank site projects for each of the three succeeding years. For each project, the CIP shall identify the project location, the type of mitigation to be undertaken, the number of acres, and the number of mitigation credits expected to result from the project.

The second step of the process shall involve the submission of the specific conceptual plans for each of the upcoming year's construction projects to the MBRT for its review and approval. This submission also may occur as part of the annual report, or may occur separately.

Step three consists of approval of the specific mitigation improvement plans ("MIPs") for the individual bank sites; this step is discussed in more detail below. Step four consists of the Program carrying out the MIP (after receiving approval of the MIP). Finally, step five provides that the Corps and DSL shall review the work and certify the mitigation credits; credit certification, as well as performance criteria and monitoring requirements, also are discussed below.

Review and Approval of MIPs³

Specific mitigation improvement plans ("MIPs") shall be submitted to, and approved by, the Corps and DSL. The MIP is the planning stage where proposed improvement activities are identified and mapped onto specific site improvement plans. The MIP is the primary planning tool for guiding and managing mitigation improvement activities for which mitigation credit is desired. The MIP process provides a planning framework for identifying the mitigation site, formulating goals and objectives, identifying wetland plant communities and

³Approval of the MIP shall be required before any uncertified credits (based on the MIP) can be sold. If no uncertified credits will be sold (based on a particular individual mitigation bank site), the Program may, but is not required to, seek prior review and approval of the MIP from the Corps and DSL. If only certified credits are to be sold as a result of a particular project, the Program may simply undertake the work and then seek certification of credits based on the work actually performed.

habitats to be gained, and establishing performance criteria for measuring overall project success. More specifically, the process shall include the following steps:

- A MIP shall be prepared for each proposed mitigation improvement project for which mitigation credit is desired and submitted to the Corps and DSL for review and approval. MIPs shall identify, and to the extent practicable and appropriate, incorporate the following:

Project Description: A narrative that describes the overall *goals* and *objectives* of the project, and how they support the goals and objectives of the West Eugene Wetlands Plan and Concept Plan Map. The narrative should highlight proposed gains in wetland plant communities, functions and values, and mitigation credits expected to be realized.

Existing Conditions: Through narrative and maps, describe existing physical conditions, including: landscape habitats (including wetlands), hydrology, soils, vegetation, elevations, surrounding land uses, wildlife, current functions and values, and cultural amenities such as parks and bicycle and pedestrian paths.

Future Conditions: Describe the future landscape conditions, including: wetland and upland habitats (including buffers, if any), functions and values, and hydrology (extent and duration).

Plans and Specifications: Plans and specifications provide the necessary detail for implementing the design and usually include a grading and hydrology plan, planting plan, and construction schedule.

Maintenance Plan: A maintenance plan outlines and describes the appropriate actions to be taken to insure success of the project, including: weed control, litter and debris removal, watering, replanting, repair of water control structures, cleaning of culverts and other pertinent activity should be described in detail.

Monitoring Plan: Monitoring plans are designed to determine whether the mitigation activity has been successful and to verify that success will continue beyond a few years. At a minimum, the monitoring plan should address hydrology, soils, and vegetation. Other useful information to track includes functions and values - are they present and operating? The format and content of the monitoring plans should be modeled after the Eastern Gateway Wetland Restoration Project - Annual Report, January, 1995.

- The Corps and DSL shall review the MIP against the policies set forth in the West Eugene Wetlands Plan, the approved Capital Improvement Plan, and this agreement, and render a decision within 30 days from its receipt. In the event a decision has not been made within the 30 day time period, the MIP application is deemed approved. A decision may include: approval as submitted; approval with conditions; or denial. If the Corps or DSL denies an MIP application, the Program may request review by the MBRT. The MBRT will consider the evidence and advise the Corps and DSL on a

recommended course of action. With the agreement of all parties (Eugene, the Corps, DSL), the 30 day time period may be extended indefinitely.

- Upon approval of the MIP, and any required restoration permits, the Program may proceed with mitigation improvement activities.
- Upon completion of the hydrological and vegetative improvements tasks, the Program shall submit a mitigation credit certification request to the Corps and DSL for their review and approval. Upon certification approval, the credits shall be deposited in the bank and made available for purchase.

PERFORMANCE CRITERIA FOR MITIGATION IMPROVEMENT PROJECTS

Mitigation bank credits will be generated as wetlands are restored, created, enhanced, and preserved. The unit of wetland credit is acres. The following performance criteria shall be used for evaluating the progress and, ultimately, the success of mitigation work. The following criteria applies to restored and created wetlands. For enhanced wetlands, performance criteria will be established on a case-by-case basis at time of mitigation improvement plan approval.

- Wetlands restored or created for credit shall meet criteria for jurisdictional wetlands using the wetland delineation manual in use by the Corps and DSL at the time the respective mitigation improvement plan is approved.
- Native Plant Species.

Species Importance. Wetlands restored or created for mitigation credit shall be dominated by native plant species where their total represents at least 50% of species importance within two years of planting or seeding, and at least 70% within five years. Species importance is defined as 50% coverage or 50% frequency of native plants as measured in a one (1) square meter plot. Note: alternative standards may be developed on a case-by-case basis for specific wetland habitats where the above criteria are inappropriate.

Species Type. The types of all planted species shall be from the Native Plant List of West Eugene Wetlands Plan. Of the plant species occurring at a 50 percent frequency rate or greater, at least 75 percent shall be from the Native Plant List of West Eugene Wetlands Plan.

Survival. At least 70 percent of the planted or seeded native plants shall be alive and present at the end of the five year monitoring period.

- Diversity and Structure. The following rates and structure are established:

Wet Prairie - minimum of 10 native species occurring at 10% frequency rate or greater.

Emergent Open Water Mix - minimum of 5 native species occurring at a 10% frequency rate or greater.

Forest - minimum 3 native species: 2 woody (25% canopy cover); 1 grass/forb (25% cover).

Scrub-Shrub - minimum 3 native species: 1 woody (30% cover); 2 grass/forb (<75% cover).

CREDIT CERTIFICATION

Following completion of mitigation work at a site, the Program shall request the Corps and DSL to certify the number of mitigation credits created as a result of the work at the mitigation bank site. The determination of the Corps and DSL as to the number of credits created by the mitigation work shall be based on the guidelines, criteria, performance standards and functional assessment procedures contained in the preceding section of this Agreement and in Appendix D, and on a set of as-built drawings.

Bank credits shall be certified and available for sale when the Program has completed the initial hydrological and vegetative work. The Program shall provide adequate financial guarantees that the mitigation efforts will meet the above performance criteria during the five-year monitoring period by including within the cost of a mitigation credit an amount equal to 20% of the estimated cost of planning and developing the individual mitigation bank site.

The Corps and DSL shall review the request and render a decision within 30 days from its receipt. If no decision is provided within 30 days, the credits shall be considered certified and available for purchase. If the Corps, DSL and Eugene all agree, the 30 day review period can be extended.

If the Program is dissatisfied with the decision of the Corps or DSL, the Program may request that the MBRT review the decision. Within 30 days, the MBRT will consider the evidence and advise the Corps and DSL as to the number of credits which should be certified. Based on the advice received from the MBRT, the Corps and DSL shall reconsider their previous decision, and either issue a new decision, or confirm their previous decision, within 30 days of receipt of advice from MBRT.

MONITORING AND REMEDIAL MEASURES FOR INDIVIDUAL BANK SITES

Monitoring of individual mitigation bank sites shall occur for a period of not less than five years from the date of planting completion. Unless otherwise agreed to by Eugene, the Corps and DSL, sites shall be inspected on an annual basis, with maintenance activities performed as needed. If Eugene, the Corps and DSL agree to a monitoring period in excess of five years, then the parties also shall identify a specific frequency for those inspections: the parties anticipate that such monitoring would occur annually for the first two or three years, and then less frequently for the duration of the monitoring period. During the monitoring period, management shall occur as needed to reconcile current conditions with mitigation goals. Monitoring goals and specified levels of precision will be developed on a case-by-case basis.

The Program shall perform any necessary maintenance of wetlands plants and hydrological functions on all mitigation bank sites for which the Corps and DSL have certified credits. Maintenance activities shall seek to maintain the wetland functions and values of mitigation bank sites, consistent with the standards and criteria of the Plan.

In the event that a mitigation bank site fails to provide expected wetlands functions and values during the monitoring period, the Program shall determine the cause of the failure and develop a plan for submission to the MBRT outlining the corrective measures to be taken based on the ecological conditions of the site. Management activities shall continue until the standards are met.

Upon completion of the monitoring period and evidence that the bank site has performed according to required standards, the Program may request from the Corps and DSL approval to release any remaining financial guarantee funds which had been reserved and set aside for that site. The Corps and DSL shall respond to the request within 30 days. If no response is provided within that 30 day period, the request shall be deemed approved and the Program may use those remaining funds for other Program activities.

ACCOUNTING AND USE OF MITIGATION CREDITS

The Program shall maintain a ledger of all mitigation credits created (i.e., certified by the Corps and DSL), and of all mitigation credits sold, including both certified and uncertified credits. The Program's accounting shall include mitigation credits created by each mitigation bank site (i.e., the credits certified by the Corps and DSL for each mitigation bank site), the numbers of mitigation credits available for sale and sold to date, costs associated with mitigation credits and operation of the Program, mitigation sites for which all mitigation credits have been sold, amounts received in payment for mitigation credits, and other amounts or assets received for operation of the Program or fulfillment of its goals and objectives. Any party may review the Program's accounting records upon request and after reasonable notice.

The Program shall create and sell a "uniform" credit, regardless of the mitigation method (i.e., restoration, creation, enhancement or preservation), the wetland type (i.e., wet prairie grasslands, scrub-shrub, forested, emergent open water, disturbed agricultural), or the type of wetlands being impacted by development for which mitigation credits are required.

The Program shall establish a price for the sale of mitigation credits sufficient to recover all of the Program's costs associated with creating mitigation credits on mitigation bank sites, including costs of site preparation, seeding, planting, monitoring, maintenance, remedial activities, and an allocable amount for Program administration. The Program shall review the price of credits not less than annually, and shall include within the Annual Report the then-current price for credits, as well as any planned adjustment to the price.

Sale of mitigation bank credits shall be limited to certain geographic locations identified in Map 2 of Appendix C. First priority for sale of credits shall go to compensate for impacted areas within the West Eugene Wetlands Study Area. Second priority shall go to impacted sites within the Urban Growth Boundary for the City of Eugene and at the Eugene Airport. Finally, mitigation credits can be sold to compensate for wetlands loss outside these other areas, but

only with the prior, express approval of the Corps and DSL.

Subject to the following, the Program may sell both certified and uncertified credits:

Certified credits.

Certified mitigation credits are those which are created on mitigation bank sites and come into existence (i.e., certification by the Corps and DSL) and have completed the hydrologic and vegetative improvements on the site before they are committed to a particular project impact. Certified mitigation credits are used to provide mitigation at the time they are purchased in connection with a proposed development activity.

Uncertified credits.

In order to capitalize the Mitigation Banking Program, the Program may sell a limited number of uncertified credits during the initial stages of this Agreement. The sale of uncertified credits shall be limited to the first six (6) years of this Agreement, by which time the parties anticipate that the Banking Program will be fully operational. The Program will use the funds from the sale of uncertified mitigation credits to perform the mitigation requirements described in the Plan to create a sufficient number of mitigation credits to provide the required mitigation for the particular project.

The sale of uncertified credits shall be limited to 30% of the number of mitigation credits reasonably expected to be produced as a result of the individual mitigation bank projects contained in the three-year capital improvement plans. In addition, no uncertified credit may be sold unless the Corps and DSL have approved a mitigation improvement plan which, when implemented, will create the necessary credits.

Following completion of the mitigation improvement plan for which uncertified credits were sold, the Corps and DSL shall determine the actual number of mitigation credits produced by the project. Following that determination, the Program shall reconcile the actual certified credits with the number of uncertified credits sold. If the actual certified credits exceeds the number of uncertified credits sold, then the excess shall be credited to the Program to be sold as any other certified mitigation credit. If the actual certified credits is less than the number of uncertified credits sold, then the shortage shall be debited from the mitigation bank's ledger. In no event may the Program sell a certified credit created for work for which an uncertified credit already was sold. In the event any uncertified credits become certified prior to their purchase, the now certified credits must be purchased prior to the sale of any new uncertified credits. Any new uncertified credits must have an approved Mitigation Improvement Plan.

Uncertified credits shall be accounted for as follows:

- (1) The maximum number of uncertified credits is limited to 30% of the potential credits to be realized from the Bank's 3-year capital improvement plan (CIP).
- (2) Each year the CIP will be updated to extend the CIP into the next 3-year cycle and to estimate the resulting number of potential uncertified credits. The estimate will

include any changes resulting from credit purchases and from conversion from uncertified to certified credit status. Based on a hypothetical situation, the following table indicates how the accounting system will operate during the 6-year cycle of the uncertified credit program:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Period of Capital Improvement Plan	Maximum Number of Potential Credits from CIP	Maximum Number of Potential Uncertified Credits (30% of CIP)	Balance of Uncertified Credits from Prior Year	Total Uncertified Credits Available for Sale	Number of Uncertified Credits Sold	Number of Uncertified Credits Certified	Balance of Remaining Uncertified Credits
1. Years 1, 2, 3	20	6	0	6	2	0	4
2. Years 2, 3, 4	13*	3.9	4	7.9	3.10	2	2.8
3. Years 3, 4, 5	25*	7.5	2.8	10.3	3.5	2	4.8
4. Years 4, 5, 6	8*	2.4	4.8	7.2	3.0	0	4.2
5. Years 5, 6,	12*	3.6	4.2	7.8	0	0	7.8
6. Years 6	6.4*	1.9	7.8	9.7	3.18	0	6.52

* After year 1 and for determining "maximum potential uncertified credits" (column 3), 30% is applied only to the potential credits that can be realized from the "additional" year. For example, in the second year, the CIP covers years 2, 3, and 4. 30% is applied only to the credits that can be realized from year 4 (7.5 credits).

Within the annual report, the following information will be provided:

- (a) Maximum number of total potential credits based on approved CIP;
- (b) Maximum number of uncertified credits based on 30% of approved CIP;
- (c) Number of potential credits resulting from approved Mitigation Improvement Plans;
- (d) Number of uncertified credits authorized and available for sale;
- (e) Number of uncertified credits purchased (debits);
- (f) Number of uncertified credits certified;
- (e) Number of uncertified credits unsold at end of year.

ANNUAL REPORT

The Program shall report to the MBRT, not less than annually, on the performance of the individual mitigation sites and the status of the Program's mitigation credit ledger. Not later than September of each year, the Program shall prepare and forward to the MBRT a report on the Program's activities for the preceding 12 month period, and a projection of the Program's activities for the next 12 month period. The Annual Report shall include:

(1) An accounting of all mitigation credits created and sold during the preceding 12 month period. The bank credit ledger review shall include: the number of credits certified during the year; mitigation costs (land, planning and engineering design, construction, maintenance, remedial activities); the number of credits (certified and uncertified) purchased (i.e., debits); the revenues generated from sale of credits; the remedial actions, if any, and associated costs; and recommended corrective actions, if any, to policy and procedure actions.

(2) A description of the work to be performed during the next 12 month period at individual mitigation bank sites, including work previously approved by the Corps and DSL which will create mitigation credits, as well as work to monitor and remediate

existing mitigation bank sites.

(3) For each individual mitigation bank site still in its monitoring period, the monitoring results for the mitigation bank for the previous 12 - 24 month period. Monitoring and assessment methodologies for all future reports will be modeled after the Eastern Gateway Wetland Restoration Project Annual Report, January 1995. The report shall include information related to: site design & construction; monitoring: vegetation, soils, hydrology, wildlife utilization; maintenance activities performed; and recommended corrective measures, if any, to design standards, specifications, and maintenance protocols.

(4) The three year capital improvement plan, unless the Program separately submitted the CIP to the MBRT.

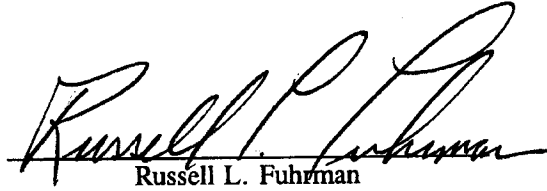
Annual joint field inspections by the signatories of this agreement are encouraged. Eugene shall schedule an annual field inspection for the parties.

EFFECTIVE DATE AND MODIFICATION

This Agreement may be amended only by a written amendment signed by all parties to the Agreement. Changes to any of the policies, standards, criteria, guidelines or functional assessment procedures criteria which govern the selection of mitigation or development sites, or the creation or use of mitigation credits, may be approved by agreement between Eugene and the Corps and DSL.

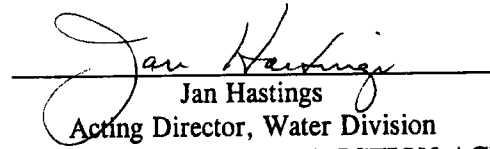
This Agreement shall take effect upon execution by Eugene, the Corps and DSL. The Agreement shall be binding on the other parties only after they have signed the Agreement. This Agreement shall continue in effect until all mitigation credits created by the mitigation bank sites have been sold and the Program has completed all monitoring and maintenance functions required at all mitigation bank sites.

**The signatures to this document are
on the following page—Page 14**



Russell L. Fuhrman
Major General, U.S. Army
Division Engineer, North Pacific Division
U.S. ARMY CORPS OF ENGINEERS

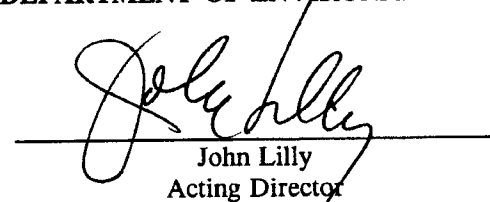
Russell Peterson
State Supervisor
U.S. FISH AND WILDLIFE SERVICE



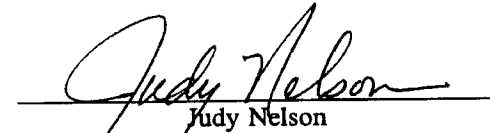
Jan Hastings
Acting Director, Water Division
U.S. ENVIRONMENTAL PROTECTION AGENCY



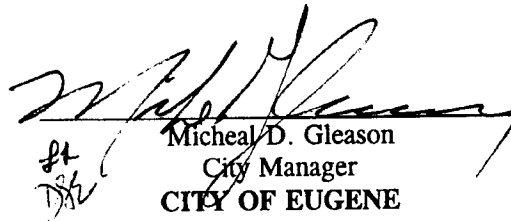
Langdon Marsh
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City Manager
CITY OF EUGENE

WEST EUGENE WETLANDS PLAN:

*A Product of the
West Eugene Wetlands Special Area Study*

December 1992

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CHAPTER ONE

OBJECTIVES AND HIGHLIGHTS

Plan Objectives

There were four major objectives of the West Eugene Wetlands Special Area Study (WEWSAS):

1. To use the best information to help the community understand the choices available;
2. To find a balance between environmental protection and sound urban development which meets state and federal laws and regulations;
3. To provide opportunities for involvement of all interested segments of the community in Plan development; and
4. To turn a perceived "wetlands problem" into a "wetlands opportunity" for the community.

Plan Highlights

As suggested in the Preface and the above objectives, this Plan addresses wetlands and economic development as critical parts of a healthy, livable community. While the plan contains more detailed goals, policies, and recommended actions, the thrust of the Plan can be understood by reviewing the following highlights, Plan Recommendations (Map 3) and the Wetlands Conceptual Plan Map (Map 4).

Protection and Restoration of a Wetland and Waterway System

To implement existing federal and state wetland law and policy, the Plan recommends protection of the remaining valuable wetlands. Sites with rare plants are proposed for protection. Almost all of the sites with remnants of the wet prairie grasslands with other important natural values are recommended for protection within the west Eugene wetlands study area. Existing wetlands will be enhanced and areas restored where wetlands once existed. These areas and additional areas along stream courses will be used to form a connected wetland system creating greenways along Amazon Creek, Willow Creek, the A Channel (old Amazon Creek), and the A-3 Channel. This system will provide open space and scenic values in the west Eugene region. Screening techniques will be used to protect wetlands from the effects of adjacent land uses.

Protection of Natural Diversity

By protecting a variety of wetlands, establishing protective buffers, creating and enhancing a variety of wetland types, managing them as a connected system, and linking them together, the community can enhance the natural diversity of west Eugene, an area which was neglected too often in the past. In the future, it will be rich in natural and cultural diversity.

Development Opportunities and Certainty

After many years of planning for urban uses and investing millions of dollars in public infrastructure facilities, the discovery of wetlands in west Eugene placed a cloud of uncertainty over future development opportunities. The Plan responds to this dilemma with recommendations that attempt to balance environmental and economic development values within the framework of federal and state wetland law. The Plan removes the cloud of uncertainty by recommending development on some wetlands while protecting others (see Map 3). Wetlands that are recommended for development are frequently small, isolated and difficult to protect from already planned or developed urban uses. The Plan also recommends that the City seek a regional permit from the Army Corps of Engineers so that the administration of the permitting and mitigation process can occur at the local level, thus saving valuable time and resources.

Public comment during the preparation of the Plan and examples of new development adjacent to wetlands in other communities, tells us that citizens value living, working and shopping in areas that demonstrate attention to the surrounding landscape. Using this Plan, the community can focus its attention on designing future development in ways that complement wetland areas, resulting in added value for both the development and the environment.

Wetland Protection Measures

The Plan examines and recommends a number of wetland protection measures. The primary long-term protection strategy is public or private nonprofit acquisition, coupled with a natural resource designation on the Metropolitan Plan and a natural resource zoning district that would prohibit development. Until funds become available for acquisition, the existing federal and state wetland regulatory processes will continue to be the primary means for insuring wetland protection. In addition to their existing review process, federal and state regulatory agencies will utilize this Plan's recommendations as guidelines when considering individual permit applications. When the City obtains a federal regional permit and a state approved wetland conservation plan, the administration of the permitting process will be transferred to the City of Eugene. At that time, the City will have adopted other protection measures such as overlay zones, buffering requirements, and conservation easements.

A priority for implementing this Plan is the preparation and adoption of a waterside protection and development ordinance. This ordinance will protect water quality and wildlife habitat of identified natural resource areas, allowing and encouraging development that is designed to enhance environmental values (see Appendix A).

Mitigation

Mitigation is the process used by federal and state agencies for determining whether wetlands may be developed (impacted) and, if so, under what conditions. The decision-making process is hierarchical where each level of criteria must be satisfied prior to proceeding to the next. The process is structured so that priority consideration is given to *avoiding* wetland impact. If it can be shown there is an unavoidable *need* to impact wetlands, the process then attempts to *minimize* the extent of the impact and sets out requirements to *compensate* for wetland losses in the form of *enhancement, restoration or creation* of wetland resources.

This Plan has conducted the mitigation analysis for the entire study area and concludes that the most effective way to achieve no net loss of wetland resources is to avoid impact. As a result, over 75% of the 1,307 wetland acres will be protected from impact through acquisition, comprehensive plan designations, zoning techniques and buffering requirements.

For the 288 wetland acres recommended for development, the Plan requires compensation to occur at a minimum ratio of 1.5 acres of replacement for each acre of impact. Compensation is targeted for areas where the prospects for success are the highest, most beneficial to the ecological landscape and require little, if any, on-going maintenance. These areas are located on historic wetlands, disturbed agricultural wetlands and in areas adjacent to existing waterways. Enhancement and restoration, therefore, will be the primary methods for compensating for wetland losses. Mitigation efforts will concentrate on reestablishing historic wetland types and habitats that naturally occur in the area, while also creating opportunities for other wetland types such as marshes and ponds.

The Plan approaches mitigation in a comprehensive manner where resulting efforts not only satisfy federal and state wetland law but achieve other community needs and objectives such as providing additional flood control storage, water quality enhancement features, improved wildlife habitat and educational and recreational needs.

Mitigation and the Regional Mitigation Bank Concept

The Plan utilizes the wetland mitigation bank concept as the primary means for implementing the mitigation program. With this approach, mitigation efforts are planned as a whole where the most suitable sites are identified, acquired and restored in advance of wetland impact. This concept not only benefits the natural resource system by planning for the restoration of the Amazon Creek basin, but it also benefits the users of the bank - the development community. The bank system performs the mitigation requirements for individual users where the details of compensation are preplanned, constructed and maintained by a public or private nonprofit agency. To satisfy individual impact requirements, users simply have to buy mitigation credits from the bank, thus eliminating uncertainty and saving valuable time and resources. Because the bank is planned and developed as a whole, the details of mitigation can be incorporated into the existing environment, resulting in a more logical and natural system. The bank is proposed to have sufficient capacity to serve the mitigation needs of the West Eugene Wetland Study Area and the community as a whole.

Stormwater Management

The City of Eugene will develop a comprehensive Stormwater Management Program that addresses the issues of flood control, water quality and natural resource management. This program will include management of the west Eugene wetlands system and will focus on the interrelationships among these components of Eugene's waterways and associated wetlands. The City of Eugene Public Works Department will use fewer piped storm sewers and will manage the open channels in ways to better balance stormwater and flood needs with environmental and wildlife habitat needs. The efforts will help reduce pollution and will make the waterways more pleasant urban open spaces.

Water Quality Improvements

Constructed wetlands and wetland improvements will be used as biological filters to remove sediments, certain nutrients, and other water pollutants from the drainageways in west Eugene. In some instances, wetlands will be enhanced by providing more water to sites. The result will be cleaner surface waters, improved aquatic habitats, and a more pleasant water-oriented experience for those who live, work and visit west Eugene. While these wetlands may have multiple values, they will be managed for their primary use - stormwater treatment. A separate study is being conducted by the City of Eugene to address further water quality improvement techniques, including reducing sources of water pollution that enter the storm sewer system.

Improved Flood Control

By widening channels, protecting existing wetlands and creating new wetlands, additional flood storage capacity can be added in west Eugene. The widened channel bottoms will allow the low flow channels to meander among wetlands and for the reestablishment of stream bank habitat. This will reduce downstream impacts of storm runoff originating in the urban area. These flood storage improvements can often provide multiple benefits, such as wildlife habitat and recreation. Widening projects will be designed to protect and enhance adjacent wetlands.

Improved Plant and Animal Habitats

Within the managed wetland system, rare plants will be protected. Experimentation on ways to increase populations of rare plants will occur through scientific research and demonstration projects. Also, the unique Willamette Valley prairie grassland plant community will be protected through creation of a wetland prairie reserve. By protecting and restoring a variety of wetland types, and by buffering natural areas from the impacts of nearby development, a diversity of habitats will be created; that diversity will benefit wildlife. The greenway corridor concept also benefits wildlife. Expanding existing natural systems and restoring habitat in areas that have been damaged by human activities insures better survival of wildlife and wildlife viewing opportunities. The greenway corridor concept also achieves this purpose.

Recreation, Education, and Research

Planned trails, bikeways, wildlife observation points and cleaner water within a diverse system of wetland types will provide numerous opportunities for public enjoyment of west Eugene environments. The wetland environment in west Eugene will become a favorite place to recreate and learn particularly when utilized by elementary, secondary and higher learning institutions in the community. Located near the University of Oregon, Oregon State University, Lane Community College, and other federal research laboratories, west Eugene will be the subject of further study over the coming decades. The possibility of a nature center devoted to west Eugene natural areas, including wetlands and the native American and early white settlement of the southern Willamette Valley, will be explored. Such a center might serve educational, recreational, and research needs.

CHAPTER FOUR

DEVELOPMENT AND MITIGATION

INTRODUCTION

This element of the Plan acknowledges conditions where the community's need for economic development outweighs the benefits to protect certain wetland sites by making them available for development according to the mitigation provisions of this Plan. The Plan views the mitigation process as an opportunity to restore and enhance wetland functions and values of the Amazon Creek basin, while allowing limited development on isolated, lower quality wetlands and meeting the requirements of state and federal wetland law.

The 288 wetland acres proposed for development were determined through a process that evaluated each wetland against a set of criteria which had the effect of identifying those wetlands that are isolated, low quality and of limited functional value. The criteria used in evaluating sites for possible development are contained in Appendix B.

In addition to evaluation by local experts, resource agencies and community members, the relative quality of the west Eugene wetlands was determined by the Wetland Evaluation Technique (WET) program, designed by Paul Adamus of the Environmental Protection Agency. The results of this evaluation are contained in the Technical Report.

The Plan proposes to use the mitigation process to achieve compliance with federal and state wetland law, and to provide a vision and program for incorporating all of the elements of this plan with other related community objectives (flood control, water quality and wildlife habitat enhancement, recreation and education programs) so that a broader goal is achieved - the restoration of the Amazon Creek basin into a community asset.

The basic concepts of the mitigation program are:

- Avoid and minimize impact to all wetland sites that meet the protection criteria contained in Appendix B.
- Where impact is unavoidable, compensate for losses commensurate with the level of impact giving priority to establishing the basic physical wetland parameters (water, topography, connectedness) that eventually results in full functioning and diverse wetland habitats.
- Establish a management entity that will monitor, maintain and enforce the requirements of the mitigation program.
- Where full functioning wetlands are to be impacted, in-kind replacement of significant functions and values will be required. The overall mitigation program, however, will be guided by the ecological characteristics of the regional landscape and not necessarily by specific case-by-case impacts. For disturbed agricultural wetlands, mitigation requirements will be determined using historic wetland types presumed to have existed prior to disturbance and the desired mix by the public. Incentives will be provided to mitigate in advance of impact in the form of replacement ratios which are less than the ratios for compensating at the time of impact.

- To increase the certainty of success and to achieve the goal of a connected system of wetlands and waterways, mitigation efforts are targeted for areas that once exhibited, or currently exhibit, proper wetland soils and moisture conditions. Within the WEWSAS boundary, the primary mitigation sites are “disturbed agricultural wetlands”. These sites are missing at least one of the three wetland parameters (water, hydric soil, wetland vegetation) and due to non-wetland activities (agricultural uses) occurring on these sites, their existing wetland value is relatively low. As such, for mitigation credit purposes, the Plan gives more credit for the enhancement of these sites than for other “low” quality wetlands that exhibit all three wetland parameters.
- The primary means to achieve the Plan’s mitigation goals is through the establishment of a regional wetland mitigation bank. These are areas where the most suitable lands for mitigation are identified, acquired, designed, constructed and managed in advance of wetland impact, and incentives are provided that encourage the use of the bank by those seeking a wetland impact permit. Because the Plan will enhance and restore more wetland acreage, functions and values than will be lost to development, the excess capacity will be available for mitigation credit to properties located outside the west Eugene study area and within the urban growth boundary, and to the Eugene Airport proper.

GOALS, POLICIES, RECOMMENDED ACTIONS

GOALS

- 4.1 Use the wetland mitigation process as an opportunity to achieve multiple community objectives, including wetland resource enhancement, increased flood control capacity, water quality enhancement and the establishment of educational and recreational programs.
- 4.2 Use the wetland mitigation process as an opportunity to reverse the trend of wetland losses and begin a positive trend of wetland gains by restoring and enhancing the historic wetland system of the Amazon Creek watershed.
- 4.3 Achieve compliance with federal and state wetland law, policies and guidelines.
- 4.4 Increase certainty in the development process.
- 4.5 Minimize reductions to the existing industrial and commercial buildable lands inventory as a result of wetland protection.
- 4.6 Provide for the overall wetland mitigation needs for the community of Eugene, including the territory within the urban growth boundary and Eugene Airport.

POLICIES

Mitigation

- 4.1 Mitigation efforts shall help to reestablish a connected system of wetlands, waterways and upland resources.

- 4.2 To insure long-term success, mitigation efforts shall give priority to establishing or reestablishing the basic hydrologic conditions necessary to meet the stated mitigation objectives.
- 4.3 Mitigation efforts shall concentrate on restoring wetland type, habitat, functions and values that represent the historic, ecological landscape of the Amazon Creek basin.
- 4.4 Mitigation efforts shall use local, native plant species.
- 4.5 Mitigation efforts shall be designed and constructed to minimize the level of on-going maintenance.
- 4.6 Develop, adopt and implement a comprehensive wetland mitigation program.
- 4.7 Mitigation efforts shall occur in the priority areas as depicted on Map 3, Wetlands Recommendations.
- 4.8 Develop a wetland mitigation overlay zone where mitigation is a permitted use, and apply it to areas targeted as future mitigation sites as shown on Map 3.
- 4.9 Establish, develop and maintain a regional wetland mitigation bank that will provide mitigation credit capacity for the West Eugene Wetlands Study Area, the balance of the Eugene urban growth boundary and the Eugene Airport proper.
- 4.10 To be eligible for participation in the mitigation bank, wetland impact requests must be consistent with the goals, policies and provisions of this Plan.
- 4.11 Require all mitigation efforts to participate in a comprehensive monitoring and maintenance program.
- 4.12 Develop a system that provides security against unsuccessful mitigation efforts, such as a bond or other financial guarantee.
- 4.13 Amend applicable City codes, policies and maintenance operation procedures to comply with the provisions of the this Plan and implementation measures.
- 4.14 All mitigation must be completed in advance or concurrent with development.
- 4.15 Unless on-site mitigation would better meet the goals and policies of this Plan, mitigation efforts shall occur according to the provisions of the regional mitigation bank provisions.
- 4.16 Enhancement of existing wetlands can be used to add functional credits to the wetland mitigation bank.

- 4.18 Either on a regional or case-by-case mitigation basis, develop better information as to existing wildlife habitat values and a mechanism, such as the modified Habitat Evaluation Program (HEP), to measure future wildlife gains on mitigation sites.

Development

- 4.19 Allow development of wetlands that meet the criteria for wetland development contained in Appendix B of this Plan as illustrated on Map 3.
- 4.20 Adopt the protection and development criteria, contained in Appendix B, as the basis for the classification of the wetland sites shown on WEWSAS Map 3 and, for any new sites, apply these criteria to determine status.
- 4.21 Use the WEWSAS wetland delineation map, the Functions and Values detailed in the WEWSAS Technical Report and those sites recommended for development on Map 3, as the basic inventory for acres, functions and values to be developed and replaced.
- 4.22 Provide flexibility in the provisions of the mitigation program so that conditions unique to certain properties can be resolved at the administrative level provided the proposal meets the basic intent, purpose, and criteria of WEWSAS.
- 4.23 Provide wetland technical assistance to the public.
- 4.24 Unless designated as a mitigation site in this Plan or as part of on-site mitigation requirements, buildable lands that are within the UGB and designated for commercial or industrial use shall not be used for mitigation.
- 4.25 For application with future mitigation efforts, encourage wetlands identified as future disposal sites for dredged or fill material to be utilized (prior to development) as a source for wetland vegetation and soils.

Administration

- 4.26 Encourage use of regional or local nonprofit agencies to assist in managing and monitoring wetland mitigation and protection efforts.

RECOMMENDED ACTIONS

- 4.1 Adopt mitigation review provisions as follows:

Type I - Administrative review, no public review

- Fully Complies with WEWSAS
- No rare, threatened or endangered plant or animal species
- Utilizes mitigation bank

Type II - Local Public Review

- Does not fully comply with WEWSAS, such as a minor variance to a protection measure standard (i.e., buffer width).
- Involves amendment of wetland boundary where subsequent scientific data clearly refutes the location, size or shape of the original, adopted boundary.

Type III - Local, State, Federal Public Review

- Involves amendment of a wetland site from protection or restoration status to development status.
 - Involves amendments to policies and standards of WEWSAS.
 - Does not utilize mitigation bank or on-site mitigation option.
 - Involves amendment of wetland boundary when there is unresolvable conflict between existing boundary data and subsequent data.
 - Involves amendment of wetland boundary map to include a new site.
 - Involves development of a site with rare, threatened or endangered plant or animal species.
- 4.2 Develop and adopt a Comprehensive Wetland Mitigation Program. Details of the program are included in Appendix E.
- 4.3 Develop wetland mitigation provisions that require a wetland impact permit and mitigation plan to be approved and obtained from the responsible regulatory agencies prior to any activity that may further degrade wetland resources, including drainage modifications, landform alterations, storage of materials, vegetation removal and construction related activities.
- 4.4 Seek funding from the Army Corps of Engineers to work with the Soil Conservation Service to determine the feasibility of restoring the hydrologic regime of Assessment Area "B" (see SRI Wetland Map in the WEWSAS Technical Report and sites with "B" prefix on Map 3) by modifying the design of the Amazon Creek, A-3 and A Channels to provide for the hydrologic requirements of the various wetland habitats, flood control and water quality enhancement facilities.
- 4.5 Establish a local wetland assistance team to provide technical assistance to the public.
- 4.6 Require a preapplication conference with the wetland assistance team to provide an information exchange concerning the objectives of the applicant and the requirements of the wetland provisions.
- 4.7 Monitor ground water elevations along Amazon Creek, A Channel, Willow Creek, and the A-3 Channel and match hydrologic requirements of mitigation projects with the findings of the monitoring system.
- 4.8 Develop a permit processing system in which the level of review is matched with the proposed magnitude of wetland impact and degree of consistency with the goals, policies and standards of WEWSAS.

WESTERN AMAZON DRAINAGE BASIN

This area is shown on Map 2. Other than statements in this section, the Western Amazon Drainage Basin is not intended to be affected by any portion of the Plan.

This area is included in the Plan to identify lands which may be available to help meet mitigation needs within the West Eugene Wetlands Study Area and the greater Eugene region. Land acquisition in this area will occur only from willing owners who choose to sell land after an independent appraisal has been obtained which determines the fair market value of that land. Owners may choose to sell land outright, a conservation easement or donate land under a voluntary program. There is nothing in this Plan which prohibits owners from participating in a regional mitigation bank or seeking to sell mitigation credits or rights on the open market.

GOAL

- 4.7 Allow some of the region's wetland mitigation needs to be met through enhancement and restoration of wetlands in the Western Amazon Drainage Basin.

POLICIES

- 4.27 Use cooperative arrangements with private land owners to acquire lands, conservation easements, or land donation through voluntary programs and negotiations with willing sellers.
- 4.28 Seek restoration and enhancement of wetlands for mitigation purposes based on the following factors: a) presence of hydric soils, b) indication of past wetland conditions, c) proximity to water features, d) proximity to the floodplain, and e) capability of providing adequate wetland hydrology.
- 4.29 Attempt to minimize impacts of the mitigation program on adjacent uses by providing buffers within the boundaries of land purchased and enhanced or restored or through cooperative programs which are acceptable to adjacent land owners.

RECOMMENDED ACTION

- 4.9 Use cooperative arrangements with private land owners to implement this Plan. Keep affected parties informed of the Plan implementation and amendment process.

APPENDIX C

Geographic Area of Influence

The areas within which mitigation projects will occur and within which impacts will occur in conjunction with the West Eugene Mitigation Bank Program are described herein and shown on two accompanying maps.

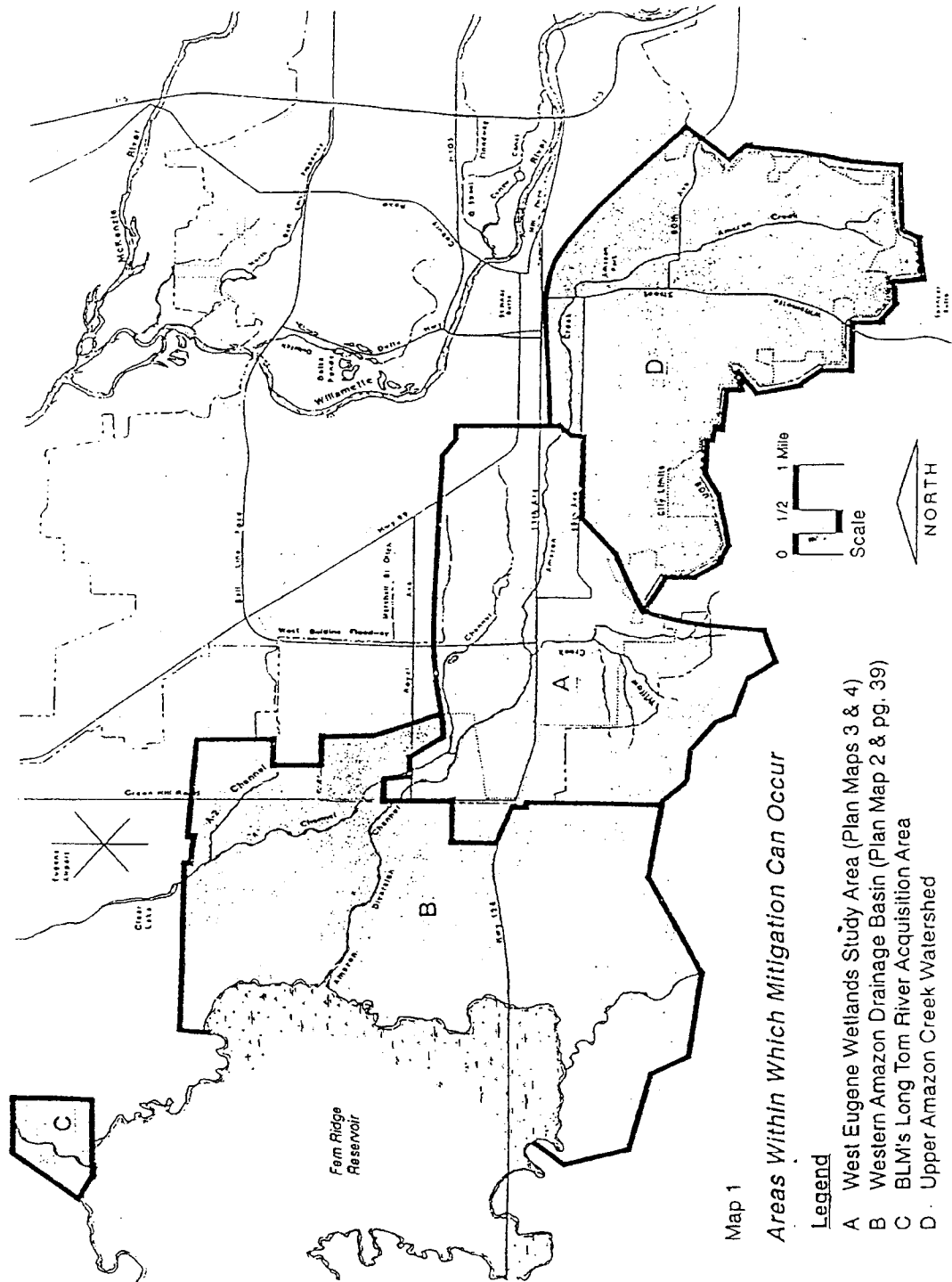
Geographic Area Where Mitigation Bank Projects Will Occur (Map No. 1)

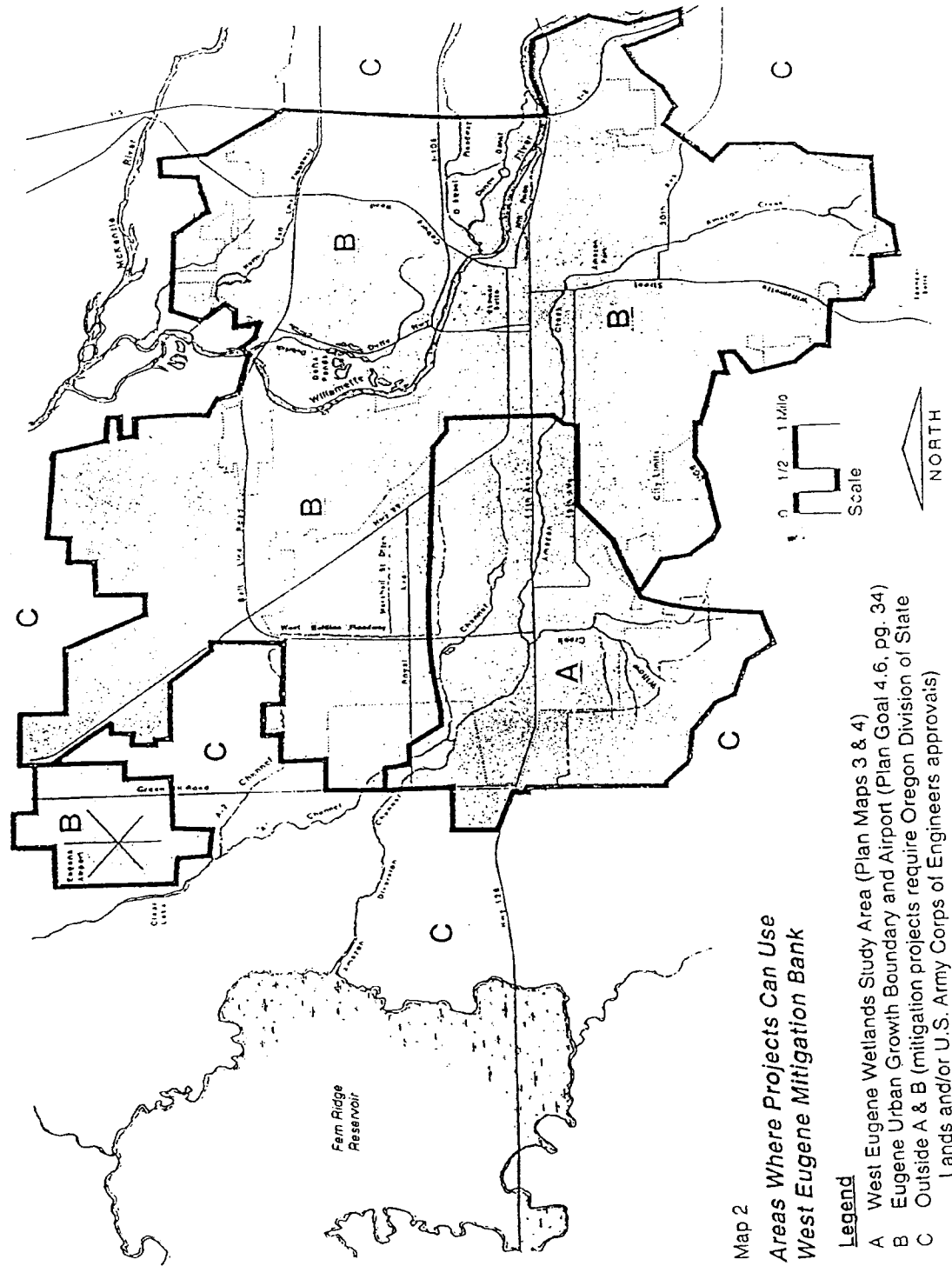
West Eugene Mitigation Bank wetland restoration, enhancement and creation projects will be undertaken within the Long Tom River watershed and its tributary stream, Amazon Creek, as shown on accompanying Map No. 1. These areas are consistent with the West Eugene Wetlands Plan, Study Area shown on Map No. 2 in the 1992 West Eugene Wetland Plan and the U.S. Bureau of Land Management's acquisition plan for the area along the Long Tom River north of Fern Ridge Dam.

Geographic Area Where Wetland Impacts May Use the West Eugene Mitigation Bank (Map No. 2)

In accordance with the West Eugene Wetlands Plan, the priority order (based on timing of order for credits and anticipated demands) for use of the West Eugene Wetlands Mitigation Bank Program are:

- West Eugene Wetlands Study Area (shown on accompanying Map No. 2).
- Elsewhere in the City of Eugene's urban growth boundary and Eugene's Mahlon Sweet Airport (shown on accompanying Map No. 2).
- Outside areas highlighted on Map No. 2 only when Oregon Division of State Lands and U.S. Army Corps of Engineers approval is obtained by the applicant.





Map 2

**Areas Where Projects Can Use
West Eugene Mitigation Bank**

Legend

- A West Eugene Wetlands Study Area (Plan Maps 3 & 4)
- B Eugene Urban Growth Boundary and Airport (Plan Goal 4.6, pg. 34)
- C Outside A & B (mitigation projects require Oregon Division of State Lands and/or U.S. Army Corps of Engineers approvals)

APPENDIX D
Establishing and Certifying Credits

Mitigation Credits

Within the mitigation bank system, mitigation credits are the unit of measurement for describing wetland impact compensation requirements (demand) and for how these requirements are satisfied (supply). For each acre of wetland impact, one mitigation credit is required and can be purchased from the Mitigation Bank Program (the "Program") to satisfy the impact requirement.

Credit Supply

Mitigation credits are established by the Program through restoration, creation, enhancement, and preservation activities.¹ Because these activities have varying levels of risk and capacity for wetland gains, ratios have been established to reflect these varying conditions. The ratios express the compensation values for each wetland impact acre (e.g., 1.0:1 means 1 acre of mitigation for each acre of impact). Restoration is the preferred mitigation activity and results in more mitigation credits than creation and enhancement activities. The following ratios apply to bank conditions and, therefore, assumes mitigation activities occur prior to wetland impacts. These ratios are then converted to the bank credit factor by dividing one (1) by the ratio (for example $1.5/1 = .66$ credits).

<u>Mitigation Method</u>	<u>Ratios</u>	<u>Bank Credit Factor</u>
<i>Restoration</i>	1.0:1	1.0
<i>Creation</i>	1.5:1	0.66
<i>Enhancement</i>	2.5:1	0.40

To determine the potential mitigation credits of a given mitigation bank site, multiply the applicable mitigation credit factor (1.0; 0.66; 0.40) by the number of restoration, creation and enhancement acres of the mitigation site. The sum of these products equals the potential mitigation credits of the bank site. For example, assume a mitigation bank site to be 6 acres in size with each of the mitigation methods possible on 2 acres. The following mitigation credits could be realized.

<u>Mitigation Method</u>	<u>Size (acres)</u>	<u>Mitigation Credit Factor</u>	<u>Mitigation Credits</u>
Restoration	2.0	x 1.0	= 2.00
Creation	2.0	x 0.66	= 1.32
Enhancement	2.0	x 0.40	= 0.80
Total:	6.0		4.12

¹Credits for preservation shall be determined on an individual, case-by-case basis.

Credit Demand

For determining mitigation obligations, one acre of wetland impact requires one mitigation credit. The total number of required mitigation credits, therefore, is equal to the total number of impact acres. For example, an 8 acre wetland impact site requires 8 mitigation credits.

Restoration, Creation and Enhancement Areas

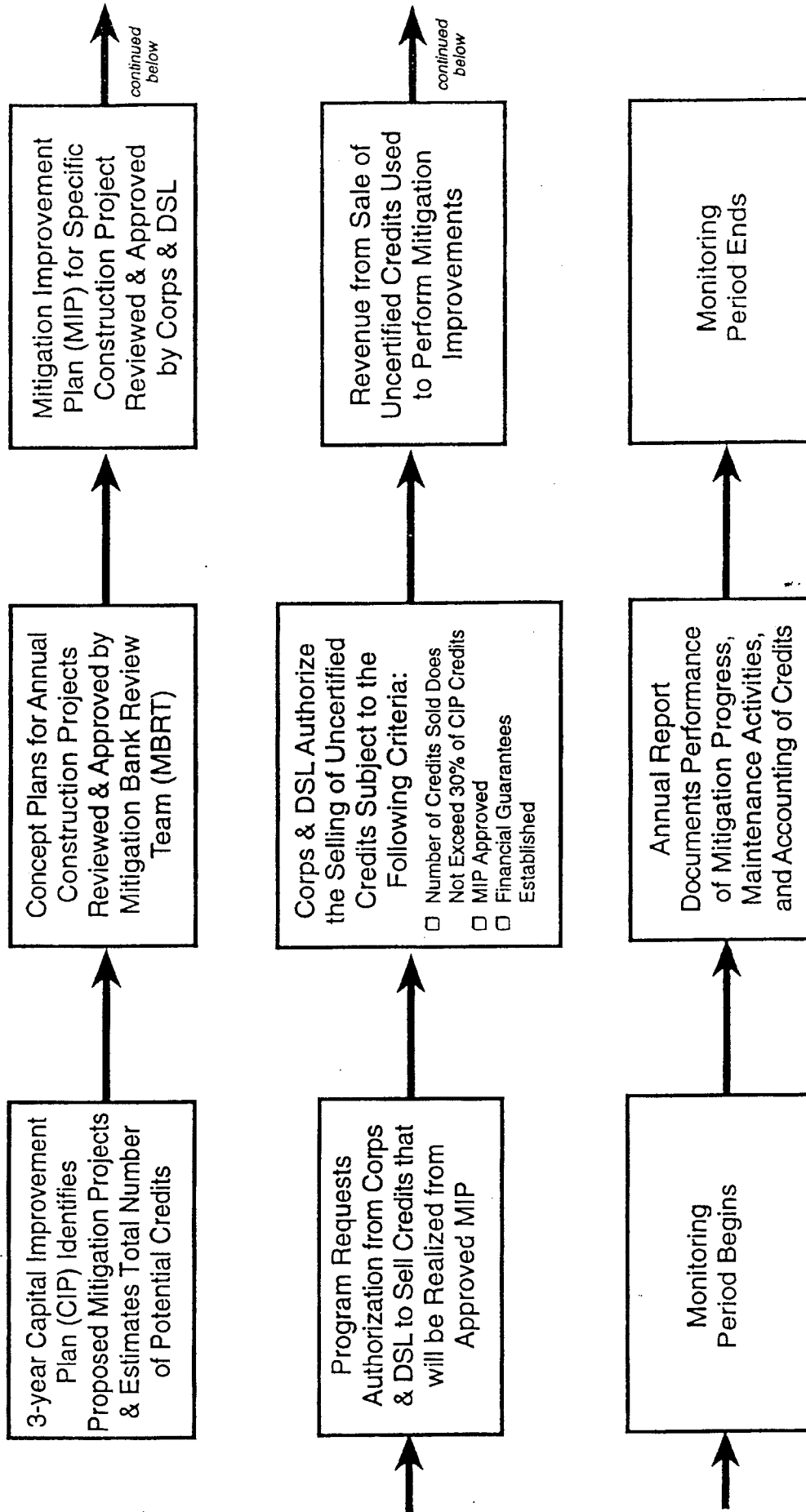
The following describes area suitable for mitigation by restoration, creation, and enhancement mitigation methods.

Mitigation Areas	Mitigation Method		
	Restore	Create	Enhance
Wet Prairie Wetlands			X
Scrub-Shrub Wetlands			X
Forested Wetlands			X
Emergent Wetland			X
Old Field/Fill/Pasture Wetlands	X		
Agricultural Wetlands	X		
Historic Wetlands	X		
Uplands		X	

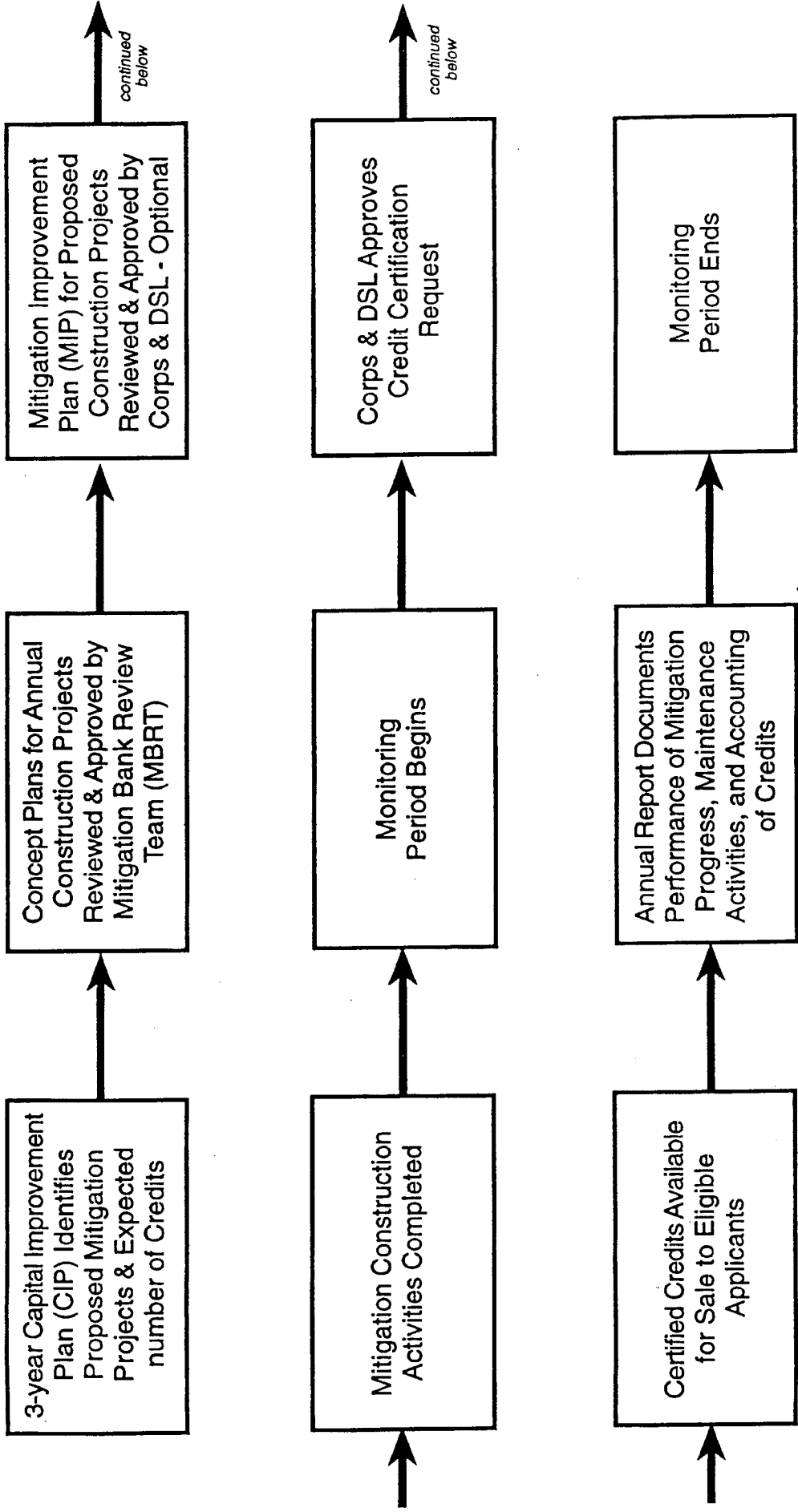
Refer to Existing Wetland Types Map and West Eugene Wetlands Plan Maps.

Process for Establishing & Selling Uncertified Credits

Note: In this scenario, there are no certified mitigation credits in the bank when the program receives a credit purchase request.



Process for Establishing Certified Mitigation Bank Credits



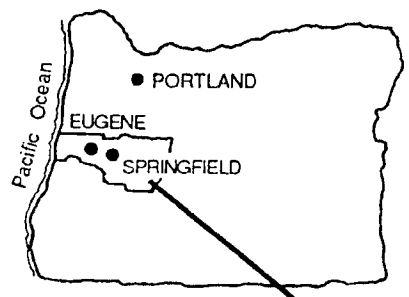
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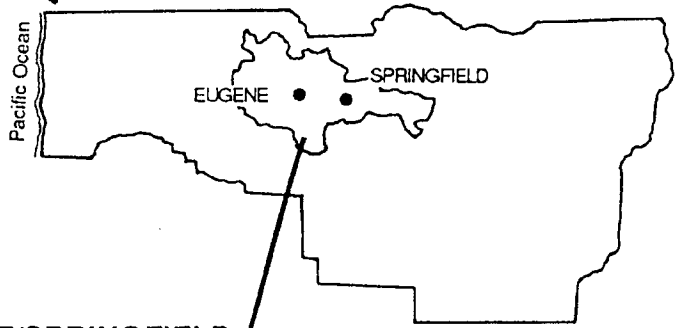
Map 1 Vicinity Map

West Eugene Wetland Special Area Study, 1992

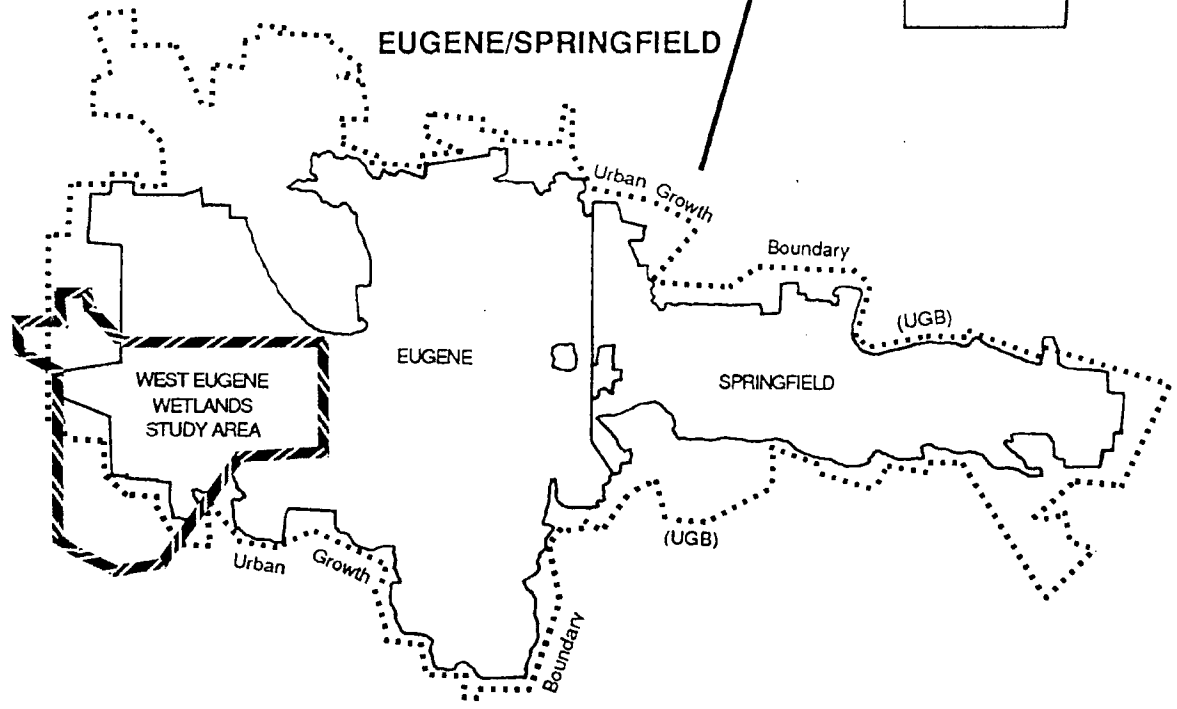
OREGON



LANE COUNTY



EUGENE/SPRINGFIELD



ATTACHMENT A

MITIGATION RATIO REQUIREMENTS

WETLAND TYPE	REPLACEMENT RATIOS	
	RESTORATION	ENHANCEMENT
Wet Prairie	2.0:1	2.5:1
Ash Forest	1.5:1	2.0:1
Emergent Marsh/Open Water Mix	1.5:1	2.0:1
Scrub/Shrub	1.5:1	2.0:1
Disturbed Agricultural	1.0:1	1.5:1
TOTALS	----	----