SEPA ADDENDUM

March 2000

This document is a State Environmental Policy Act (SEPA) Addendum to the *Final Supplemental Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport* issued May 13, 1997 by the Federal Aviation Administration (FAA) and the Port of Seattle, and the *SEPA Environmental Checklist for the Auburn Wetland Mitigation Project* issued August 1998. This addendum has been prepared in accordance with Chapter 197-11-625 of the Washington Administrative Code, and Port of Seattle SEPA Policies and Procedures Resolution No. 3028. The purpose of this document is to describe and analyze the modification to the Master Plan Update Development Actions for mitigating proposed wetland fill, and to modify the SEPA environmental checklist. These modifications do not substantially change the analysis of significant impacts described in the *Final Supplemental Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport or the Environmental Checklist for the Auburn Wetland Mitigation Project.*

PROJECT NAME

Port of Seattle Master Plan Update Improvement Actions at Seattle-Tacoma International Airport – Auburn Wetland Mitigation Project.

EXISTING ENVIRONMENTAL DOCUMENTS

Final Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport, U.S. Department of Transportation (USDOT), FAA, and Port of Seattle, February 1996

Final Supplemental Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport, US DOT, FAA, and Port of Seattle, May 1997

SEPA Environmental Checklist for the Port of Seattle Master Plan Improvements Wetland Mitigation Project, Port of Seattle, August 1998

Natural Resource Mitigation Plan Master Plan Update Improvements Seattle-Tacoma International Airport, Port of Seattle and Parametrix, August 1999

SEPA Addendum to the Final Supplemental Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport, FAA and Port of Seattle, January 24, 2000

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PROJECT DESCRIPTION

As part of the Master Plan Update Development Actions at Seattle-Tacoma International Airport (STIA), wetlands will be filled or impacted during construction of new facilities. New facilities include the Third Runway, the South Aviation Support Area facilities, and two Runway Safety Areas. In addition, some wetlands will be filled during work in the borrow areas and for a haul road. Construction will take place over approximately 700 acres and result in filling approximately 18.33 acres of wetlands. The wetland fill will affect approximately 8.27 acres of forested wetlands, 2.92 acres of shrub wetlands, and 7.14 acres of emergent wetlands (refer to the January 24, 2000 SEPA Addendum identified above for additional information on wetland impacts at STIA).

To compensate for the unavoidable loss of wetland area and wildlife function of wetlands, a wetland mitigation project is proposed for development on an approximately 67-acre parcel near the Green River in the City of Auburn. The proposed activities include the creation and enhancement of wetland areas, development of avian wildlife habitat, and increasing flood storage capacity. The project will create approximately 34 acres of new wetland and enhance six acres of existing wetland, for a total of 40 acres of wetland area on the mitigation site.

Since the issuance of the SEPA environmental checklist in 1998 the design of the mitigation project has increased in size and advanced from a conceptual plan to a 60 percent design. Therefore, the following discussion is presented to provide a more detailed explanation of the current proposal.

PROJECT GOALS

The wetland mitigation goals and objectives, identified below, are based on overall wetland functions and acreage lost as a result of implementing the proposed Master Plan Update improvements at STIA.

Goals

The overall wetland mitigation goal is to compensate for unavoidable wetland impacts by in-kind replacement of habitat. This would be accomplished by creating a diverse replacement habitat with a net gain in functional value and acreage. The general mitigation goals are as follows:

1. Achieve no net loss of wetland acreage by establishing a diverse, in-kind replacement habitat with forested, shrub, and emergent wetland classes.
2. Provide in-kind wildlife habitat replacement outside the 10,000-ft aircraft operations safety radius by creating a large wetland ecosystem off-site with connection to other habitat corridors.
3. Provide in-kind wildlife habitat replacement while maximizing public safety and minimizing wildlife hazards to aircraft.
4. Enhance the existing emergent wetland.

The proposed compensatory mitigation actions at the Auburn site are summarized below in Table 1.

Table 1. Summary of wetland impacts and off-site compensatory design objectives for the proposed Master Plan Update improvements.

Project Impact	Compensatory Design Objectives	Potential Acreage Provided	Compensation Ratio
Fill 8.27 acres of forested wetland and loss of associated wildlife habitat.	Provide in-kind replacement of forested wetland vegetation cover and increase overall wildlife habitat function.	25.96 acres of forested wetland	3.4:1
	Enhance existing emergent wetlands to create native forested habitat.	6.00[a] acres of enhanced forested wetland	NA
Fill 2.92 acres of shrub wetland and loss of associated wildlife habitat.	Provide in-kind replacement of shrub wetland vegetation cover and increase overall wildlife habitat function.	3.40 acres of shrub wetland	1.1:1
Fill 7.14 acres of emergent wetland and loss of associated wildlife habitat.	Provide functional replacement of emergent wetlands and increase wildlife habitat function.	5.17 acres of emergent wetland	0.68:1[b]
	Provide pockets of open-water habitat.	0.03 acre of open-water wetland	NA
	Protect the wetland from potential off-site disturbance and provide enhanced upland wildlife habitat.	Approximately 15.00 acres of forested upland buffer	NA

NA = Not applicable.

[a] Enhancement of this wetland is assumed to generate two acres of mitigation credit in the 3.4:1 ratio above.

[b] Most emergent wetland communities impacted from Master Plan Update improvement projects consist of lawn, farmland, or other disturbed plant communities. Historically, these wetlands would have been forest or shrub wetland communities, but due to clearing and development, the forested or shrub components were removed. Therefore, replacement ratios for emergent communities are reduced, and increased for higher quality forested communities.

MITIGATION SITE PLAN

The mitigation site plan and general construction methods used to achieve the design objectives are discussed below. This section also contains the evaluation methods and justifications for establishing the wetland water regime, the grading plan, vegetation plan, and monitoring and contingency plans for wetland development.

Water Regime

An adequate water regime is the most critical factor required to establish the desired forest, shrub, and emergent wetland vegetation classes on the mitigation site. The duration and amount of standing water and soil saturation control the wetland community types present on-site. Knowledge of the hydrology requirements of natural Puget Sound wetland communities and over three years of groundwater monitoring on the site indicate that it is feasible to create the hydrologic conditions necessary to sustain a diverse wetland habitat with several plant community types.

These hydrologic conditions would be attained by excavating basins in the mitigation area to approximately two to eight ft below the ground surface to intercept the seasonally high or permanent groundwater table. This would result in typical ground elevations ranging between 45 to

37 ft, which would allow a range of wetland plant communities to persist on soils with varying degrees of flooding or saturation. Excavation in some limited areas will be a maximum of 12 ft. The approximate elevations, hydrologic regime, and wetland vegetation classes proposed for the mitigation are presented in Table 2. The relationship of the proposed wetland vegetation zones to anticipated water levels and site topography is shown in Figure 1.

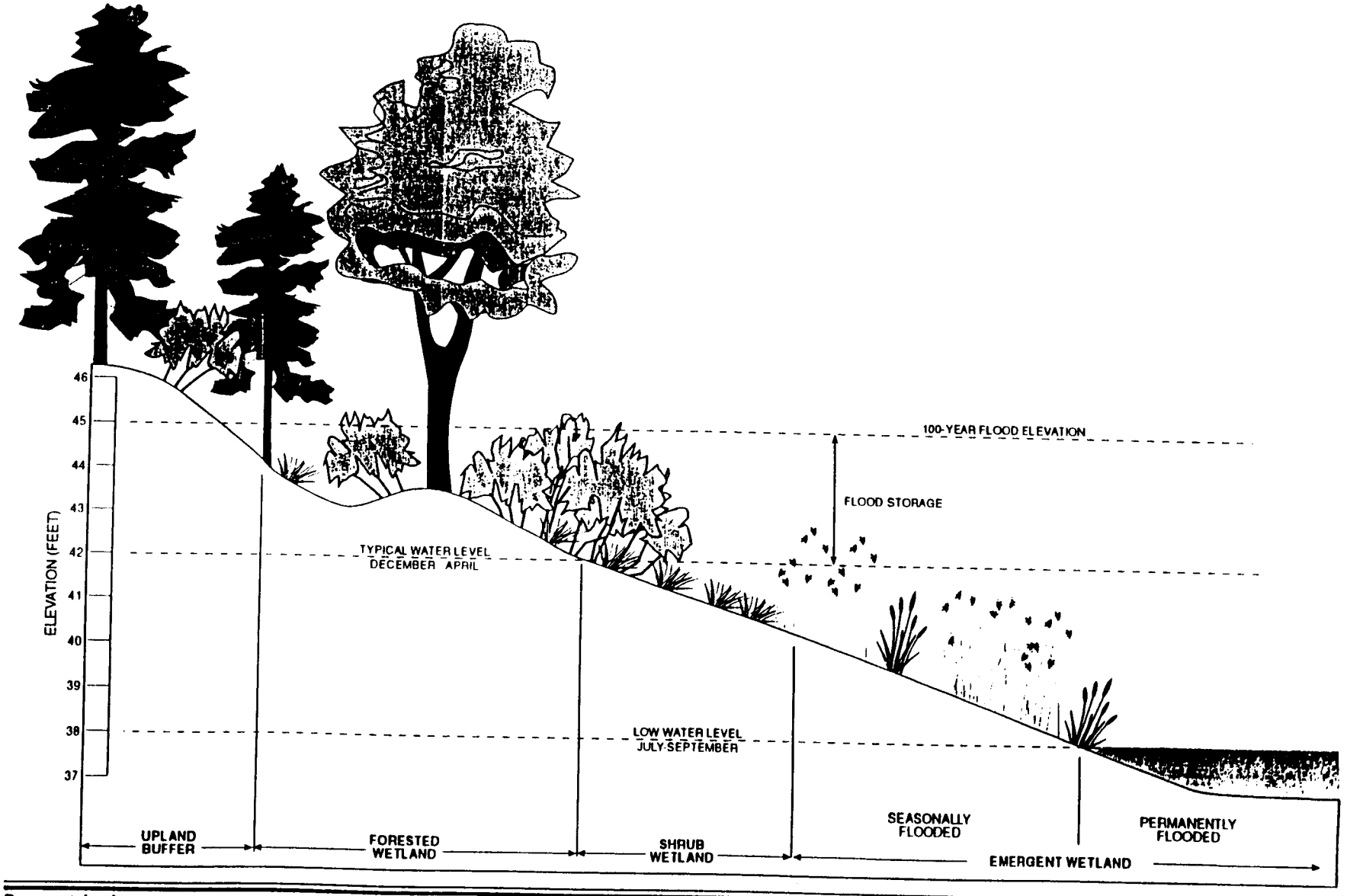
The proposed wetland would become part of the 100-year floodplain of Green River backwater areas (Figure 2) by constructing a vegetated swale from existing ditches located along S. 277th Street to the northwest corner of the wetland. The bottom elevation of this ditch would be at 41 ft.

Table 2. Proposed wetland classes, elevation ranges, and hydrologic regimes.

Proposed Wetland Class	Proposed Elevation Range (ft)	Anticipated Hydrologic Regime
Forested Wetland	46 to 42	Seasonally saturated soil during years of typical rainfall. During a 10-year flood [a], flooding of up to three ft for up to nine consecutive days would occur. Soil would be unsaturated to at least 18 inches below the ground surface during most summer and fall periods.
Shrub Wetland	42 to 41	Seasonally saturated or flooded with up to one ft of water during years of average rainfall. During a 10-year flood, water could be up to four ft deep for nine consecutive days. Soil would generally be saturated within 12 inches of the ground surface during most of the summer and early fall.
Persistent Emergent	41 to 38	Seasonally flooded with up to four ft of water during years of average rainfall. The water table would be at or within six inches of the ground surface during late summer and early fall.
Open Water/Unvegetated	below 38	Permanently to semi-permanently flooded during years of average rainfall. Surface water would generally be six to 24 inches deep during late summer and early fall, but may not be present during years of extremely low rainfall.

[a] Because of flood control management of the Green River, the peak flow for 10-year and 100-year flood events are equivalent.

Two adjustable weirs are proposed in the northwestern portion of the site to control water levels for optimum plant establishment. These weirs will provide flexibility in managing site hydrology. The 100-year flood event would increase water levels in the wetland by up to three ft. The frequency of inundation due to Green River flooding is low (Figure 3), with the greatest probability occurring during late fall through mid-winter. All plants proposed for the wetland area are adapted to a fluctuating water table and periodic inundation, which is common during winter months in floodplain wetlands of western Washington. Therefore, vegetation "die-back" as a result of flooding should not occur.



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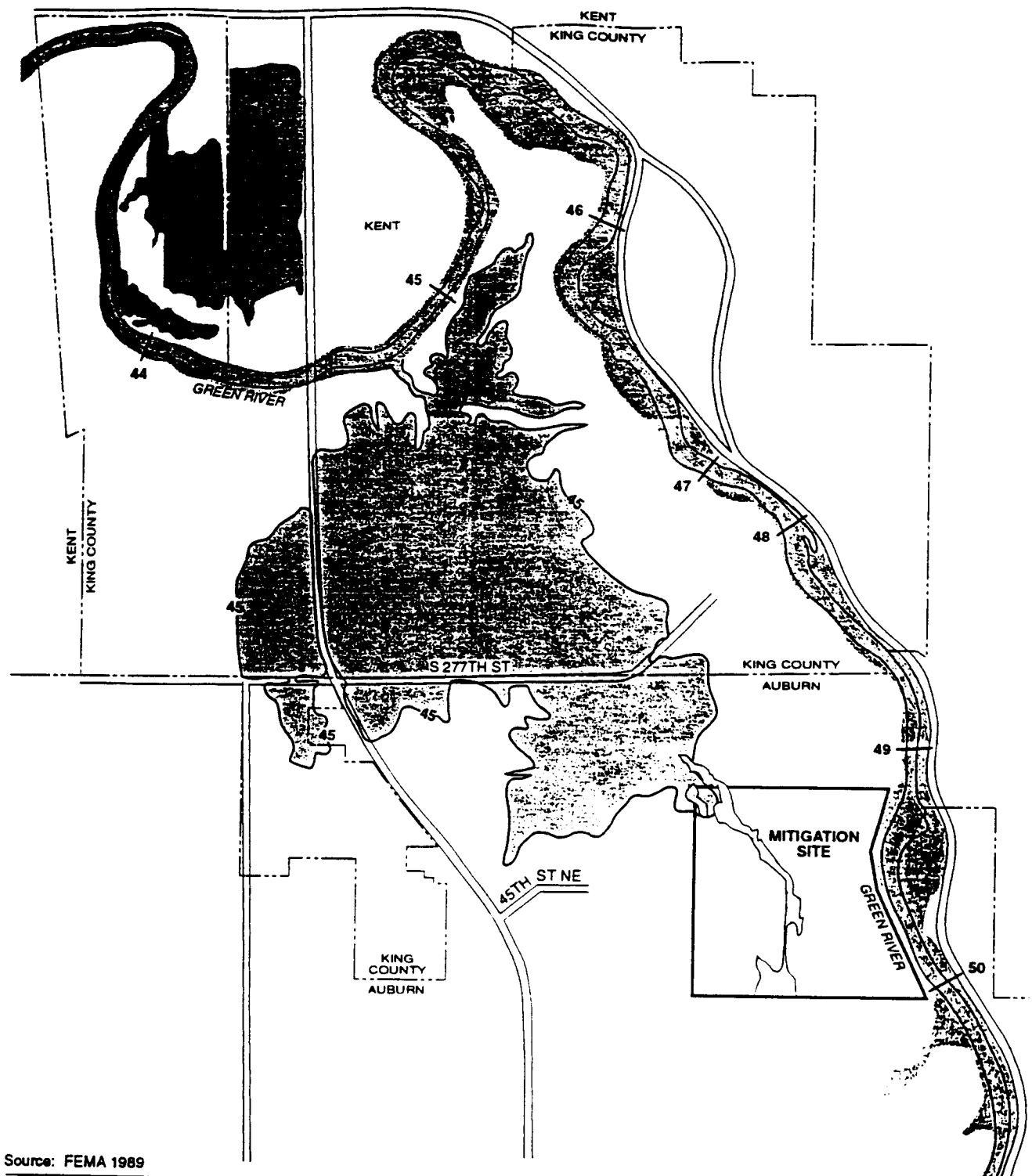
Data Compiled by Parametrix

Figure 1
Relationship of Seasonal Water Level Variations and Soil Surface Elevations to Proposed Wetland Vegetation Classes



Source: FEMA 1989

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NOT TO SCALE

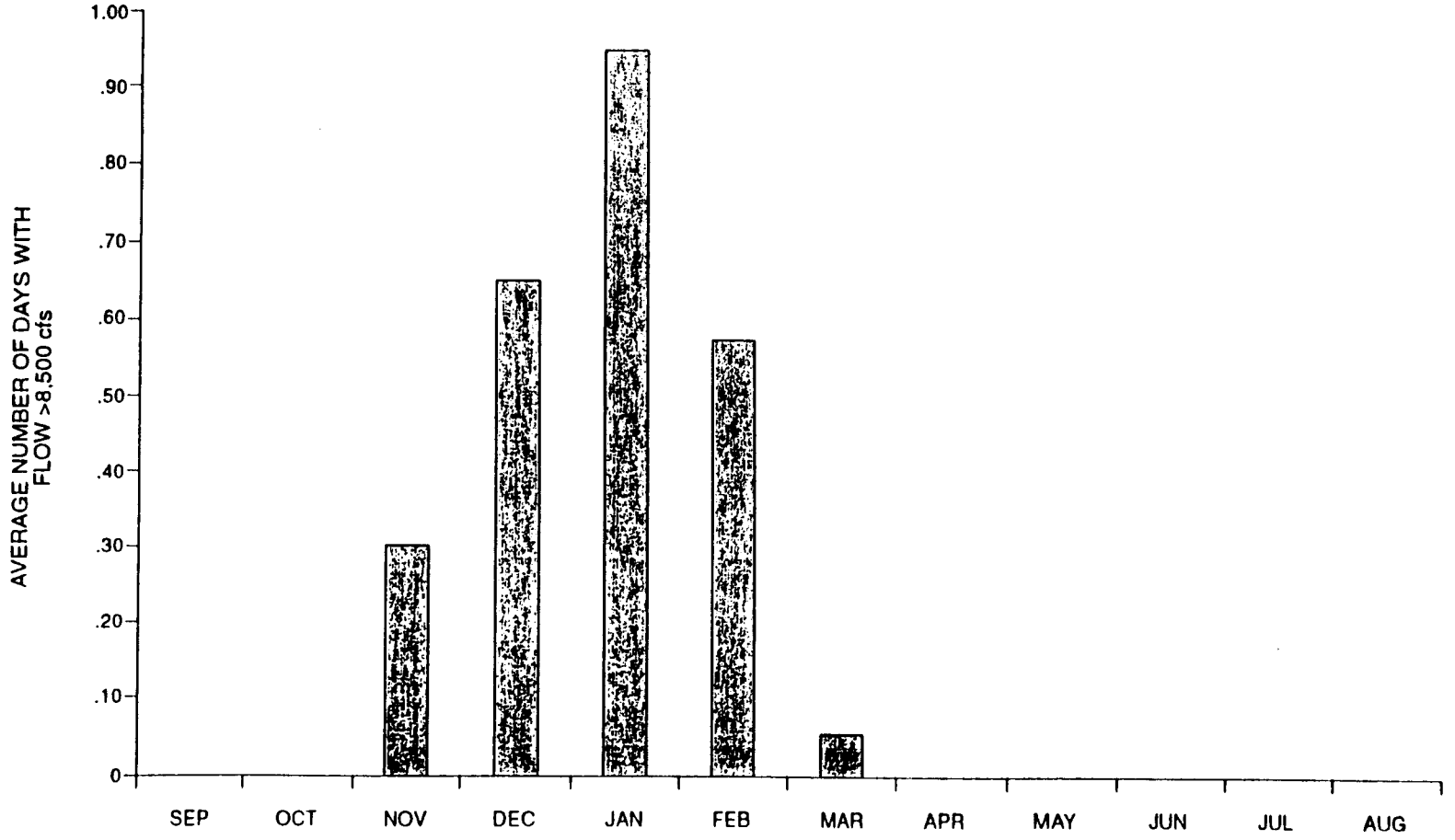
Existing Wetland

100 Year Floodplain

50 — Flood Elevations

Figure 2
100-Year Floodplains On and Near the Proposed Wetland Mitigation Site

AR 044443



USGS 1996

Figure 3
Green River Flood Frequency by Month
(Based on 1960-1996 Data for Auburn)

Grading

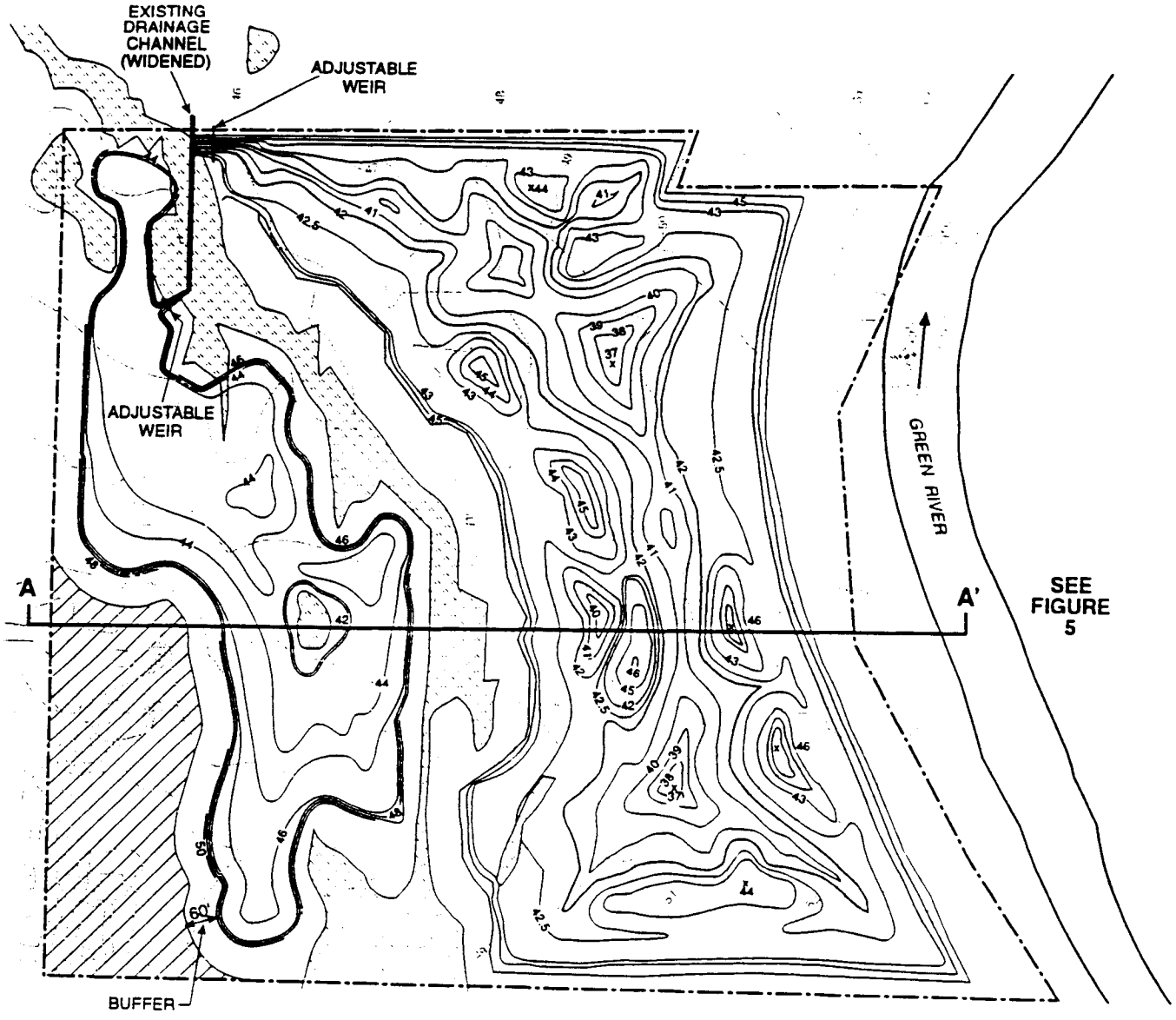
The mitigation design objectives would be achieved by excavating and grading two basins on either side of the existing emergent wetland to intercept the water table (Figures 1, 4, and 5). The proposed grading involves three earthwork construction steps. First, the top 12 inches of soil would be excavated and removed from the site. This soil contains the roots and rhizomes of pasture grasses and other undesirable invasive species such as reed canarygrass. Two to eight ft of underlying sandy silt-loam soils would be excavated to form two basins, with approximately one-third of the soil stockpiled for reuse on-site (two-thirds available for off-site use or disposal). The last grading step is to replace the stockpiled soil (blended with composted organic matter, see next section for description) which would be graded at varying thicknesses to provide the appropriate rooting depth and zones of saturation for each of the desired wetland classes.

The proposed grading would affect about 0.29 acre of the existing emergent wetland; however, all of the existing wetland depression will be replaced by the created wetland, and no net loss of wetland area will result. In addition, approximately 0.43 acre of wetland (0.14 acre on-site and 0.29 acre off-site) will be used as a temporary construction road. These areas will be restored and enhanced with native vegetation after construction is complete.

Surface Soil Removal: Surface soil would be removed to minimize colonization by non-native plants currently growing on the site. Excavation of 12 inches of surface soil would largely eliminate seeds, roots, and rhizomes and reduce colonization by most invasive plants. Based on a site grading area of about 40 acres (including the areas below elevation 45 ft) and removal of 12 inches of surface topsoil, the quantity of topsoil hauled off-site would be approximately 64,550 cy.

Basin Excavation and Dewatering: Approximately 440,000 cy of soil would be excavated to create the two wetland basins, with excavation depths ranging between one and 12 ft. A Shallow Perched Water Zone (0 to 20 ft deep, between elevation 50 and 30 ft), and a Primary Aquifer (20 to 60+ ft deep, between elevation 30 and -10 ft) directly underlie the site. Due to the presence of high groundwater on the site, it will be necessary to lower the groundwater level before grading activities can begin. Dewatering the site will occur prior to and concurrently with grading activities. It is estimated that in order to lower the Shallow Perched Water Zone, approximately 28 to 35 deep wells would be installed. Water would be pumped from the Primary Aquifer to allow the Shallow Perched Water Zone to drain. Excavation activities will proceed with caution, and inspections of the natural subsurface will be made. Where the perched aquifer does not readily drain, gravel drains and/or sump pumping may be required to effectively dewater the perched aquifer. All gravel drains, if used, would be sealed with a bentonite grout.

Two options are available for temporarily conveying and discharging water from the dewatering wells to the Green River. Option A would discharge water to an existing ditch system north of the site. The ditch system would convey water to the Green River about one mile north of the site. Option B would convey water through surface pipes to a temporary outfall in the Green River (Figure 6). The outfall, designed to prevent bank or stream bed erosion, would consist of a six-foot diameter by four-foot high concrete catch basin placed in the river. Dewatering discharge would be conveyed to the catch basin through a 12- to 18-inch pipe that would be anchored to the catch basin. Water from the pipe would flow into the catch basin to dissipate energy and then sheet flow over the top and sides into the river. Two to three ecology blocks may be placed around the catch basin for



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N

APPROXIMATE SCALE IN FEET

0 150 300

Site Boundary (Approximate)

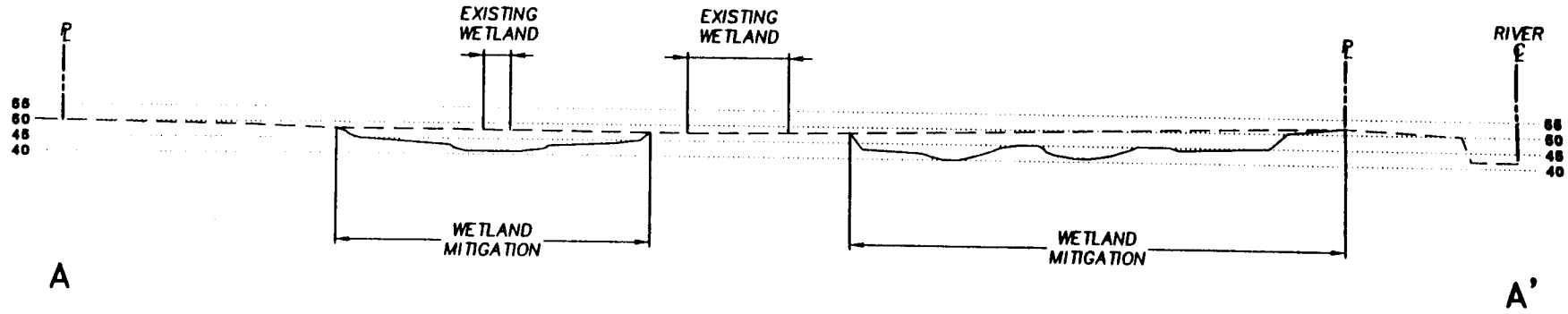
50 Proposed Grade

50 Existing Grade

Existing Wetland, to be enhanced

Reserve Area (for future development)

Figure 4
Wetland Mitigation Grading Plan



LEGEND:

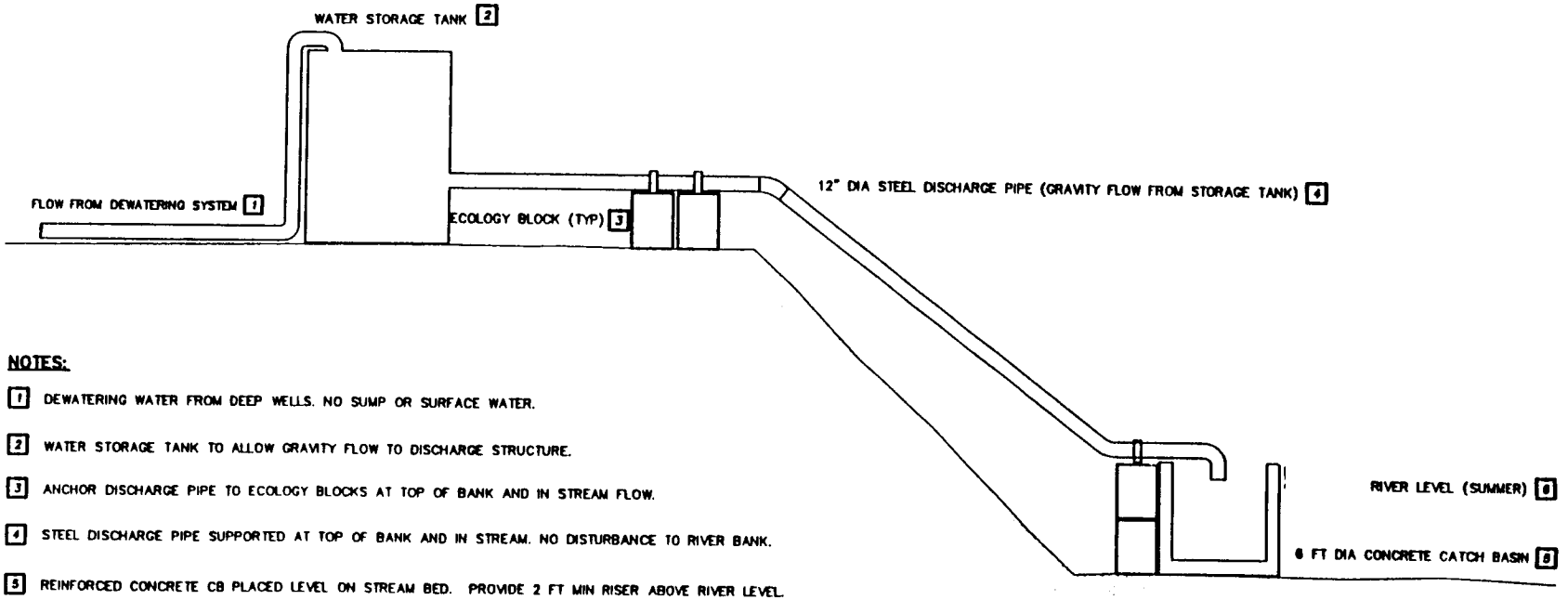
EXISTING GRADE

PROPOSED GRADE

FILE: 291209F5
DATE: 04/27/00

SCALE: HORIZONTAL 1"=200'
VERTICAL 1"=50'

Figure 5
Proposed Grading for Off-Site Wetland Mitigation, Cross Section



NOTES:

1. DEWATERING WATER FROM DEEP WELLS. NO SUMP OR SURFACE WATER.
2. WATER STORAGE TANK TO ALLOW GRAVITY FLOW TO DISCHARGE STRUCTURE.
3. ANCHOR DISCHARGE PIPE TO ECOLOGY BLOCKS AT TOP OF BANK AND IN STREAM FLOW.
4. STEEL DISCHARGE PIPE SUPPORTED AT TOP OF BANK AND IN STREAM. NO DISTURBANCE TO RIVER BANK.
5. REINFORCED CONCRETE CB PLACED LEVEL ON STREAM BED. PROVIDE 2 FT MIN RISER ABOVE RIVER LEVEL.
6. WATER LEVEL IN RIVER VARIES ACCORDING TO UPSTREAM CONTROL.
7. STATED DIMENSIONS ARE APPROXIMATE.

TEMPORARY DEWATERING OUTFALL
CONCEPTUAL
NOT TO SCALE

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DATE: 04/27/00

Figure 6
Temporary Dewatering Outfall
Auburn Wetland Development

stability. For security and safety purposes, a chain link fence may be secured around the discharge system. Water will be conveyed through 12- to 18-inch diameter PVC or steel pipe to a small temporary outfall.

Approximately one-third of the excavated material would be selectively stockpiled at on-site or off-site staging areas for use as backfill in the basin. The basins will generally drain to the northwest at elevations of 42 ft in the east and 43 ft in the west. The transition slope between the newly constructed wetland and the undisturbed grades around the perimeter of the mitigation area would be approximately 3H:1V (horizontal to vertical). Within the newly constructed wetland, slopes would generally be less than 10H:1V, but will be variable to promote diversity of habitats and desired hydrologic regimes.

Topsoil Replacement and Finish Grading

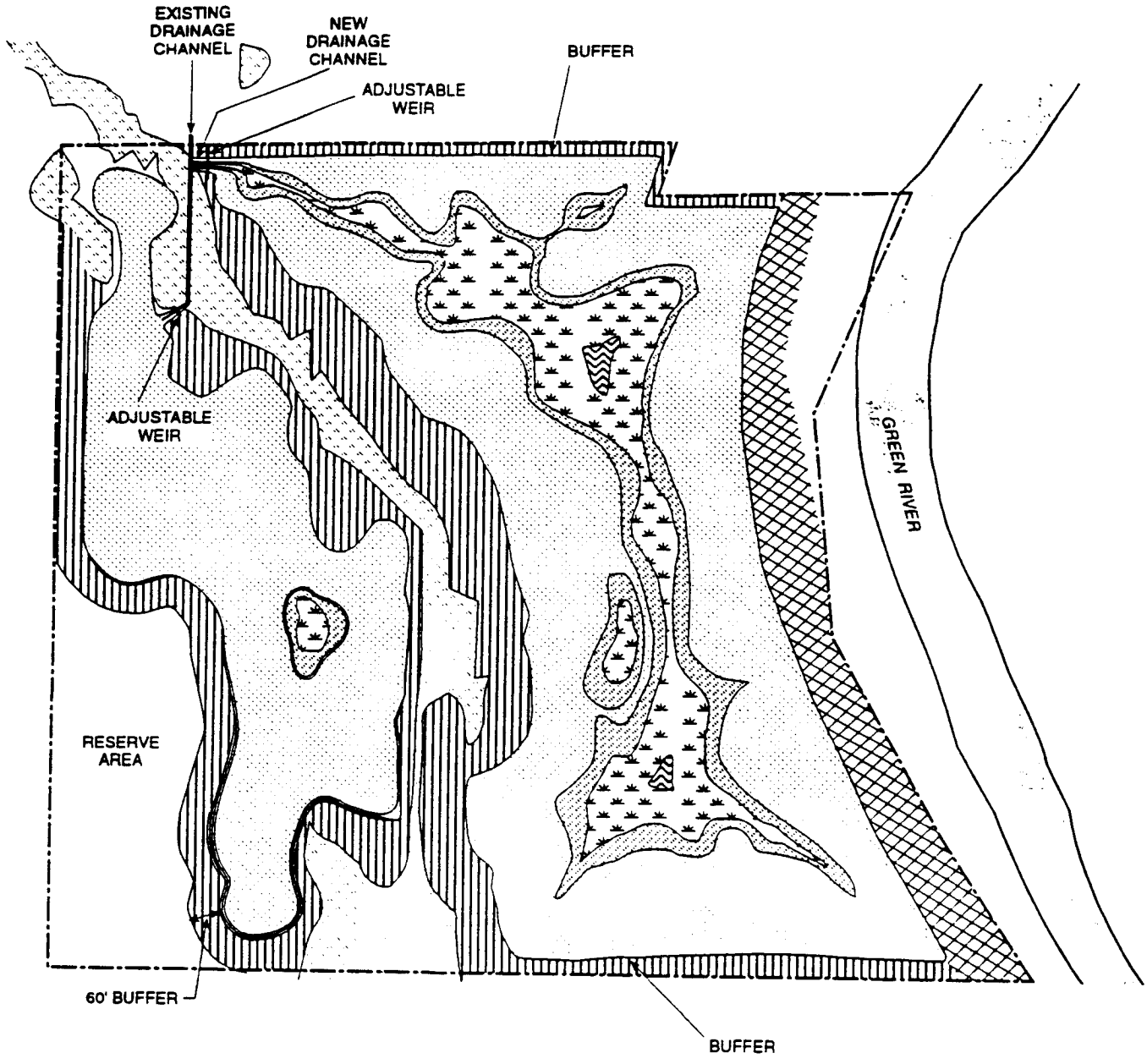
Topsoil will be processed on-site by blending the native subsoil with composted organic matter. Topsoil will be placed and graded to 12 inch thicknesses at elevations of 41 ft and above to provide the proper rooting medium and zone of saturation for the selected vegetation classes. The proposed grading plan and wetland class acreages indicate that approximately 105,000 cy of replacement soil are needed. When suitable some of the on-site sandy loam material may be used as a topsoil.

Landscape Plan

Four wetland vegetation classes would be planted in the mitigation area: forested, shrub, emergent, and open water (Figure 7). These general classes would include eight wetland plant associations (or planting zones) typical of freshwater wetlands and forested uplands in the northern Puget Sound basin (Figure 8). These plant associations are groups of plants selected to mimic naturally occurring native plant groups that may be found within a wetland class. These planting groups were selected because they are adapted to the expected typical soil moisture regimes and they tolerate the range of moisture levels expected seasonally during dry or wet years. Plant species were also selected based on their value as food sources for wildlife.

The wetland plant associations would be planted to correspond to variations in topographic and hydrologic conditions to increase habitat diversity. For instance, in portions of the east basin, a relatively abrupt edge would be graded, between elevation 40 and 42 ft, which would provide forested wetland cover and overhanging vegetation adjacent to emergent areas. At the time of planting, minor variations in the plantings may occur to account for site-specific factors and the planting season. For example, if an area is planted in late spring or summer, container-grown versus live-stake material would be used. Similarly, during late fall, winter, or early spring plantings, a greater amount of bareroot and live-stake versus container-grown material would be planted.

All shrub and forested wetland zones would be seeded with grasses such as redtop, tufted hairgrass (*Deschampsia cespitosa*), red fescue (*Festuca rubra*), and mannagrass (*Glyceria* spp.). A small percentage of small-fruited bulrush (*Scirpus microcarpus*) would be seeded in the shrub wetlands



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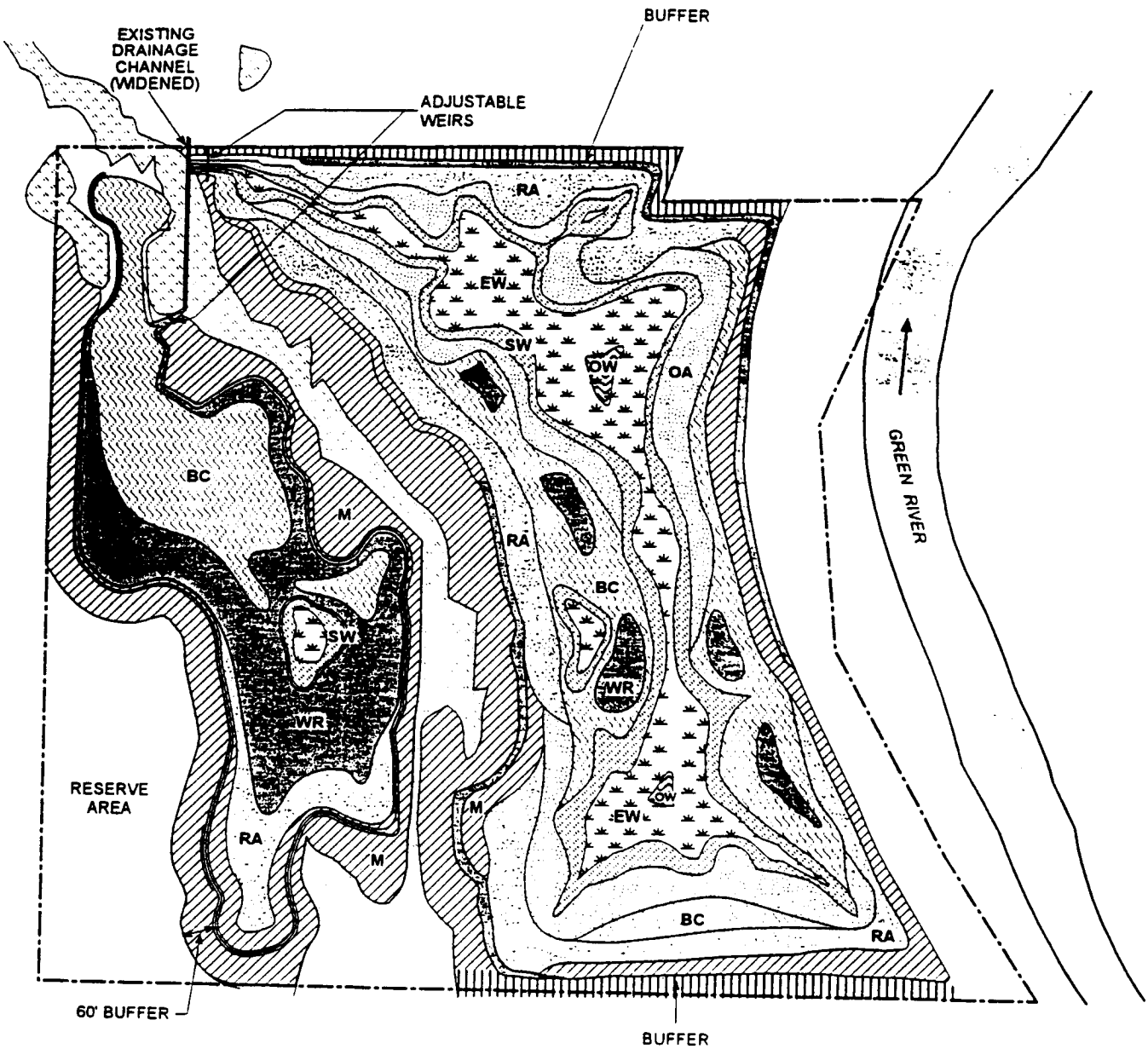
APPROXIMATE SCALE IN FEET

0 150 300

- Site Boundary (Approximate)
- Existing Wetland, to be enhanced
- Forested Wetland
- Shrub Wetland
- Emergent Wetland
- Open Water/Non-vegetated
- Upland Buffer
- Upland Grasses

Figure 7
Proposed Wetland Classes and Buffer Vegetation Types for the Wetland Mitigation Site



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N

APPROXIMATE SCALE IN FEET

0 150 300

BC	Black Cottonwood
RA	Red Alder
OA	Oregon Ash
M	Mixed Forest
WR	Western Redcedar

	Site Boundary (Approximate)
	Existing Wetland, to be enhanced
SW	Shrub Wetland
EW	Emergent Wetland
OW	Open Water/Non-vegetated
	Upland Buffer

Figure 8 Proposed Plant Associations for the Wetland Mitigation Site

and the wetter portions of the forested wetlands (Table 3). It is expected that some small stands of the more shade-tolerant species, such as mannagrass and red fescue, would persist, after overstory establishment, and become part of the understory. Figure 9 depicts the expected growth pattern of the plantings as time progresses. It is anticipated that a mature forested wetland system will develop within 50 years.

It is anticipated that the majority of plant material for the wetland mitigation will be contract-grown by commercial nurseries. Nurseries must certify that plant material that is legally procured and propagated from Pacific Northwest sources. The Pacific Northwest region will be considered to be the region encompassing the Willamette Valley of Oregon, all of western Washington, and southwest British Columbia.

Table 3. Proposed seed mix for wetland and upland areas.

Scientific Name	Common Name	Indicator Status	Comments
Wetland			
Agrostis alba	Redtop	FAC	Species used would depend on the plant association and corresponding hydrologic regime. Not all listed species would be used in each plant association.
Carex obnupta	Slough sedge	OBL	
Deschampsia caespitosa	Tufted hairgrass	FACW	
Festuca rubra	Red fescue	FAC	
Glyceria spp.	Mannagrass	FACW+	
Scirpus microcarpus	Small-fruited bulrush	OBL	
Upland			
Low Grow mix	Barkley's perennial ryegrass	NA	This mix would be applied in the upland buffer area.
	Red fescue		
	Aurora hard fescue		

NA = Not applicable.

Phased Planting Approach

The planting plan for the site will likely include a phased planting approach. The site will be planted over several years. The phased planting approach will allow verification of assumptions regarding wetland hydrology, soil conditions, and the optimal plants for the environmental conditions present in the mitigation project. Phased planting provides an opportunity for adaptive management of the mitigation site, and allows modification of planting concepts as site hydrology develops. Given phased planting, monitoring will be extended to cover a minimum of 10 years from final plantings.

Weed Control

Invasive non-native species such as reed canarygrass and Himalayan blackberry can reduce successful establishment of desirable native plant species. A variety of weed control strategies are available to treat non-native species during the monitoring period.

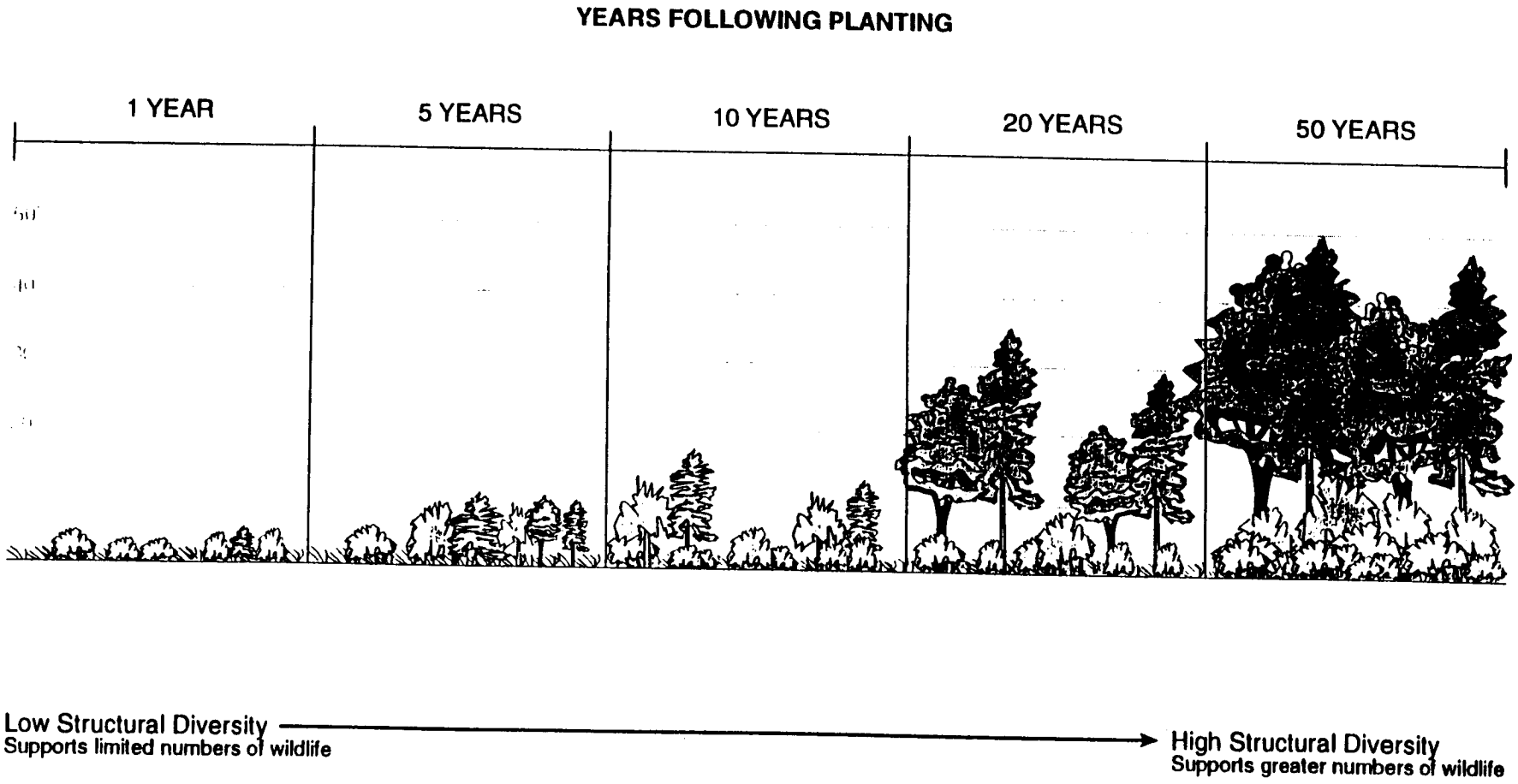


Figure 9
Successional Changes In Forested Wetland Vegetation Following Planting

These will be used as necessary:

- Dense plantings of target species that competitively exclude non-native species
- Applications of EPA-approved herbicides by licensed applicators
- Application of sterile straw or other biodegradable mulch
- Installation of biodegradable weed barrier fabric
- Mechanical removal using mowers, line trimmers, or hand removal
- Thermal removal using flame or heated water

In addition, topsoil containing weed seed, roots, and rhizomes will be removed in order to establish appropriate wetland hydrology over much of this site. It is anticipated that reed canarygrass may be particularly problematic. Several methods for controlling reed canarygrass are currently proposed. However, there is no reliable prescriptive approach to fully eradicating this species. Therefore, a somewhat experimental approach may be taken, to increase understanding of this species as well as to control it.

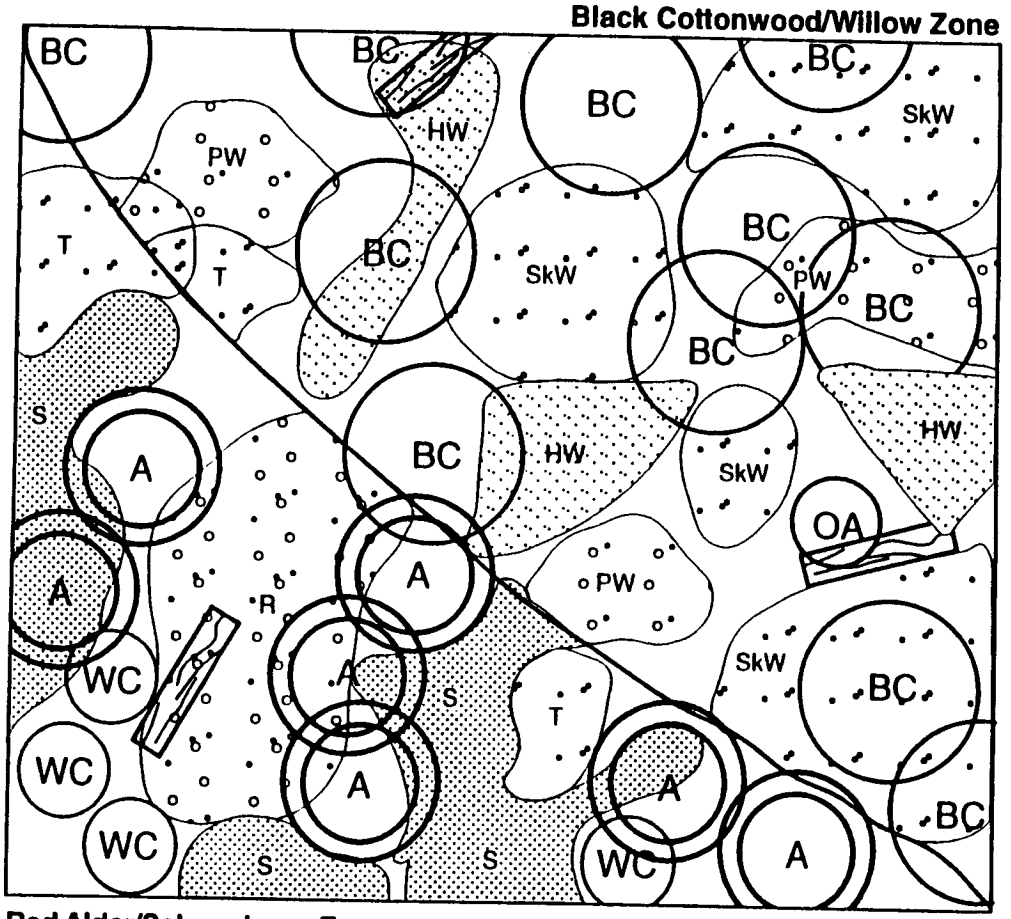
Existing vegetation, including reed canarygrass, could be removed from the site by application of approved herbicides, plowing, cultivating, and allowing the site to lie fallow. The project has been designed to anticipate some colonization of reed canarygrass by incorporating forested wetlands that ultimately will shade out this species. Competitive exclusion will be used by seeding areas with a fast-germinating cover crop. Competitive grass species such as tufted hairgrass sloughgrass (*Beckmannia syzigachne*), bentgrass, or red fescue may be used. Contingency actions could include repeated applications of herbicides, mowing, or use of weed barriers.

Black Cottonwood/Willow Association

The black cottonwood/willow association is characteristic of many floodplain forested wetlands in western Washington, including the Green River Valley. The plants within this association (Table 4 and Figure 10) are adapted to a large fluctuation in the water table and are tolerant of seasonally dry soils. This zone would be planted above elevation 42 ft.

Table 4. Proposed plant species for the black cottonwood/willow association.

Scientific Name	Common Name	Indicator Status[a]	Condition	Comments
Trees				
Fraxinus latifolia	Oregon ash	FACW	container	Trees would be planted at densities of at least 120 plants per acre.
Populus trichocarpa	Black cottonwood	FAC	container/ bareroot	
Salix lasiandra	Pacific willow	FACW+	bareroot/ live stake	
Shrubs				
Lonicera involucrata	Twinberry	FAC+	container	Approximately 35% to 50% would be planted at about five ft on center.
Salix hookeriana	Hooker's willow	FACW	bareroot/ live stake	
Salix sitchensis	Sitka willow	FACW	bareroot/ live stake	



Black Cottonwood/Willow Zone

- BC — Black Cottonwood
- OA — Oregon Ash
- HW — Hooker's Willow
- PW — Pacific Willow
- SkW — Sitka Willow
- T — Twinberry
- Hydroseed
- Downed Log

Red Alder/Salmonberry Zone

- A — Red Alder
- WC — Western Crabapple
- R — Red-Osier Dogwood
- T — Twinberry
- S — Salmonberry
- Hydroseed
- Downed Log

SCALE IN FEET

0 10 20

Figure 10
Typical Planting Plan for the Black Cottonwood and Red Alder Planting Zones

Red Alder/Salmonberry Association

The red alder/salmonberry association (Table 5, see Figure 10) commonly occurs on wet valley floors in seasonally flooded areas. This association would be planted above the 42 ft elevation where year-round soil saturation would not occur.

Table 5. Proposed plant species list for the red alder/salmonberry association.

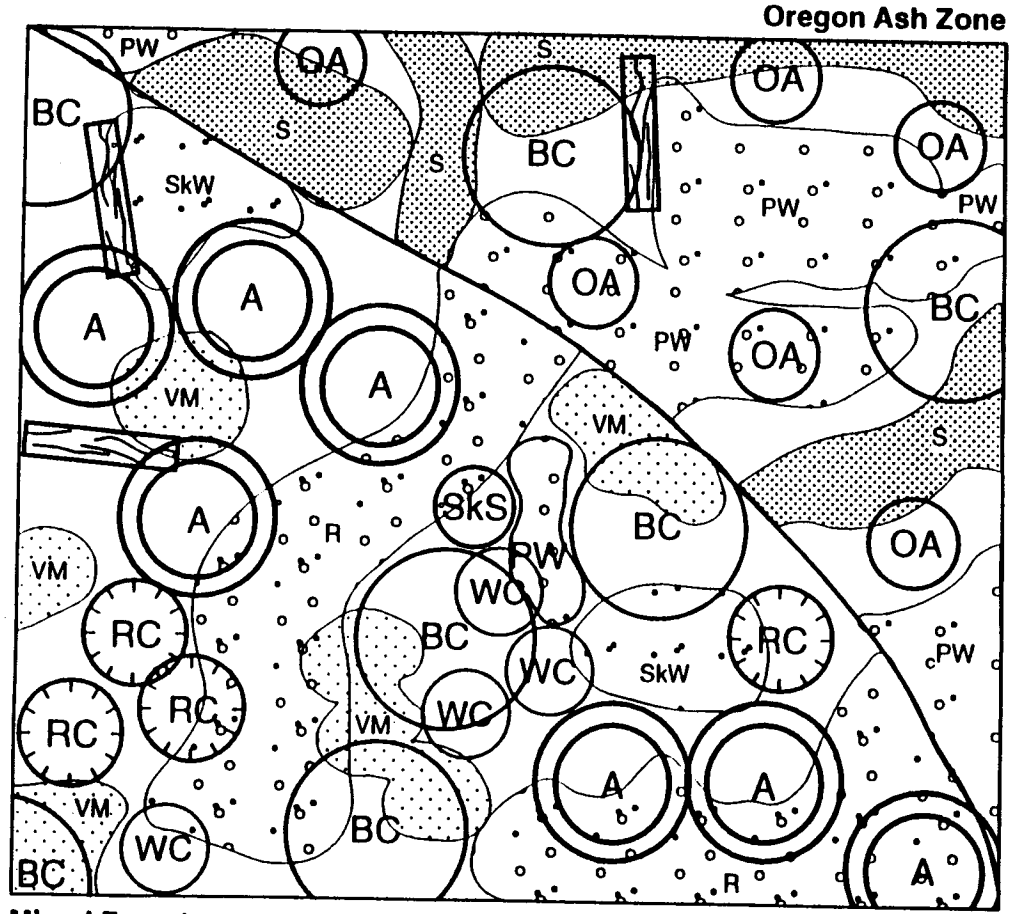
Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Alnus rubra	Red alder	FAC	container	Trees would be planted at densities of at least 120 plants per acre
Pyrus fusca	Western crabapple	FACW	container	
Shrubs				
Cornus stolonifera	Red-osier dogwood	FACW	bareroot/ live stake	40% to 50% of the area would be planted with shrubs at an approximate spacing of five ft on center.
Lonicera involucrata	Twinberry	FAC+	container	
Rubus spectabilis	Salmonberry	FAC+	container/ bareroot	

Oregon Ash Association

The Oregon ash association is most commonly found in floodplains or associated with streams. This community would be planted in the wetter portions of the forest zone since most of the associated species are tolerant of soil saturation and inundation well into the spring. Oregon ash will comprise most of the plant cover, with minor components of salmonberry and willow (Table 6 and Figure 11).

Table 6. Proposed plant species list for the Oregon ash association.

Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Fraxinus latifolia	Oregon ash	FACW	container	Trees would be planted at densities of at least 150 per acres.
Salix lasiandra	Pacific willow	FACW+	bareroot/ live stake	
Populus trichocarpa	Black cottonwood	FAC	container/ bareroot	
Shrubs				
Rubus spectabilis	Salmonberry	FAC+	container/ bareroot	10% to 20% of the area would be planted with salmonberry at spacings of at least five ft on center.



Oregon Ash Zone

- BC — Black Cottonwood
- OA — Oregon Ash
- PW_o — Pacific Willow
- S — Salmonberry
- Hydroseed
- Downed Log

Mixed Forest Zone

- BC — Black Cottonwood
- A — Red Alder
- SkS — Sitka Spruce
- RC — Western Redcedar
- WC — Western Crabapple
- PW_o — Pacific Willow
- SkW — Sitka Willow
- R — Red-Osier Dogwood
- VM — Vine Maple
- Hydroseed
- Downed Log

SCALE IN FEET

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Figure 11
Typical Planting Plan for the Oregon Ash and the Mixed Forest Planting Zone

Mixed Forest Association

The mixed forest association includes several coniferous and deciduous tree species as well as an understory shrub component. This association would be planted approximately between elevation 43 ft and 49 ft, because some of the tree species included are less tolerant of prolonged soil saturation (Table 7, see Figure 11).

Table 7. Proposed plant species list for the mixed forest association.

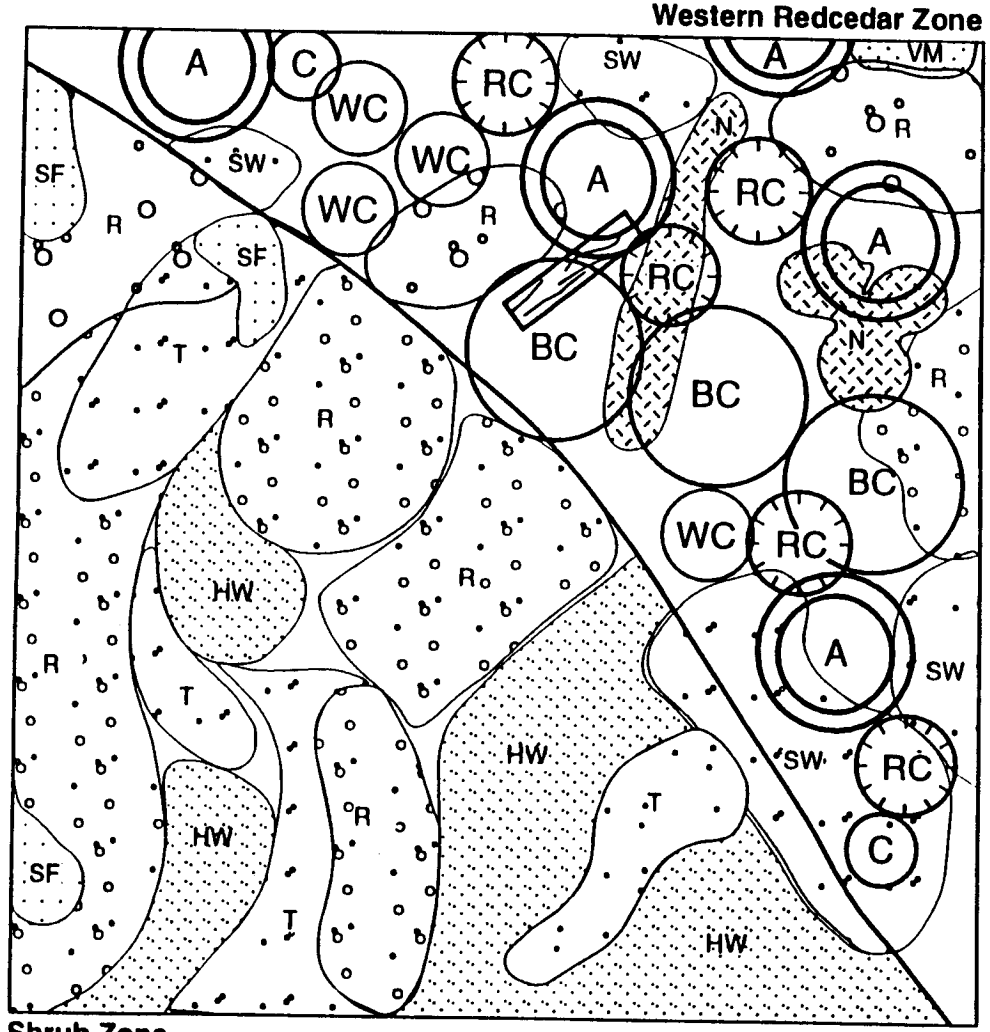
Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Alnus rubra	Red alder	FAC	container	Trees would be planted at densities of at least 120 per acre.
Picea sitchensis	Sitka spruce	FAC	container	
Populus trichocarpa	Black cottonwood	FAC	container/ bare root	
Pyrus fusca	Western crabapple	FACW	container	
Salix lasiandra	Pacific willow	FACW+	bareroot/ live stake	
Thuja plicata	Western redcedar	FAC	container	
Shrubs				
Acer circinatum	Vine maple	FAC-	container	40% to 50% of the area would be planted approximately five ft on center.
Cornus stolonifera	Red-osier dogwood	FACW	bareroot/ live stake	
Salix sitchensis	Sitka willow	FACW	bareroot/ live stake	

Western Redcedar Association

The western redcedar association includes deciduous as well as coniferous tree species and limited shrub species plantings (Table 8, Figure 12). Since several of the tree species within this association are less tolerant of prolonged soil saturation, it would be planted in the upper portions of the wetland between elevations 43 ft and 45 ft.

Wetland Enhancement

The wetland enhancement area will be located in the existing emergent wetland swale that bisects the site. This wetland area will be enhanced by planting a forested community composed of native tree and shrub species (Table 9). This forest association will be planted at the existing ground elevations, between elevations 45 ft and 49 ft.



Western Redcedar Zone

- RC — Western Redcedar
- BC — Black Cottonwood
- A — Red Alder
- WC — Western Crabapple
- C — Cascara
- SW — Scouler's Willow
- N — Pacific Ninebark
- R — Red-Osier Dogwood
- VM — Vine Maple
- Hydroseeding
- Downed Log

Shrub Zone

- R — Red-Osier Dogwood
- HW — Hooker's Willow
- T — Twinberry
- SF — Small-Fruited Bulrush
- Hydroseeding

SCALE IN FEET

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Figure 12
Typical Planting Plan for the Western Redcedar and the Shrub Planting Zones

Table 8. Proposed plant species list for the western redcedar association.

Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Alnus rubra	Red alder	FAC	container	Planted at densities of at least 150/acre.
Populus trichocarpa	Black cottonwood	FAC	container/ bareroot	
Pyrus fusca	Western crabapple	FACW	container	
Rhamnus purshiana	Cascara	FAC-	container	
Thuja plicata	Western redcedar	FAC	container	
Shrubs				
Acer circinatum	Vine maple	FAC-	container	20% to 30% of the area would be planted approximately five ft on center.
Cornus stolonifera	Red-osier dogwood	FACW	bareroot/ live stake	
Physocarpus capitatus	Pacific ninebark	FACW-	container	
Salix scouleriana	Scouler's willow	FAC	bareroot/ live stake	

Table 9. Proposed plant species list for the existing emergent wetland.

Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Alnus rubra	Red alder	FAC	container	Trees would be planted at densities of at least 150 per acre.
Populus trichocarpa	Black cottonwood	FAC	container/ bareroot	
Pyrus fusca	Western crabapple	FACW	container	
Rhamnus purshiana	Cascara	FAC-	container	
Thuja plicata	Western redcedar	FAC	container	
Shrubs				
Cornus stolonifera	Red-osier dogwood	FACW	bareroot/ live stake	20% to 30% of the area would be planted approximately nine-ft on center.
Physocarpus capitatus	Pacific ninebark	FACW-	container	
Rubus spectablis	Salmonberry	FAC	container	
Salix scouleriana	Scouler's willow	FAC	bareroot/ live stake	

Planting Sequences

Planting of overstory trees and shrubs in forest and shrub plant associations would occur during the first fall or early spring season following site grading, when soil moisture is optimal. Trees would be at least three-year-old branched seedlings and at least 24 inches tall. Trees of varying sizes (between approximately 24 and 48 inches) would be planted to provide height diversity and simulate a more natural condition. Shrub understory species in the forested areas would be planted in patches to mimic their natural occurrence on approximately five-ft centers (see Figures 10 through 12). The shrub wetland zone would also be planted on five-ft centers (Table 10).

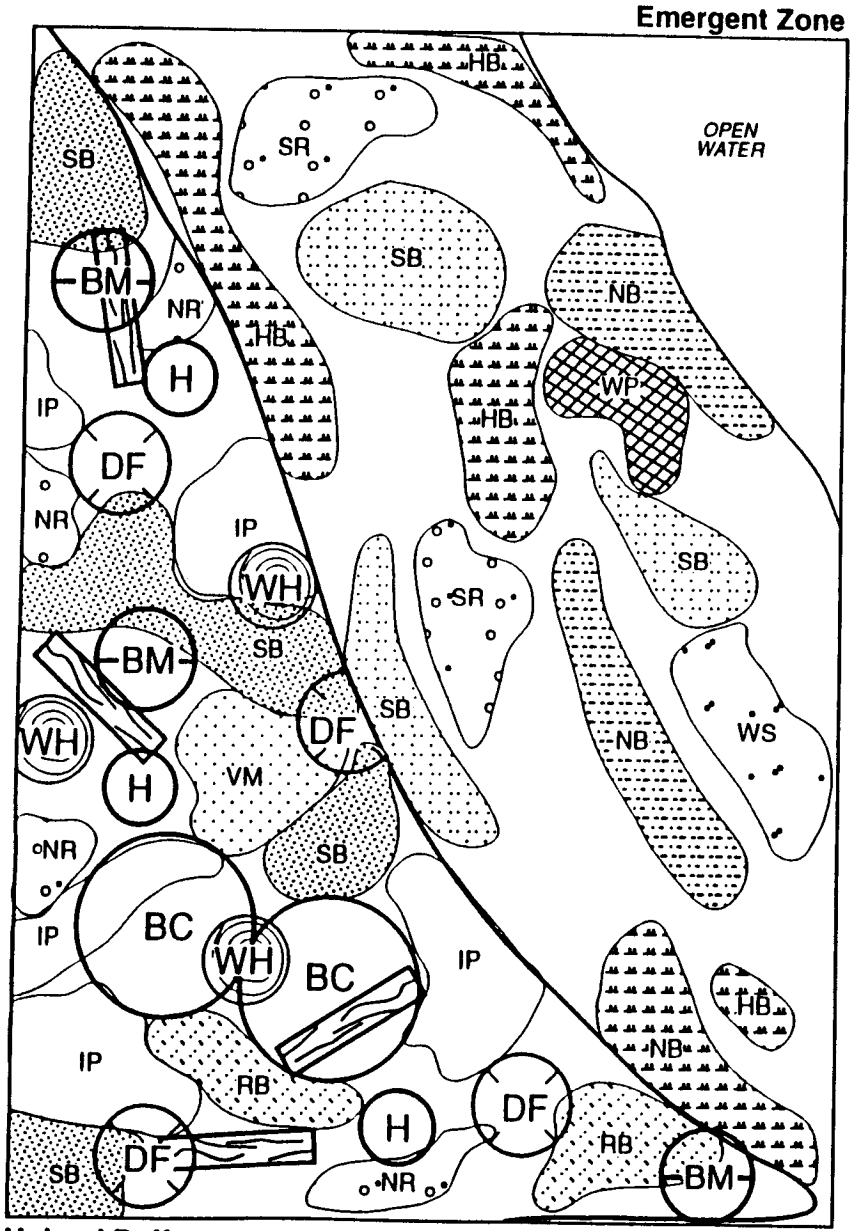
Table 10. Proposed plant species list for the shrub zone.

Scientific Name	Common Name	Indicator Status	Condition	Comments
Cornus stolonifera	Red-osier dogwood	FACW	bareroot / live stake	Shrubs would be planted in approximately 85% to 90% of the shrub zone at spacings ranging from five to eight ft on center.
Lonicera involucrata	Twinberry	FAC+	container	
Salix hookeriana	Hooker's willow	FACW-	bareroot / live stake	
Salix lasiandra	Pacific willow	FACW+	bareroot/ live stake	

A phased approach to planting may be implemented after the grading activities are complete. Phased planting allows for adaptive management of the site. For example, it would be possible to monitor site hydrology and potentially adjust the locations of the plant communities to suit the hydrologic regime. Plantings will be placed in the field by a qualified landscape designer, architect, or wetland biologist.

Emergent Planting Zone

Emergent wetlands would be planted with native emergent species common in the Green River Valley and the northern Puget Sound region. Since wetland hydrology is designed to create both seasonally and permanently flooded areas, plants that are tolerant of extended flooding and soil saturation would be established in these areas. These species would include water parsley (*Oenanthe sarmentosa*), narrow-leaf bur-reed, hardstem bulrush (*Scirpus acutis*), and spike-rush (Table 11). The typical growth pattern for emergent marsh plants is in monotypic patches with some interspersion in open, less densely vegetated areas, and proposed planting would mimic this pattern (Figure 13). Planting shoots with rhizomes 18 inches on center in monotypic stands of varying size and seeding a mix of emergent species (see Table 10) in the areas between patches should achieve that result. Because ponding in emergent areas is expected well into the early summer, planting of emergent species would occur during the fall months when soils are becoming saturated–but before water levels reach their winter maximum.



Emergent Zone

- SR — Common Spikerush
- WP — Water Parsley
- WS — Water Smartweed
- HB — Hardstem Bulrush
- SB — Small-fruited Bulrush
- NB — Narrow-leaf Bur-reed
- Hydroseed Mix/ Natural Colonization

Upland Buffer

- VM — Vine Maple
- BM — Big-leaf Maple
- H — Hazelnut
- IP — Indian Plum
- BC — Black Cottonwood
- DF — Douglas-fir
- NR — Nootka Rose
- RB — Red Elderberry
- SB — Snowberry
- WH — Western Hemlock
- Downed Log

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Figure 13
Typical Planting Plan for the Emergent and the Upland Buffer Planting Zones

Table 11. Proposed species list for the emergent zone.

Scientific Name	Common Name	Indicator Status	Condition
Carex rostrata	Beaked sedge	OBL	plug
Eleocharis palustris	Common spike-rush	OBL	plug
Oenanthe sarmentosa	Water parsley	OBL	container
Polygonum amphibium	Water smartweed	OBL	container
Scirpus acutis	Hardstem bulrush	OBL	plug
Scirpus microcarpus	Small-fruited bulrush	OBL	seed
Sparganium emersum	Narrow-leaf bur-reed	OBL	plug

Upland Buffer

The mitigation site will be protected by a 60-ft buffer along its western boundary, and 50-ft buffers on the north and south. In addition, the existing wetland will be provided with 50 ft buffers on both its east and west sides to create an upland/wetland mosaic to increase habitat diversity. Nearly 35 acres of new wetland will be created and six acres of existing wetland will be enhanced. These mitigation areas will be protected by approximately 15 acres of upland buffer. The 15 acres of upland buffer will also provide habitat functions to a variety of wildlife species.

All vegetated upland areas disturbed during wetland construction would be seeded using low-growing grass species (see Table 3). Following seeding, forested buffers would be planted bordering the northern and southern boundaries of the mitigation wetland where the area is susceptible to potential disturbance. Trees and shrubs would be planted (Table 12, see Figure 13) at densities sufficient to attain the stem density performance standards for forested wetland habitat. As in the forested wetland areas, species that are less tolerant of direct sun would be placed approximately three years after initial plantings. A narrow strip of land to the east of the site, adjacent to the Green River, is proposed for trail construction by King County. Grassland would remain between the edge of the constructed mitigation wetland and the King County property boundary.

Table 12. Proposed plant species list for the upland buffer.

Scientific Name	Common Name	Indicator Status	Condition	Comments
Trees				
Acer macrophyllum	Big-leaf maple	FACU	container	At least 120 trees per acre would be planted in the upland buffer.
Populus trichocarpa	Black cottonwood	FAC	container/ bareroot	
Pseudotsuga menziesii	Douglas fir	FACU	container	
Tsuga heterophylla	Western hemlock	FACU	container	
Thuja plicata	Western redcedar	FAC	container	
Shrubs				
Acer circinatum	Vine maple	FAC	container	30% to 40% of the area planted five to six ft on center.
Corylus cornuta	Hazelnut	FACU	container	
Oemleria cerasiformis	Indian plum	FACU	container	
Rosa nutkana	Nootka rose	FAC	container	
Symphoricarpos albus	Snowberry	FACU	container	
Sambucus racemosa	Red elderberry	UPL	container	

IMPLEMENTATION

The following section describes the general implementation sequence for the Auburn site.

Pre-Construction Meeting

Oversight during construction of the wetland mitigation will be required to ensure that the contractors follow the plans and specifications. Prior to any site work, a pre-construction meeting will be held with the Port, general contractors, engineers, landscape contractors, landscape architects, and biologists to make certain that aspects of the project are properly implemented. Both a civil engineer and wetland ecologist will be available for on-site inspections and approvals of all work.

Dewatering

Due to the seasonally high water table on the site, it will likely be necessary to lower the groundwater level during excavation and grading activities. All aspects of the contractor's dewatering plan and grading sequence will be discussed during pre-construction meetings.

Excavation and Grading

Prior to any excavation, the extent of all grading activities will be surveyed by a professional surveyor and staked in the field. Approximately 440,000 cy of soil will be excavated to form the new wetland basins. The majority of the excavated material will be transported off-site for re-use or disposal (at an approved upland location). The contractor as well as the approved fill disposal site would be required to obtain all appropriate permits. Part of the excavated soil will be blended with composted organic matter and replaced as topsoil after new site grades are established. The topsoil blending operation will require temporary stockpiling and processing in either an on-site or off-site staging area.

Erosion Control

Generally, construction of the wetland basin will not be prone to off-site migration of sediments. In areas where there is potential for fine sediments reaching the Green River and adjacent properties, a variety of erosion control measures will be employed. Staging areas and existing wetlands will be protected with silt fence installed around the perimeter. Stockpiled soil left in place for more than three weeks will be stabilized with an approved native hydroseed mixture, tarp, or appropriate Best Management Practice. In addition, a native erosion control grass seed mixture will be used to stabilize the soil in the graded portions of the site until native vegetation can be installed. The desired outcome from this strategy is to choose a grass mixture that rapidly establishes cover to stabilize the soil while not competing with the installed plant material.

To reduce vehicles/equipment tracking mud onto paved roads, the site entrance roads will be stabilized using a pad constructed of quarry spalls or vehicles and/or their tires will be washed and or brushed prior to leaving the site.

Irrigation

After all grading activities have been completed an irrigation system will be installed throughout the site. Water for the irrigation system would be pumped to the site from the City of Auburn water supply system. Irrigation will ensure that the newly planted vegetation receives water during dry periods of the year to promote healthy vigorous growth. The irrigation system will remain in place until the plants become established, which is anticipated to take two to five years.

Planting

All planting zones will be staked in the field according to the proposed plant associations and site hydrology. Because of variations in grading and soil conditions, it is difficult to predict exactly what the site hydrology will be after grading is complete. Therefore, it is expected that plant locations and species will slightly vary from the landscape plan. Because planting locations will be field located according to site hydrology, there will be ongoing coordination between landscape architects, wetland biologists, and landscape contractors to identify proper planting locations and methodologies. Due to the large number of plants needed to cover the entire site, planting will occur in phases. Also, plantings for the later phases can be better matched to the newly established site hydrology while evaluating the performance of the initial plantings.

To prevent herbivory, exclusionary devises may be installed around the mitigation plantings to frighten or deter wildlife species from grazing on the plant material. Depending upon the type of community, the level of exclusionary devises may vary from putting plastic collars around shrub and tree stems to wire mesh around emergent planting zones.

After all plants are installed, a four-inch layer of mulch will be placed around the base of the shrub or tree species to retain water, provide organic matter, and reduce competition with other plant material.

Fence Installation

Because one of the purposes of this mitigation site is to provide habitat for wildlife species, the perimeter of the site may be fenced to limit human access and prevent domestic animals from disturbing the breeding, migrating, and foraging wildlife species using the site. The fence may be either permanent or temporary depending on the performance of the wetland community and the future land use development of the surrounding properties. It is anticipated that the boundary fence will be constructed out of chain-link material for durability.

MONITORING PLAN

The mitigation site will be monitored for a 10-year period, with monitoring focusing on collecting the physical and ecological data necessary to determine whether performance standards for the mitigation site are being achieved. Monitoring reports will summarize the ecological condition of the wetland, and the degree of compliance with performance standards; as necessary, contingency actions will be recommended. The first phase of monitoring will be to complete an as-built report, as described below.

As-Built Report

An as-built wetland report that describes the mitigation as constructed and planted will be prepared to define the baseline conditions for measuring progress toward the defined goals and final performance standards. The as-built report will also establish all sampling locations for future monitoring activity. Any significant deviations from the construction plan will be noted, and the significance of these deviations evaluated and coordinated with the ACOE. A detailed wetland map will be prepared from field surveys and will include the following information:

- Topography at one-ft intervals
- Locations of major plant community boundaries
- Locations of surface water
- Locations of vegetation transects, photograph points, groundwater wells, staff gages, and other sampling points

The as-built report will summarize the existing wetland condition once construction is completed by describing the aerial extent of the wetland (and each vegetation zone planted) relative to mitigation goals, the hydrologic condition of each wetland planting area, and the relationship between each planting zone and observed soil moisture. These wetland features will then be compared to those established as design criteria for the wetland.

10-Year Monitoring Plan

Using the as-built report of baseline conditions, monitoring activities will focus on the collection of vegetation, hydrology, and wildlife data to evaluate wetland function and compliance with the permit conditions. Monitoring will also include photographic documentation of site features and the development of habitat on-site.

Vegetation monitoring will be performed to determine how plant communities are developing on the site. Data describing plant species composition, density, and cover will be collected along permanent vegetation transects or within plots. Walk-through surveys will be made to estimate annual shoot growth, survival rates, and vegetation structure. Photographs can provide qualitative documentation of plant community development on the site and in the buffer over time. Therefore, photographs will be taken along transects and at appropriate viewpoints to show extent and rate of plant height and cover. Aerial photographs and/or ground-based mapping will be undertaken to determine whether in-kind replacement ratios are being met.

Hydrologic data will be collected to evaluate the duration and amount of flooding or soil saturation using staff gages and field observations. Staff gages will be read monthly for the first three years after construction is complete, and three times per year thereafter. Permanent wells will be installed to measure groundwater depths. Wells will be placed at the existing central wetland and at representative sites in newly constructed forested, scrub-shrub, and emergent plant communities. Water depths will be read monthly for the first three years after construction is complete, and three times per year thereafter.

Habitat structure and wildlife use of the mitigation site will be monitored to evaluate whether performance standards are being met. Surveys will be conducted four times per year to record wildlife species and activities on-site.

Monitoring data will also be used to analyze the overall success of the mitigation project, including recommendations for future designs, reporting of plant growth under various hydrologic regimes, and other general observations relevant to mitigation design and implementation. Most monitoring activities will be completed along the permanent transects and fixed points established and marked during the as-built survey; however, as determined in the field, additional monitoring may be needed to document unique conditions not present at pre-established sampling locations. All monitoring will use standard ecological techniques to sample, measure, or describe vegetation, hydrologic, and wildlife habitat conditions. These techniques include walk-through surveys, line-intercept sampling along, plot sampling, and wetland delineation.

At the end of the 10-year monitoring period, the determination can be made whether the created wetland area is larger than the mitigation requirement. If more than the required wetland area has been created, the additional wetland acreage could be considered as mitigation for future permit actions in coordination with resource agencies that have permit authority.

Any deviations from design parameters will be noted and analyzed, including the anticipated significance of any deviations from the eventual development of a functioning wetland system relative to performance goals.

SITE PROTECTION

The Port and the City of Auburn are currently negotiating the terms of site protection. Several alternatives are being considered; however, both entities would agree to protect the site in perpetuity.

MAINTENANCE AND CONTINGENCY PLAN

The mitigation wetland has been designed to achieve the final performance standards without significant ongoing maintenance. Proposed plant communities are adapted to the designed hydrologic regime and floodplain location. Supplemental irrigation during the first two seasons following planting may be used to enhance plant establishment and reduce the risk of mortality due to transplant shock. This maintenance activity will depend on rainfall.

To achieve relatively rapid overstory development and structural diversity, trees will be planted closer together than would occur in natural, mature stands. At the end of the 10-year monitoring period, some deciduous trees could be cut or girdled and left as woody debris for wildlife habitat. This management activity will allow the remaining trees adequate space to reach full size, while providing additional microhabitat for small plants and animals in the downed or standing woody debris.

If plant species exhibit greater than 30 percent mortality within the first two years these species may be replaced with species of similar form and function if deemed appropriate by a qualified professional.

Since reed canarygrass is present in adjacent wetland areas, and this undesirable species could invade the wetland through seed dispersal, maintenance actions may be required to control its spread. These actions could include periodic mowing, treatment with EPA-approved herbicide, and/or reseeding with native wetland grasses. Extensive, long-term control of reed canarygrass is not anticipated since dense stands should not develop under shrub or forest canopies, and emergent wetlands will be too wet for this species to out-compete other wetland plants.

In establishing native plant communities at wetland mitigation sites, the presence of invasive non-native species such as reed canarygrass and Himalayan blackberry, threaten successful establishment of cover by native wetland species. A variety of weed control strategies are available to treat non-native species and these weed control strategies may be used throughout the project. Steps in weed control may take any of the following forms:

- Dense plantings of target species that competitively exclude non-native species
- Applications of EPA-approved herbicides, as necessary
- Use of mulch in the form of sterile straw or other biodegradable mulch
- Installation of biodegradable weed barrier cloth
- Mechanical removal of weeds by using weed whackers, hoeing, or hand-removal

Vegetation at newly planted mitigation sites can be vulnerable to browse by Canada geese, deer, voles, beaver and other wildlife species. In order to avoid significant loss of planted species, a number of contingency measures may be necessary. Collars may be installed around woody species or netting may be constructed over some plantings. A combination of cayenne pepper and pruning wax applied to woody stems has been an effective deterrent to herbivory. These and other contingency measures may be employed on a case-by-case basis.

PROJECT CHANGES

Since issuance of the SEPA Environmental Checklist (August 1998) for the Auburn Wetland Mitigation project, additional wetlands were identified at STIA (see the January 2000 SEPA Addendum). This has resulted in the need to increase the size of the mitigation area which in turn has affected other aspects of the proposal. Table 13 identifies the changes in the project since issuance of the environmental checklist (August 1998).

Another project change relates to the truck haul routes that will potentially be affected by road development on S. 277th Street. The routing of trucks is defined up to the nearest interchange for SR 167 (Valley Freeway). With S. 277th Street available, truck traffic would access SR 167 from S. 277th Street, with access from the site to Auburn Way North most likely through 49th Street NE. In 1999, the construction of S. 277th Street was completed connecting to the east across the Green River and it is proposed that site truck traffic be directed from 49th Street NE north to S. 277th Street via either the "D" Street or "G" Street rights-of-way. While the cities of Kent and Auburn have stated that they would prefer that there be no truck hauling on the new roadway section east of Auburn Way North, S. 277th Street would provide the most direct and flexible access for trucks to the street network.

Table 13. Summary of project changes.

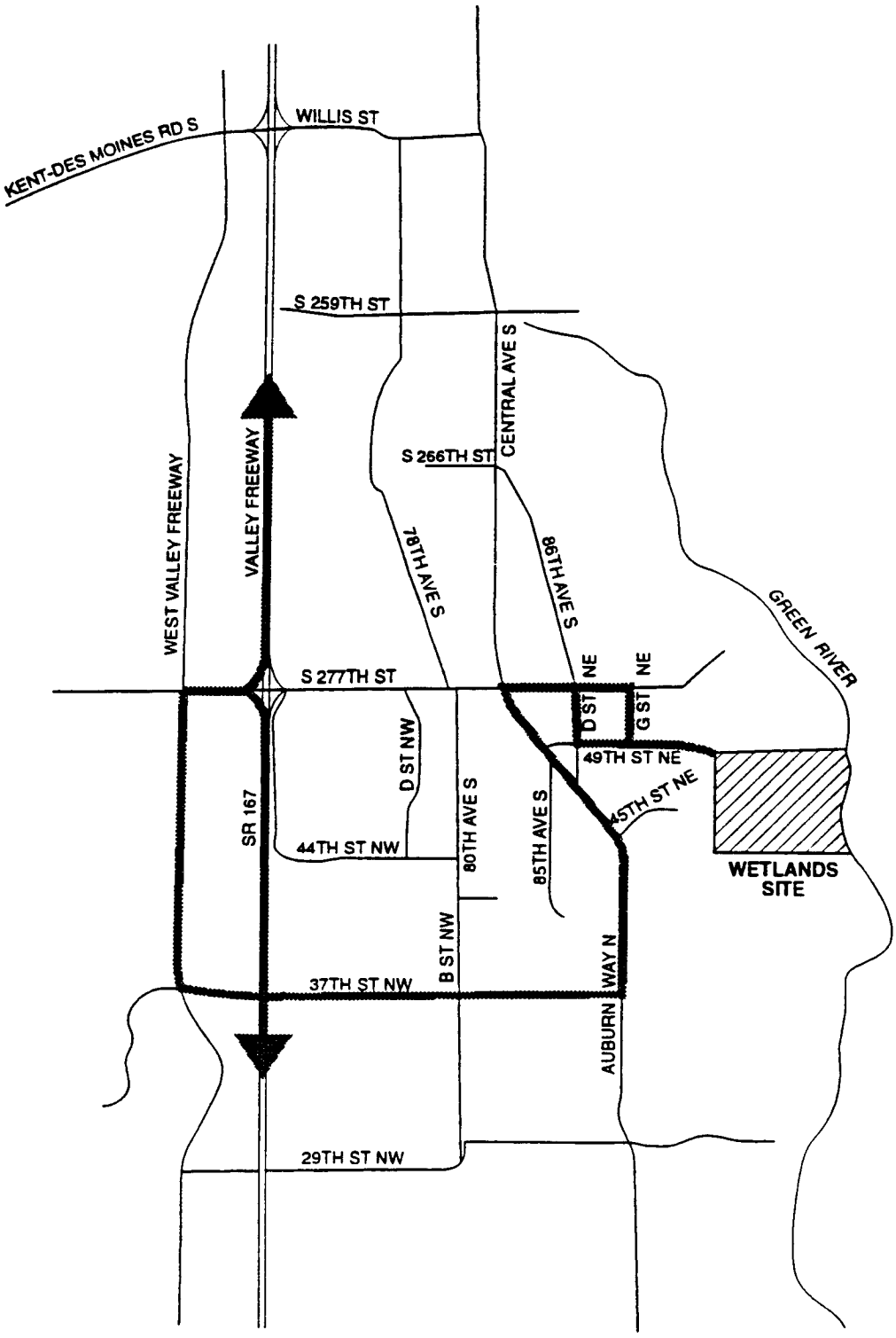
	Original Proposal (1998)	Revised Proposal (2000)
Total Wetland Area Created and Enhanced	30 acres	>40 acres
- Forested Wetland	23 acres	26 acres
- Shrub Wetland	2 acres	3.4 acres
- Emergent Wetland	4.5 acres	5.17 acres
- Open Water	0.5 acres	<0.5 acre
- Enhancement of Existing Wetlands	0 acre	6 acres
Excavation	370,000 yds^3	440,000 yds^3
Temporary Soil Stockpile	40,000 yds^3	40,000-50,000 yds^3
Replacement Soil Required	90,000 yds^3	105,000 yds^3
Construction Start Date	Summer 2000	Summer 2001
Construction Duration	One Summer Season	One or Two Summer Seasons
Planting Phasing	One to Two Years	Two to Three Years
Staging Area Size	12.9 acres	5 acres

Construction of the S. 277th Street grade separation project along this route (FAST Corridor project) will begin in 2001, and would result in this section of S. 277th Street (from Auburn Way North to SR 167) being closed for two years. The proposed detour would route all traffic to SR 167 via Auburn Way North, 37th Street NE, West Valley Highway and back to SR 167 at the S. 277th Street interchange. Figure 14 shows the proposed truck route from the project site to the S. 277th Street interchange with SR 167, with hauling occurring during closure of S. 277th Street for the FAST Corridor project construction. This represents the worst case truck route for the project access to SR 167.

PROJECT IMPACTS AND MITIGATION

Generally, there are no changes in the types of impacts that would be generated by the project since the impacts were initially disclosed in the 1998 SEPA Environmental Checklist. The main change is potentially in the magnitude or duration of some impacts. For example, the amount of material to be excavated has increased from 370,000 yds^3 to 440,000 yds^3. Of this material, approximately 400,000 yds^3 will be removed from the site (versus 330,000 yds^3 in the original proposal). Therefore, this has changed the transportation analysis. This issue is discussed below.

The construction of the new wetland in Auburn would involve the removal of up to 400,000 yds^3 of soil from the site (some excavated material would be stockpiled and reused on the site thus the difference between the amount excavated and the amount removed off-site). For the purposes of the transportation analysis a "worst case" scenario was assumed, that the excavation work occurs in one season. If the excavation work is not completed over one season, then haul truck impacts would be



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Truck Route to Freeway

Figure 14
Port of Seattle
Auburn Wetland
Truck Traffic Routes

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spread over two seasons. This would reduce the necessary number of daily truck trips (the magnitude of the impact per day would decrease, but the duration would increase). The assumptions in the analysis of truck haul trips are as follows:

- Approximately 400,000 cy of material would be removed from the site
- Ten-week hauling period available after site dewatering is achieved
- Hauling is prohibited during PM peak period (4-6 PM weekdays) reducing hauling hours to six hours per day
- Twenty two cubic yards per truck+dolly combination

Using these parameters, there would be an estimated 18,180 truckloads of excavated material to remove from the site, and thus 18,180 truck round trips. To accommodate the removal of the excavated material in a 10-week, five-days per week window of excavation, 50 days of material hauling would be necessary at 364 truckloads per day. Over six hauling hours per day, this would equate to 61 truck trips per hour. This is an increase of approximately 20 truck trips per hour over the original proposal.

Discussions with Auburn's traffic engineer indicated that there is existing congestion along both Auburn Way North and S. 277th Street during the peak periods, however, off-peak operation is manageable for truck movements (personal communication Stephen Mullen City of Auburn Traffic Engineer). Therefore, hauling from the site would be timed to avoid the worst traffic period (the PM peak hour period). Although increased truck traffic can be accommodated on the roadways, truck hauling from the site could increase congestion, particularly at intersections and for truck turning movements to and from the project site.

Mitigation for the impact of truck trips (congestion and delay) on roadway operations include potentially extending the hauling hours throughout the day (while continuing to avoid the PM peak period), such as hauling in the evening after 6PM or on weekends. This would reduce the number of truck movements each hour along the hauling routes, however the total number of truck trips would remain the same for the project. To mitigate for congestion caused by trucks entering and leaving the site, flaggers should be provided during hauling periods. In particular, flaggers should be used at the following locations: (1) on 49th Street NE at either D Street or G Street and (2) on S. 277th Street at D Street and/or G Street.

The increased level of truck traffic may also impact the condition of the pavement on the haul route roads resulting in the possible creation of potholes, pavement buckling, or differential settling. There has also been some concern expressed by the cities of Kent and Auburn over trucks using the new section of S. 277th Street. Any truck damage to the existing roadways would require repair based on a comparison of the roadway conditions before and after hauling. Mitigation may involve actual roadwork such as paving or compensatory payments to local jurisdictions.

SEPA REVIEW

The Port of Seattle has reviewed this proposal and determined that it is a minor revision that is within the scope of the projects described in the Master Plan Update. The proposed revisions do not change the analysis of significant impacts provided in the *Final Supplemental Environmental Impact Statement for the Proposed Master Plan Update Development Actions at Seattle-Tacoma International Airport* (Port of Seattle, May 1997) and the *SEPA Environmental Checklist for the Port of Seattle Master Plan Improvements Wetland Mitigation Project* (Port of Seattle, August 1998).

Date Addendum Prepared: April 27, 2000

SEPA Lead Agency: Port of Seattle - POS File No.

SEPA Responsible Official: Michael Feldman, Director of Aviation Facilities