

D I R E C T I V E

D 31-12

Effective Date

August 1, 1990

/s/ Duane Berentson
Secretary of Transportation

**Washington State Department of Transportation
Protection of Wetlands Action Plan**

I. Introduction

A. Purpose

To provide policy and guidance for the protection and preservation of wetlands; to ensure no net loss of wetlands caused by department actions; and to increase the quantity and quality of wetlands in the long term.

B. References

1. Executive Order 89-10, "Protection of Wetlands," December 11, 1989
2. Executive Order 90-04, "Protection of Wetlands" April 21, 1990
3. Environmental Procedures Manual 31-11, Section 3-2

C. Definitions

1. *Buffers*: Buffers are areas that surround a wetland and provide protection from adverse impacts to the integrity and value of a wetland and its ecosystems. Wetland buffers:
 - a. Moderate the rate and volume of surface water runoff into wetlands;
 - b. Stabilize soil and prevent erosion and sedimentation in wetlands;
 - c. Filter suspended solids, nutrients, and harmful or toxic substances;
 - d. Protect wetland wildlife habitat diversity and/or integrity;
 - e. Minimize adverse human impacts in wetlands.
2. *Mitigation*: Mitigation is an established environmental impact minimization process. The theme of mitigation policies

underscores avoidance of adverse impacts as a preference, since avoidance has the greatest reliability and is the simplest and most effective way to minimize wetlands impacts.

In the following order of decreasing preference, mitigation is:

- a. Avoiding the impact altogether by not taking a certain action or part of an action;
 - b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
 - e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
 - f. Mitigation monitoring is evaluating the development of a constructed resource to determine its rate of maturity in replacing the function and value of the impacted resource and taking appropriate corrective measures. Mitigation for individual actions may include a combination of the above measures; (EO 90-04, Section 12).
3. *Wetland Inventory*: A wetlands inventory is a data collection process during which information about the presence, approximate extent, and in some cases the characteristics of wetlands are collected. Inventories can be general (i.e. aerial photographs) or site-specific (through field inventory work).
 4. *Wetlands*: For purposes of implementing the policies as stated in the Executive Order(s) (EO), the wetland definition of the U.S. Fish and Wildlife Service is used.

“Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must have one or more of the following attributes: (1) at least periodically, the land supports predominantly hydrophytes, (2) the substrata is predominantly undrained hydric soil, and, (3) the substrata is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.”

The definition includes: swamps, marshes, bogs, ponds, stream beds, riparian corridors, mudflats, pools, other unvegetated wetlands, open water areas, coral reefs, vegetated shallows, riffle pools, and other aquatic habitats. For regulatory purposes, the

definition in M 31-11, "Environmental Procedures Manual" applies.

II. Policy

It is WSDOT's policy to provide cost-effective, safe, efficient, dependable and environmentally responsive transportation facilities and services.

WSDOT policy is to avoid, where practical, any activities that would adversely affect wetlands in designing, constructing, and maintaining the state transportation system. Where it is not possible to avoid wetlands, WSDOT will take appropriate action to minimize wetland impacts and to adequately mitigate impacts that cannot be avoided.

WSDOT supports the goals of the Governor's Executive Order 89-10, "Protection of Wetlands," dated December 11, 1989. The interim goal of the executive order is "To achieve no overall net loss in acreage and function of Washington's wetlands resource base." A long-term goal of the executive order is to increase the quantity and quality of Washington's wetlands resource base. WSDOT recognizes the importance of wetlands as a unique and valuable component of the state's natural environment. As the manager of over 100,000 acres of land in the state transportation system, WSDOT reaffirms its responsibility to protect and preserve wetlands in and adjacent to those lands. WSDOT will continue to plan and conduct its activities to lessen the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

In compliance with the Governor's Executive Order 90-04, Section 13, WSDOT adopts the statewide policies and standards on wetlands rating system, mitigation, buffers, restoration, and enhancement as a part of the State Environmental Policy Act (SEPA) (WAC 468-12) to the extent legally permissible. The adopted policies shall be applied where appropriate to all licenses, permits, approval, grants, and department actions undertaken.

In compliance with Section 7 of the EO, WSDOT, within available resources, shall use its authority to assist in implementing applicable portions of the Puget Sound Plan wetlands program as developed by the Puget Sound Water Quality Authority (PSWQA) in compliance with Section 7 of the EO.

Elements of WSDOT's implementation plan include: developing methods and procedures for inventorying wetlands on its transportation properties, doing physical inventorying of wetlands; researching wetland mitigation methods; using wetland banking to achieve a net increase in wetlands; entering into cooperative agreements with resource agencies; and conducting training and public awareness programs.

A brief report will be given to the Governor's Office by WSDOT annually, describing the Action Plan tasks completed, and discussing major milestones, problem issues, and new strategies to meet the desired goals. The first report will be submitted by June 30, 1991.

Nothing in this action plan shall apply to: emergency work that is essential to save lives or protect property and public health and safety; and artificial wetlands created in roadside ditches.

III. Responsibilities

A. Assistant Secretary for Program Development

Develop the department's Wetland Protection Action Plan and its implementing procedures.

B. Assistant Secretaries for Marine Transportation and Operations; District Administrators

Implement provisions of Executive Order 89-10 and department's Action Plan and Procedures in the design, construction and maintenance activities of the department (see Appendix 1).

IV. Appendices

1. Action Plan for Implementation of Protection of Wetlands

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Appendix 1
Action Plan for Implementation
of Protection of Wetlands

Program Development

I. Impact Identification

The following is a list of program development activities that could adversely impact or reduce the effectiveness of a wetland:

- a. Proposed project activities.
- b. Unresponsiveness to national and state legislation, regulations, and trends.

II. Implementation

Wetland Inventory

- a. Action: Conduct an inventory of wetlands within and abutting highway right of way and department owned capital facilities using the standards and strategies developed by Ecology.
- b. Timeline: Complete inventory by June 1995.
- c. Contact: Department Biologist.
- d. Coordination: State and federal resource agencies and local agencies and applicable department divisions.

Project Prospectus

- a. Action: Identify potential wetland impacts at project scoping stage and document in project prospectus.
- b. Timeline: Project scoping stage.
- c. Contact: District Project Development Engineer.
- d. Coordination: Biologist and District Environmental Coordinator.

Agency SEPA Policy

- a. Action: Revise WAC 468-12 to adopt to the extent legally permissible the statewide policies on wetlands developed by Ecology in compliance with EO 90-04.
- b. Timeline: December 1991.
- c. Contact: Environmental Program Manager.
- d. Coordination: Ecology.

Wetland Mitigation Banks

- a. Action: Develop program and procedures for establishing wetland mitigation banks as mitigation for multiple small wetland impacts.
- b. Timeline: June 1992.
- c. Contact: Environmental Program Manager.
- d. Coordination: Federal and State resource agencies and applicable local agencies and department divisions.

Wetland Management Agreements

- a. Action: Where appropriate and cost-effective, establish cooperative management and maintenance agreements with resource agencies for management of WSDOT owned wetlands.
- b. Timeline: December 1995.
- c. Contact: Environmental Program Manager.
- d. Coordination: State and local agencies and applicable department divisions.

Wetland Research

- a. Action: Develop research proposals related to wetlands and transportation.
- b. Timeline: July 1991.
- c. Contact: Environmental Program Manager.
- d. Coordination: Federal and state resource agencies.

Wetland Buffers

- a. Action: Develop procedures to identify, establish, and protect buffer areas abutting wetlands according to standards developed by Ecology in compliance with EO 90-04, Section 13.
- b. Timeline: July 1992.
- c. Contact: Environmental Program Manager.
- d. Coordination: Department of Ecology, districts, and applicable department divisions.

Wetland Education Programs

- a. Action: Develop training programs for design, construction, and maintenance personnel on wetland values and department wetland policy. Actively communicate department policy and wetland preservation program to the public.
- b. Timeline: June 1991.
- c. Contact: Environmental Program Manager.
- d. Coordination: State resource agencies and applicable department divisions.

Design

I. Impact Identification

The following is a list of highway design activities that could adversely impact or reduce the effectiveness of a wetland:

- a. Location of new highways or realignment of existing highways within wetlands or buffer areas.
- b. Fill placed in wetland or buffer zone to provide suitable foundation for highways or bridge approaches.
- c. Excavation or fill that alters water table or flow to a wetland.
- d. Damaging or eliminating essential vegetation in a wetland or designated buffer zone by widening lanes or safety improvements such as guardrail removal and/or slope flattening.

II. Implementation

Project Design Alternative Analysis

- a. Action: Develop project design alternatives that take into consideration public health and safety while avoiding or minimizing direct or indirect impacts to or loss of wetlands.
- b. Timeline: Include in project biology reports, and environmental and design documents.
- c. Contact: District Project Development Engineer.
- d. Coordination: Resource agencies, Department Biologist, and District Environmental Coordinator.

Biology/Wetland Analyses and Reports

- a. Action: Conduct biology/wetland analyses of projects likely to affect wetlands and develop recommendations for proposed mitigation of wetland impacts.
- b. Timeline: Include in each project in proximity of wetlands.
- c. Contact: Department Biologist.
- d. Coordination: Resource agencies and applicable department divisions.

Environmental Documents

- a. Action: Identify and quantify wetland impacts of alternatives and include a conceptual description of proposed mitigation.
- b. Timeline: Include in each project affecting wetlands.
- c. Contact: District Project Development Engineer.
- d. Coordination: Resource agencies and applicable department divisions.

Project Design Documents

- a. Action: Develop project designs that include best management practices including:
 - Preserving plant life within a wetland;
 - Using native erosion control mixes and plant materials;
 - Treating storm water runoff through grass swales and sedimentation ponds;
 - Driving piles for bridges or other structures from barges, work area platforms on filter fabric, or trestle to avoid permanent fills in wetlands.
- b. Timeline: Include in each project design affecting wetlands.
- c. Contact: District Project Development Engineer.
- d. Coordination: Department Hydraulics Engineer and Biologist, resource agencies and applicable department divisions.

Wetland Mitigation Plan

- a. Action: Develop wetland mitigation plan to achieve the goal of no net loss of wetland functions and value.
- b. Timeline: Prior to application of permits.
- c. Contact: District Project Development Engineer.
- d. Coordination: Resource agencies, Department Biologist, and applicable department divisions.

Permit Applications

- a. Action: Incorporate detailed mitigation plan into permit application packages required when wetlands are affected for future construction or maintenance.
- b. Timeline: Include in each project permit required for wetland impacts.
- c. Contact: District Project Development Engineer.
- d. Coordination: Department Biologist, permit agency, and resource agencies.

Land Management

I. Program Development

The following is a list of land management activities that could adversely impact or reduce the effectiveness of a wetland:

- a. Disposing of surplus wetland properties.
- b. No mapping of existing wetlands on WSDOT properties.
- c. No procedure on dealing with disposition of wetlands.

II. Implementation

Wetland Preservation on Department Owned Properties

- a. Action: Develop program and procedures for preserving wetlands on department owned properties surplus to department needs.
- b. Timeline: June 1992.
- c. Contact: Environmental Program Manager.
- d. Coordination: Environmental Section, District Administrator, state resource agencies, applicable local agency, and other applicable department divisions.

Wetland Preservation Map

- a. Action: Designate wetland properties to be preserved and retained in WSDOT ownership on right of way maps (e.g., surplus properties, capital facilities and sundry sites).
- b. Timeline: December 1995.
- c. Contact: Environmental Program Manager and Department Cartographer.
- d. Coordination: State resource agencies and applicable department divisions.

Construction

I. Impact Identification

The following is a list of highway construction activities that could adversely impact or reduce the effectiveness of a wetland:

- a. Filling in or wasting materials in wetland or buffer zones.
- b. Significantly disrupting natural population of wildlife or eliminating habitat within the wetland by operation of equipment or location of the staging area.
- c. Aggregate washing increasing sediment loading to the wetland.
- d. Noise, air, or other impacts on wetland wildlife.

II. Implementation

Mitigation Implementation

- a. Action: Follow wetland mitigation order of preference for construction activities in proximity of wetlands; i.e., avoid, minimize impacts, rectify impacts, reduce or eliminate over time, or compensate.
- b. Timeline: Immediately.
- c. Contact: Environmental Program Manager.
- d. Coordination: Operations Engineer.

Disposal Sites

- a. Action: Develop specifications and manage contracts to ensure upland sites are used by contractor for disposal of material.
- b. Timeline: January 1991.
- c. Contact: Roadway Construction Engineer.
- d. Coordination: Environmental Program Manager.

Drainage Facility Construction

- a. Action: Develop procedures and specifications to construct drainage ditches, culverts, and roadside contours for continued flow of water into existing or newly constructed wetlands.
- b. Timeline: January 1992.
- c. Contact: Roadway Construction Engineer and Environmental Program Manager.
- d. Coordination: Applicable department divisions.

Pile Driving

- a. Action: Develop procedures and contract specifications to require pile driving equipment within wetlands to be operated from barges, existing structures, work area platforms on filter fabric, or trestle as approved by permit agencies. Platforms and trestle must be removed after completion of work.
- b. Timeline: January 1992.
- c. Contact: Roadway Construction Engineer and Marine Terminal Construction Engineer.
- d. Coordination: Environmental Program Manager and resource agencies.

Maintenance

I. Impact Identification

The following is a list of highway maintenance activities that could adversely impact or reduce the effectiveness of a wetland:

- a. Filling or wasting with materials generated from ditch cleaning, pavement sweeping, shoulder repair, or other maintenance activity.
- b. Revising drainage to modify or eliminate the water from a wetland.

- c. Damaging or eliminating essential vegetation in a wetland or designated buffer zone by cutting, spraying, or grading.
- d. Significantly disrupting natural population of wildlife within the wetland by operation of equipment or elimination of habitat.
- e. Adversely altering nutrient levels of wetlands by introduction of runoff containing dead vegetation, fertilizers, pesticides, or other substances that may be detrimental.

II. Implementation

Mitigation Implementation

- a. Action: Highway maintenance shall preserve, protect, and enhance wetlands within highway rights of way, and shall avoid adverse impacts unless there is no practical alternative. When maintenance activities result in adverse impacts, the mitigation shall follow the order of preference as defined under Mitigation (minimize impacts, rectify impacts, reduce or eliminate the impact over time, or compensate by replacing, enhancing, or providing a substitute).
- b. Timeline: Immediately.
- c. Contact: Chief Landscape Architect for Maintenance.
- d. Coordination: All divisions, districts, outside agencies, and public interest groups.

Disposal of Waste Materials

- a. Action: It is a policy of WSDOT Maintenance to dispose of waste materials, generated from ditch cleaning, pavement sweeping, shoulder repair, or other maintenance activities, in upland sites. Disposal of waste materials in wetlands, either on or off the right of way, shall not be allowed.
- b. Timeline: Immediately.
- c. Contact: Chief Maintenance Engineer.
- d. Coordination: All districts, outside agencies, and public interest groups.

Roadside Management Planning for Protection of Wetlands

- a. Action: It is a goal of the WSDOT Maintenance Office to develop Roadside Management Plans for all highways within the state. Recognition of wetlands along each roadside is an essential part of the roadside management process and shall be included in Roadside Management Plans along with special management requirements for maintenance and perpetuation of the wetlands.
- b. Timeline: Start immediately, finish July 1998.
- c. Contact: Chief Landscape Architect for Maintenance.
- d. Coordination: All districts and department biologist.