State of Washington Joint Legislative Audit and Review Committee (JLARC)



Business Process Review of Environmental Permitting for Transportation Projects

Report 05-14

October 7, 2005

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BUSINESS PROCESS
REVIEW OF
ENVIRONMENTAL
PERMITTING FOR
TRANSPORTATION
PROJECTS

Conducted for the Transportation Performance Audit Board

REPORT 05-14

REPORT DIGEST

OCTOBER 7, 2005



STATE OF WASHINGTON

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Study Mandate

In January 2005, the Transportation Performance Audit Board (TPAB) requested that the Joint Legislative Audit and Review Committee (JLARC) staff review environmental permitting issues related to construction projects managed by the Washington State Department of Transportation (WSDOT). This review includes an analysis of permitting processes on complex projects to identify factors that contribute to delays and help identify priorities for streamlining efforts. It also includes a review of recent changes to the regulation of drainage ditches and stormwater runoff related to transportation projects.

Focus and Methodology for Review

JLARC contracted with an environmental services consultant to conduct this review. JLARC selected ten recent transportation projects to analyze in detail for the study. The consultant interviewed more than 60 state staff from WSDOT and the State Departments of Ecology and Fish & Wildlife, who worked on environmental documentation and permitting for the ten sample projects. The consultant also collected documentary evidence from project staff to identify the processes and timelines related to environmental tasks. Additionally, federal government staff from the U.S. Army Corps of Engineers, the National Marine Fisheries, and the U.S. Fish & Wildlife Services were interviewed by the consultant regarding their interaction with state staff for obtaining federally regulated environmental permits. Finally, the consultant conducted research and contacted staff from other state DOTs to identify recent regulatory changes for drainage ditches and stormwater runoff.

Process Review for Ten Sample Projects

For the study, JLARC selected projects that were geographically distributed across the state, and identified a mix of projects that were either completed in a timely manner or faced delays. In order to gain insight into the most complex environmental issues encountered by WSDOT, sample projects selected for the study included one or more of the following:

- 1. Preparation of an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA);
- 2. Preparation of an environmental assessment under NEPA; and/or
- 3. One or more extensive permits related to the Endangered Species Act (ESA), the Clean Water Act, the state Water Pollution Control Act, the state Hydraulic Project Approval process, or complex local government approvals.

Environmental activities for complex WSDOT construction projects include three related and overlapping elements: environmental documentation, ESA consultation, and permitting by regulatory agencies. Environmental documentation can overlap with ESA consultation, but takes much more work and time compared to permitting. Specific business processes and related activities for these elements can vary widely across different projects in terms of approach, level of detail, and science. Similarly, the processes for specific permits vary based on the site issues and conditions.

Data does not exist to uniformly quantify the exact time and costs to support detailed environmental activities. However, JLARC was able to identify timelines and assess where delays were encountered or streamlining successes were achieved from the other information obtained in this review.

Assessment of Successful Project-Level Streamlining Activities

Regardless of the observed delays or successes on environmental timelines, there was evidence that WSDOT and regulatory agencies applied streamlining techniques to some extent on all ten of the sample projects. Based on analysis of the techniques that exhibited the greatest streamlining benefits for the sample projects, the consultant identified suggested priorities for process improvement efforts. This suggestion includes focusing efforts on processes that improve (in the following order):

- Communication efforts (formal partnering, presentations and site visits);
- Clear and complete applications (clear application processes and guidance, consistency across multiple agencies, pre-permitting agreements on design/mitigation, review of draft conditions when permissible);
- Timely regulatory reviews (liaison programs, MAP team, consistent staffing); and
- Supporting technology (Online Joint Aquatic Resource Permit Application, GIS Workbench).

While streamlining efforts have shown successes, they have not completely matured and further efficiencies can likely be achieved.

Assessment of Root Causes of Schedule Delays

Challenges with environmental documentation and permitting processes were root causes for delays on five of the ten sample projects. On this subset of projects, however, part of the overall project delay was also a result of complications with other factors, such as planning, right-of-way acquisition, third party lawsuits, and funding interruptions. For all the sample projects, funding interruptions were the most common cause of delays.

Of the five sample projects that were delayed because of non-environmental reasons, three projects had subsequent extensions of time spent on environmental tasks. These environmental schedule extensions were not a result of failures in environmental work, but rather the need to update or revise documentation or permits as a result of changes to project approaches or conditions.

Environmental processes that were root causes for delays resulted from federal staffing issues, a lack of coordination between or within programs, and changes in environmental rules, guidance, or policy.

Several projects also had schedule extensions related to incomplete applications, state agency staffing issues, or changes in design or mitigation requirements. However, these extensions actually resulted from non-environmental complications (right-of-way, third party lawsuits, and funding delays).

Assessment of Recent Requirements for Drainage Ditches and Stormwater Management

The 9th Circuit of the Federal Court issued the *Talent* decision in 2001, which specified changes in how the Corps of Engineers should regulate irrigation ditches under the Clean Water Act. As a result of this decision, the Seattle District of the Corps of Engineers has required WSDOT to increase the level of environmental review and documentation related to drainage ditches at its construction sites. However, while WSDOT has been required to increase the activity it focuses on drainage ditches, the Corps has failed to provide formal guidance on how the *Talent* decision applies to the specifics of these types of ditches. Absent this formal guidance, the extent to which the *Talent* decision should be applied to WSDOT is debatable. WSDOT is complying with the Seattle District's requirements on a case-by-case basis. However, WSDOT has not been able to secure additional formal guidance. The additional environmental documentation needed to survey drainage ditches, if extrapolated to other WSDOT projects, may seriously reduce streamlining efforts by requiring additional permitting activities.

The Department of Ecology recently updated its general stormwater runoff requirements. In some cases, these requirements may require additional measures to reduce stormwater flow control to predevelopment

conditions (i.e., generally forested conditions in Western Washington). However, pending final negotiations with Ecology, WSDOT appears likely to receive continued exemptions to manage flow control to pre-existing site conditions in highly-urbanized areas. While this may preserve WSDOT's ability to expedite permitting utilizing previous approaches, it is dependent upon how the term "highly-urbanized" is applied. At this time, other Department of Ecology updates to pollutant controls in stormwater management do not appear to have substantial changes for WSDOT's environmental approach. However, future changes could result from pending Ecology studies and federal evaluations of the state's stormwater management approaches.

Conclusions and Recommendations

- Processes supporting environmental activities on complex projects can vary widely, and because of unique circumstances and site conditions they are not uniform or routine.
- Environmental permit streamlining is not fully mature, and additional efficiencies are possible.
- Staff will have the greatest impact on improving schedule timelines by focusing on processes that
 improve or sustain strong communication, support clear and complete applications, assist with timely
 regulatory reviews, and enhance technology. Practical examples of successes exist at WSDOT.
- While environmental activities can be root causes of delays, they are often accompanied by other items that impact a project's overall schedule attainment. Also, excess time spent on environmental activities is often a result of other factors (such as updating environmental documentation as a result of other changes in project design, approach, or other external delays).
- For the sample projects in this study, funding interruptions were the most common cause of schedule delays, often resulting in further updates or revisions to environmental documentation and permits.
- There is a lack of formal federal guidance on how a recent court decision will impact regulation and permitting in the long term related to drainage ditches.
- There are some recent updates to stormwater runoff management requirements, but pending the outcomes of other evaluations, these changes may have minimal impact in highly-urbanized locations.

<u>Recommendation 1</u> – As part of the Department's Managing Project Delivery practices, WSDOT should coordinate all phases of project scheduling with state regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.

<u>Recommendation 2</u> – The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the goal of assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the state of Washington.

Recommendation 3 – The WSDOT Environmental Services Office should encourage project management teams to use online permitting processes, such as the online Joint Aquatic Resource Permit Application (JARPA) developed by the Office of Regulatory Assistance, and WSDOT should periodically report statistics on the proportion of applications submitted on-line. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the online JARPA.

<u>Recommendation 4</u> – WSDOT should include cost and schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.

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<u>Recommendation 5</u> – WSDOT should make a formal request of and coordinate with the Corps of Engineers Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the United States," as indicated in the *Talent* decision.

<u>Recommendation 6</u> – WSDOT and the Department of Ecology should complete their definition for historically "highly-urbanized" areas, as applicable to stormwater runoff management.

<u>Recommendation 7</u> – WSDOT should develop guidelines for suspending environmental documentation activities on projects where construction funding is not provided.

Recommendation 8 – WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g., early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting technology, and dedicated/multi-agency staffing). In addition, the agencies should establish performance indicators regarding which projects utilize these streamlining approaches and include this information as part of their on-going performance reporting.

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CHAPTER ONE - STUDY MANDATE

The Legislature established the Transportation Performance Audit Board (TPAB) during the 2003 Legislative Session. TPAB is authorized to conduct performance reviews and performance audits of transportation agencies. The Transportation Commission provides staff support and funding for TPAB reviews and audits. The 2005-07 biennial transportation budget earmarked funds in the Commission's appropriation specifically for TPAB studies.

In January 2005, TPAB recommended JLARC staff review environmental permitting issues related to capital construction projects delivered by the Washington State Department of Transportation (WSDOT):

- 1. Analyze the environmental documentation and permitting processes to identify contributors to delays and prioritize streamlining efforts.
- 2. Assess recent changes in the regulation of drainage ditches and stormwater runoff.

This review identifies recommendations to help WSDOT and state regulatory agencies with improving the speed and predictability of environmental permitting on transportation projects. These recommendations are addressed in Chapter 7.

Appendices to this report include the full scope and objectives, additional detailed information on the sample projects reviewed in this study, and examples of process diagrams for certain environmental activities.

BUSINESS PROCESS REVIEW OF ENVIRONMENTA	L PERMITTING FOR TRANSPORTATION PROJECTS

CHAPTER TWO – FOCUS AND METHODOLOGY FOR REVIEW OF BUSINESS PROCESSES FOR ENVIRONMENTAL PERMITTING

On behalf of the Transportation Performance Audit Board (TPAB), the Joint Legislative Audit and Review Committee (JLARC) performed a pre-audit review in January 2005, of environmental permit streamlining initiatives for transportation projects in Washington State and nationwide. This overview of streamlining presented potential future audit topics, which were focused on the Washington State Department of Transportation (WSDOT), the Department of Ecology (Ecology), and the Department of Fish and Wildlife (DFW).

As a continuation of this initial streamlining overview, TPAB requested that JLARC conduct a study of one of the identified audit topics, which stated: "Analyze the business process flow associated with environmental permitting for transportation projects." Accordingly, on January 21, 2005, TPAB approved a series of study objectives covering this topic, which are addressed in this report. A full copy of the study scope and objectives can be found in Appendix 1.

JLARC contracted with an environmental services consultant to address the scope questions.² As indicated in Appendix 1, the consultant focused its work on:

- 1. Evaluating the regulatory requirements for a set of major projects to clarify the regulatory business process and identify barriers.
- 2. Assessing the applicability of successful streamlining efforts to various environmental requirements for major transportation projects.
- 3. Analyzing recent project histories to identify the root cause(s) of schedule delays attributable to factors in addition to permitting.
- 4. Determining the extent to which the regulatory goals concerning drainage ditches and stormwater runoff have changed over time, and identifying the impact of these regulatory changes on the cost and time to completion of major transportation projects.

The consultant's analyses of these four items were then used to develop recommendations for improvements to environmental regulatory and permitting processes for WSDOT and resource agencies.

This review is based on extensive interviews with agency staff involved in the environmental permitting process for transportation projects. In order to address the first three study objectives, JLARC, with advice and assistance from WSDOT, selected ten recent or current transportation projects from across Washington State in order to analyze specific environmental permitting processes. The projects were selected to reflect both projects completed in a timely manner, as well as projects that faced delays.

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¹ JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

² TechLaw, Inc.

Numerous staff members from the State Departments of Transportation, Ecology, and Fish and Wildlife were interviewed regarding the environmental documentation and permitting process for each of the ten projects.

Three federal agencies were also interviewed regarding their environmental permitting processes, since each reviewed environmental documentation or permit applications for nearly all of the ten transportation projects. These agencies included:

- o U.S. Army Corps of Engineers Seattle District
- o National Marine Fisheries (NOAA Fisheries)
- U.S. Fish & Wildlife Service

The information collected during the interviews was compiled and reviewed for each project, which was then assessed for permit streamlining successes, as well as for causes of delays in transportation project delivery.

In order to address the fourth study objective, a separate assessment was performed regarding recent court decisions (e.g., the *Headwaters v. Talent Irrigation District*, or *Talent*, decision) and changes in resource agency policies that have modified environmental standards in the areas of drainage ditches and stormwater runoff in Washington. Other State Departments of Transportation were interviewed to determine whether they have been similarly impacted. In addition to WSDOT, the following agencies were interviewed regarding environmental standards for drainage ditches and stormwater runoff: ³

- o U.S. Army Corps of Engineers Seattle District
- Oregon Department of Transportation
- o Texas Department of Transportation
- o Ohio Department of Transportation

The remainder of the report is organized as follows:

- O Chapter 3 reviews the environmental permitting business process for ten WSDOT projects;
- O Chapter 4 assesses streamlining initiatives that supported efficient project delivery among the ten WSDOT projects;
- O Chapter 5 assesses the root causes of schedule delays among the ten WSDOT projects;
- O Chapter 6 discusses recent requirements for environmental standards for drainage ditches and stormwater runoff from roadways; and
- o Chapter 7 contains conclusions and options for recommendations to improve process.

³ Attempts were made to conduct interviews with additional State Departments of Transportation (e.g., Caltrans), however, no responses to the interview requests were received during the interview period.

CHAPTER THREE – REVIEW OF ENVIRONMENTAL PERMITTING BUSINESS PROCESSES FOR TEN WASHINGTON STATE TRANSPORTATION PROJECTS

OVERVIEW

The benefit of environmental regulatory process improvement is increased coordination on permitting issues between WSDOT and the natural resource agencies, with the goal of increasing the efficiency of permitting processes while still addressing appropriate environmental laws and regulations. This review of the business processes for environmental permitting of ten WSDOT projects focuses primarily on the recent and current status of coordination between WSDOT and state resource agencies, particularly the Department of Ecology (Ecology) and the Department of Fish and Wildlife (DFW). Secondarily, the review considered the permitting coordination between WSDOT and federal resource agencies, including the U.S. Army Corps of Engineers – Seattle District, the National Marine Fisheries (NOAA Fisheries), and the U.S. Fish & Wildlife Service (USFWS). The goal of this review is to define areas of successful permit streamlining initiatives and root causes of schedule delays.

This chapter discusses how JLARC's consultant reviewed the business processes for environmental permitting for WSDOT projects, while Chapters 4 and 5 assess successful streamlining activities and schedule delays, respectively, among the ten transportation projects.

METHODOLOGY FOR REVIEW OF SAMPLE PROJECTS

The review evaluated the regulatory requirements for a set of major transportation projects, including several projects that were completed in a timely fashion, as well as several other projects that experienced delays. This evaluation clarified the regulatory business process and identified barriers that result from federal and state regulatory requirements, state and local government policies, and WSDOT management decisions.

JLARC collaborated with WSDOT to identify ten major highway projects for which the environmental documentation and/or permitting processes are complete or are nearly complete. Selected projects were required to have one or more of the following:

- O An environmental impact statement (EIS), as required under the National Environmental Policy Act (NEPA);
- o A NEPA environmental assessment (EA); and/or
- O An extensive permitting process involving the Endangered Species Act (ESA), Clean Water Act (CWA), state Water Pollution Control Act (WPCA), state Hydraulic Project Approval (HPA), and/or local government approvals.

The selection criteria purposefully biased the project sample used in this study, focusing the review primarily on projects that faced some of the more complex environmental documentation and permitting activities. The majority of WSDOT projects do not face the complex requirements observed in these sample projects.

JLARC's consultant coordinated with WSDOT and various state and federal resource agencies to visit offices to interview staff and obtain copies of environmental documentation and permit applications (or portions of documents). A few resource agency staff members were interviewed by telephone due to their fieldwork commitments. In total, over 60 staff members from the following state agencies were interviewed regarding the environmental permitting of the ten transportation projects:

- Department of Transportation
- Department of Ecology
- Department of Fish and Wildlife

Due to scheduling challenges, several project discussions lacked input from key technical staff. For example, the SR 240 project did not have input from the wetlands specialist. In these cases, an attempt was made to obtain as much information as possible from other agency staff or to schedule a telephone interview.

Three federal resource agencies were also interviewed regarding their environmental permitting processes. Each of the following agencies reviewed environmental documentation or permit applications that were required for most of the ten transportation projects:

- o U.S. Army Corps of Engineers Seattle District
- National Marine Fisheries (NOAA Fisheries)
- o U.S. Fish & Wildlife Service

For each of the ten projects, the business process flow of the environmental documentation and permitting process were considered from the perspective of both the applicant (WSDOT) and the state and federal regulatory (or resource) agencies. Interviewees were asked to walk through the business process for environmental documentation and applicable permit applications for each project. Observations were requested regarding the efficiency of general permit activities and permit streamlining activities, as well as the impact of barriers that result from federal and state environmental requirements, state and local government policies, and WSDOT management decisions.

The information obtained during the interviews included evidence of the following:

- o All available forms and applications to be submitted by WSDOT to resource agencies,
- All available scientific discipline reports submitted by WSDOT to resource agencies, and
- O The activities required to develop, submit, and review environmental documentation and permit applications.

Since the objectives of this study were not verification, per se, of the technical adequacy of the environmental documentation and permit applications for the ten projects, it was not necessary to obtain complete copies of the documents. Rather, evidence of the existence of the documents was requested and provided primarily by WSDOT regional offices and project teams. In particular, evidence of large documents (e.g., NEPA EISs and EAs) and discipline reports (e.g., cultural resources report and biological assessment) included cover pages, tables of contents, signature sheets, and executive summary pages. Some regions chose to provide complete documents for their respective transportation projects. It is important to keep in mind that although the objective of this study was not verification of the technical adequacy of the environmental documentation and permit applications, the resource agencies indicate that it is often the inadequacy or incompleteness of those documents that cause delays.

In addition, the study attempted to obtain information regarding:

- o WSDOT staff time and resources (such as consultant contracts) required to complete environmental documentation and permit applications;
- Resource agency staff time and resources necessary to review and evaluate the forms, data and analyses submitted by WSDOT, as well as staff time and resources required to interact with WSDOT and other regulatory agencies; and
- The time and cost associated with each step of the documentation and permitting process.

However, WSDOT's project management systems are evolving, non-standardized, and not integrated with accounting systems. Therefore, complete quantifiable information on schedule durations and costs for environmental activities was generally not available.

METHODOLOGY FOR REVIEWING STORMWATER AND DRAINAGE DITCH REGULATION

In addition to the transportation project reviews, JLARC's consultant performed a separate assessment of recent court decisions (e.g., the *Headwaters v. Talent Irrigation District*, or *Talent*, decision) and changes in regulatory agency policies that have modified environmental standards in the areas of drainage ditches and stormwater runoff in Washington. In addition to document reviews, the consultant interviewed WSDOT staff and the following agencies regarding environmental standards (e.g., policy, guidance, and rules) for drainage ditches and stormwater runoff: ⁴

- o U.S. Army Corps of Engineers Seattle District
- Oregon State Department of Transportation
- o Texas State Department of Transportation
- Ohio State Department of Transportation

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⁴ Attempts were made to schedule interviews with additional State Departments of Transportation (e.g., Caltrans), however, no responses to the interview requests were received during the interview period.

See Chapter 6 for a detailed discussion regarding the drainage ditch and stormwater runoff assessment.

TEN TRANSPORTATION PROJECTS

The ten transportation projects reviewed for this study are listed below. These projects are among WSDOT's most complex for environmental permitting, but only represent a small fraction of the transportation program in Washington. Additional summary information is provided in Appendix 3, including project websites, budgets, brief descriptions, and project delivery status.

- 1. I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road
- 2. SR31, Metaline Falls to International Border
- 3. SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue
- 4. SR161, Milton to Federal Way, Jovita Blvd. To S 360th Widening
- 5. SR 522, Woodinville to Monroe, Fales Road Echo Lake Road Interchange
- 6. SR 240, Richland, I-182 to Columbia Center Boulevard
- 7. US 12, Southeast of Pasco, McNary Pool to Attalia
- 8. I-5, Chehalis, Rush Road to 13th Street
- 9. SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac
- 10. I-405, Kirkland Nickel Project, from SR 529 to 522

Nine of these ten projects, with the exception of SR 522, were funded by the 2003 Legislative Transportation Package, which established a five-cent-per-gallon gasoline tax (the Nickel Fund). Work on all ten projects, however, began prior to the imposition of the Nickel Fund. Additional information regarding transportation funding is discussed in Chapter 5. As of the drafting of this report, three of the ten projects were at the environmental permitting stage, six projects were under construction, and the construction of one project was completed.

BUSINESS PROCESSES FOR ENVIRONMENTAL DOCUMENTATION AND PERMITTING

A simplified flowchart of the WSDOT project delivery protocol is presented in Figure 3-1 on the following page. This flowchart is applicable to all ten of the study projects, and identifies the relationship of environmental tasks with other pre-construction activities necessary to proceed to construction advertisement and bids.

The activities required to develop, submit, and review environmental documentation and permit applications were found to be similar among the ten projects considered by this study. Each of the projects addressed applicable requirements for environmental documentation under NEPA, which were adopted under the Washington SEPA. The environmental documentation stage was followed by the submittal of environmental permit applications. In addition, an informal or formal ESA consultation was requested, except where a "no effect" determination was made.

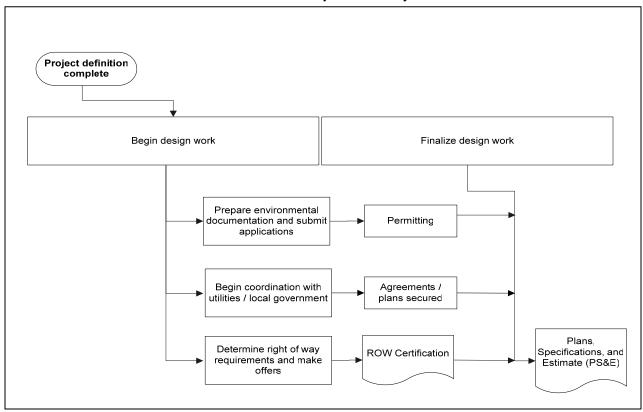


Figure 3-1 WSDOT Project Delivery

Source: WSDOT.

Figure 3-2 illustrates the general relationship between the relative amounts of work for environmental documentation and permitting phases through time. This figure also illustrates the potential streamlining overlap of the ESA consultation process with NEPA documentation. In addition, a second overlap illustrates the potential reliance of environmental permitting (e.g., CWA Section 404) on ESA consultation outcomes.

There are several long lead-time issues associated with environmental documentation and permitting that must be considered. The NEPA process addresses fish passage decisions and mitigation, sensitive areas inventories, avoidance of environmentally sensitive areas (e.g., wetlands) wherever possible and minimization of impacts when not, identification of scientific protocols that are appropriate and applicable, and coordination with Native American Tribes. Depending on the outcome of these evaluations under NEPA, the permitting process and ESA consultation process may be required to address these issues, as well as others, through permit conditions and mitigation activities.

Environmental Documentation

Environmental Permitting

Time

Figure 3-2
General Relationship Between Environmental Documentation and Permitting

Source: TechLaw, Inc. analysis.

The consultant reviewed the processes that took place for environmental documentation, ESA consultation, and environmental permitting for each of the ten sample projects. As indicated in the study scope, these business process reviews were focused on identifying factors that contributed to delays and successful streamlining activities. Because of the myriad of complex and unique details involved in these processes for each project, the consultant did not attempt to graphically depict the complete workflow for the multitudes of tasks that supported these processes for each sample project.

However, both WSDOT and the resource agencies have initiatives underway to formally document standardized processes for certain aspects of environmental documentation and environmental permitting. These efforts are intended to improve knowledge transfer and assist staff with planning, scheduling, and expediting environmental tasks. Some examples of standardized business flow diagrams are included in Appendix 4. Additionally, some generalized flow charts of certain processes are included in the remainder of this chapter.

Highlights of the three elements identified above in Figure 3-2 are described in the remainder of this chapter. These descriptions, arising from the consultant's business process reviews of the sample projects, include details on sub-elements related to specific environmental documentation processes and individual permits.

Environmental Documentation

The transportation projects reviewed for the study varied considerably from pavement replacement (Project No. 2) to construction of additional traffic lanes (Project Nos. 1, 3, 4, 6, 7, 8, and 10) to interchange replacement (Project Nos. 5 and 9) to constructing a new alignment

(Project No. 9). These present a variety in type, size and complexity of projects, all of which must be appropriately evaluated through the NEPA and SEPA process for their potential to affect the environment. In order to account for the range of project impacts (from minor to significant), NEPA provides for three basic "classes of action" to assess and document environmental impacts:

- o An EIS is required for projects that will have a significant effect on the environment.
- An EA is prepared when the significance of the environmental impact is not clearly established. If the environmental analysis and interagency review find no significant environmental impacts, a finding of no significant impact (FONSI) is issued. If, however, the EA demonstrates that a significant effect on the environment will occur, then an EIS must be prepared.
- O A categorical exclusion (CE) is prepared when an action does not individually or cumulatively have a significant effect on the environment.

An EIS can be prepared for one project or it can be prepared at a corridor level and encompass multiple projects. "Tiering" refers to the coverage of general topics, such as alignment) in a corridor or program-level EIS under which narrower EISs, EAs, or CEs are subsequently prepared. A flowchart for the NEPA process is presented in Appendix 4. Additional discussion regarding the EIS, EA, and CE processes are included below.

All ten projects considered by the study were initially addressed by an environmental impact statement (EIS) or an environmental assessment (EA) through the NEPA process. In general, the projects that were located within existing highway right-of-way met the non-impact requirements for an EA. The highway corridor projects that increased right-of-way land and/or had wetland impacts were required to develop an EIS. In those cases where NEPA documentation was dated because the project was shelved for a period of time, the EIS or EA (e.g., Project Nos. 1 and 4, respectively) was formally reevaluated. Project No. 5 was addressed by the SR 522 highway corridor EIS, but the Fales Road Interchange only required a documented categorical exclusion (DCE) to update the NEPA documentation for the Stage 4 segment. A Tier 1 corridor EIS was developed for Project No. 10, the I-405 design-build project; the Kirkland segment of I-405 was further studied in a Tier 2 EA.

NEPA Environmental Impact Statement

The EIS is the most detailed of the NEPA documents and requires full disclosure of the project scoping, consideration of project alternatives (e.g., location of alignment, design of interchange, etc.), assessment of impacts for each alternative, and demonstration of compliance with other environmental laws and executive orders. The EIS process includes the following steps: notice of intent (NOI), draft EIS (DEIS), final EIS (FEIS), and record of decision (ROD).

The lead federal agency, usually the Federal Highway Administration (FHWA), publishes the NOI in the Federal Register, which signals the initiation of the EIS process. Project scoping begins immediately to identify the major issues to be considered by the EIS; it is an open process involving various stakeholders, including the public and other federal, state, and local agencies. In Washington State, the scoping process for a major transportation project with water impacts may be addressed through a project-specific Signatory Agency Committee (SAC), which serves to merge the considerable environmental assessment requirements under NEPA and CWA

Section 404. Stakeholder involvement and interagency coordination continues throughout the entire process.

The DEIS provides a detailed description of the proposal, including the purpose and need for the project, as well as any reasonable alternatives to both the project itself and the proposed design. A number of discipline reports are developed to address the issues associated with the project, which may range from a biological assessment to a cultural resources study and a socioeconomic evaluation to a mitigation plan for environmental impacts. For example, the I-405 Corridor EIS included about 20 discipline reports to support the alternatives analyses.

In addition, the EIS must address Section 4(f) of the Department of Transportation Act of 1966, which requires an impact analysis when a transportation program or project requires the use of publicly owned land, including:

- o Public parks,
- o Recreation areas,
- o Wildlife and waterfowl refuges of national, state, or local significance,
- o Lands of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site).

This impact analysis is addressed during the EIS process and is generally included as a discipline report to the FEIS. (In 1983, the DOT Act, including Section 4(f), was recodified in the United States Code (U.S.C.). The amendment of Section 4(f) was recodified in 49 U.S.C. Section 303.)

Each project alternative must be assessed for its impacts on the affected environment. After a formal comment period, including receipt of comments from the public and other agencies, the lead agency issues the FEIS, which addresses the comments on the DEIS and provides an analysis to select the "preferred alternative." Between 30 and 90 days after the FEIS issuance, the ROD is prepared and issued. The ROD is the final decision document and usually culminates in selection of the preferred alternative from the FEIS; however, the ROD is an independent process and may select a different alternative than the FEIS preferred alternative if a documented analysis supports that decision.

NEPA Environmental Assessment

An EA is prepared to determine the significance of environmental impacts associated with a transportation project proposal. The EA includes a brief discussion of the need for the proposal, as well as a concise analysis of alternatives, the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons that were consulted.

As with an EIS, the FHWA is usually the lead federal agency for an EA for a transportation project; however, the U.S. Forest Service was the lead agency for the EA developed for Project No. 2, the all-weather surfacing of SR 31 through the Colville National Forest from Metaline Falls to the international border with Canada. The lead agency must approve the EA before its availability is announced through public notices. The EA does not need to be formally circulated for review. Depending on the FHWA-approved state public involvement procedures, a public hearing may or may not be required. A 30-day review period is required, but may be reduced in rare circumstances.

Following the review period and consideration of public comments, the significance of any environmental impacts is determined. If, during the preparation of an EA, a significant impact is discovered, then the project must prepare an EIS. Upon completion of the EA, if there are no significant impacts associated with the project, the lead agency may issue a finding of no significant impact (FONSI).

NEPA Categorical Exclusion

If a transportation project includes a pre-designated category of actions that do not individually or cumulatively have a significant social, economic, or environmental effect, then the project is excluded from the preparation of an EA or EIS. A list of CEs is presented in 23 CFR 771.117(c). Other projects may also qualify as CEs if they are documented pursuant to the requirements of 23 CFR 771.117(d). However, a normally excluded action may, under extraordinary circumstances, have a significant environmental effect. For example, the presence of an endangered species or an impact on a critical habitat area or historical site may trigger an EIS for a project that would normally be considered a CE.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies (Agency) to consider the effects of their activities on historic properties. The FHWA is usually the lead agency for federally-aided transportation projects and determines whether a project affects historic properties. The Federal Transit Administration, Corps of Engineers, Federal Aviation Administration, and other agencies have been the federal nexus on transportation projects. Historic properties are resources that have been determined eligible for inclusion in the National Register of Historic Places. The section 106 review is performed in conjunction with the NEPA environmental documentation process (section 106 is required as a part of the NEPA). The Agency and/or WSDOT submit the evaluation of historic properties in the project area to the State Historic Preservation Officer (SHPO) and appropriate tribe(s) or, if one exists, the Tribal Historic Preservation Officer (THPO), for consultation and concurrence.

The Agency and WSDOT, in consultation with the SHPO/THPO, assess effects on identified historic properties. If they agree that there is no effect, the Agency and WSDOT may proceed with the project. If, there is an adverse effect, the Agency and WSDOT continue consultation to seek ways to first avoid, then minimize, or lastly to mitigate the effects. In cases with determined effects, the consultation process yields a memorandum of agreement (MOA), before the project can proceed. A section 106 MOA outlines the measures that the Agency, WSDOT, and any consulting parties agree upon to avoid, minimize, or mitigate the effects to the historic property.

Washington State Environmental Policy Act

The State Environmental Policy Act (SEPA) requires all state and local governmental bodies to comply with the requirements of SEPA prior to making a decision on a project, policy, plan, or program. SEPA is similar to NEPA in that it provides a means to identify and evaluate potential environmental impacts that would result from governmental decisions. Washington encourages the development of combined documents that satisfy both NEPA and SEPA requirements. Also, the NEPA and SEPA lead agencies (e.g., FHWA and WSDOT) may cooperate as co-lead

agencies issuing a joint NEPA/SEPA EIS that addresses all issues required to satisfy both agencies.

SEPA also allows the adoption, or use, of NEPA documents to meet SEPA requirements. For example, a NEPA EA or EIS may be adopted or incorporated by reference. All or part of the information and environmental analysis may be adopted from the NEPA document(s), however, a new threshold determination is required. Note that under SEPA, a NEPA EA may be adopted with either a determination of nonsignificance (DNS) or determination of significance (DS). If the NEPA document does not address all of the SEPA issues, supplemental review under SEPA may be needed. For example, a SEPA EIS must be prepared if a NEPA EA receives a determination of significance. Since SEPA does not have a NEPA EA equivalent, the higher level of analysis, the EIS, is required.

Adoptions of environmental documents as environmental documentation for SEPA compliance typically take four forms:

- O An <u>adoption with a DS</u> may be issued when an existing EIS (or NEPA EA) addresses all probable significant adverse environmental impacts of a new proposal.
- o An <u>adoption with a DS and an addendum</u> may be issued that utilizes and existing EIS and adds minor new information.
- O An <u>adoption with a supplemental EIS</u> is issued when an existing EIS addresses some of the probable significant adverse environmental impacts, but not all the impacts.
- o An <u>adoption with a DNS</u> may be issued to use an existing SEPA environmental checklist or a NEPA environmental assessment.

In June 1996, WSDOT and Ecology signed a "NEPA Categorical Exclusions Implementing Agreement," which allows the adoption of a NEPA documented categorical exclusion (DCE) as the SEPA Environmental Checklist for SEPA DNS threshold decisions. This implementing agreement streamlines the DCE adoption under SEPA.

Endangered Species Act Consultations

Section 7 of the Endangered Species Act of 1973 (ESA) outlines procedures for interagency cooperation to conserve federally-listed species and designated critical habitats. Two levels of consultation, informal or formal, are conducted with either or both the USFWS and NOAA Fisheries, depending on the species and habitat under consideration. The ESA formal consultation process is initiated by FHWA, the lead agency on federally-aided transportation projects. On some projects, the Corps of Engineers is the lead for the formal consultation process when there is no federal funding.

WSDOT has been designated the non-federal designee for both the FHWA and the Corps for the informal consultation process. The informal consultation is an optional process that includes all discussions and correspondence prior to formal consultation between USFWS and NOAA Fisheries and a federal agency (e.g., FHWA) or a designated non-federal representative (e.g., WSDOT). The informal consultation is used to determine whether a proposed federally-funded transportation project may affect listed species or critical habitat, which are documented with a biological assessment (BA) that may be prepared as part of the NEPA documentation.

In 2004, the "Four Corners Agreement" was signed by FHWA, WSDOT, USFWS, and NOAA Fisheries in order to streamline the consultation process and allow WSDOT biologists to coordinate directly with the resource services without first going through FHWA. It also set up an elevation process for solving some of the more difficult consultations. The Four Corners Agreement has been replaced with a new agreement, the Interagency Transportation Consultation Program, which is a shared responsibility for project delivery, as well as for resolution of critical policy, technical, and legal issues surrounding transportation projects and the consultation process.

Figure 3-3 presents a flowchart of the informal consultation process and illustrates that this process may only be used for determinations of "may affect, not likely to adversely affect" (NLAA). USFWS and/or NOAA Fisheries will issue a concurrence letter for NLAA determination. If a proposed federal action receives a determination of "may affect, likely to adversely affect" (LAA) for a listed species or designated critical habitat, then formal consultation is required.

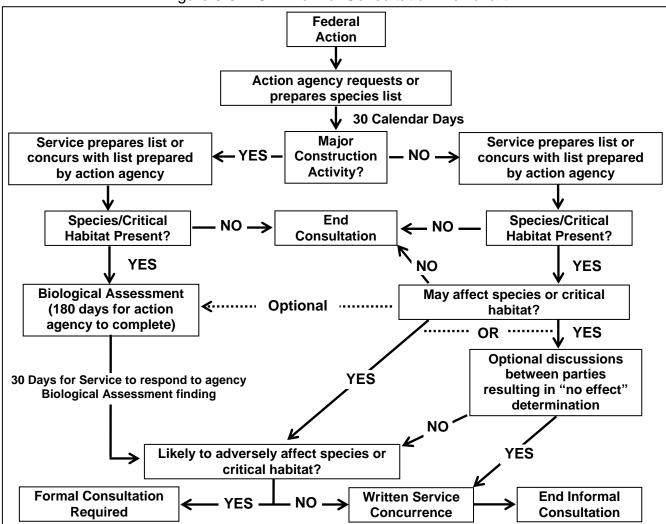


Figure 3-3 ESA Informal Consultation Flowchart

Source: Adapted from: Endangered Species Act Section 7 Consultation Handbook, U.S. Fish & Wildlife Service and NOAA Fisheries, March 1998.

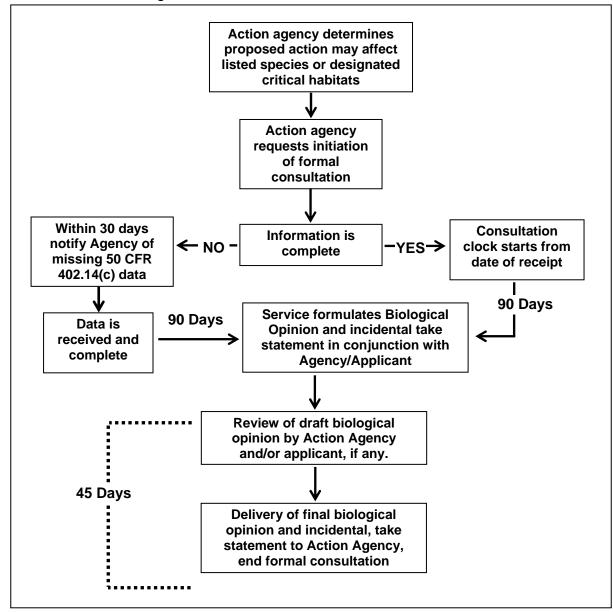


Figure 3-4 ESA Formal Consultation Flowchart

Source: Adapted from: Endangered Species Act Section 7 Consultation Handbook, U.S. Fish & Wildlife Service and NOAA Fisheries, March 1998.

Environmental Permitting

Transportation projects, whether federally-funded or not, typically require environmental permitting under the CWA Sections 401, 402, and 404; state WPCA; state HPA; and local government approvals such as critical areas ordinances established under the authority of the Growth Management Act (GMA) and substantial development permitting under the Shoreline

Management Act (SMA). The CWA Section 404 permit is typically the critical path for environmental permitting since the Corps of Engineers requires substantial supporting information, including but not limited to the NEPA analysis, ESA consultation, and Section 401 permitting. The following discussion presents a summary regarding the most common permitting programs addressed by transportation projects.

Most local and state, and increasingly federal, permitting of activities associated with aquatic resources are required to submit a Joint Aquatic Resource Permit Application (JARPA). The JARPA includes a standardized form application, but also requires submittal of additional documentation as necessary to meet the permitting requirements of each agency that uses the JARPA. For example, the JARPA was used by the ten projects in the study for:

- o HPA
- o CWA Section 401 Water Quality Certification
- o CWA Section 404 permit
- o Local government approval for shoreline substantial development
- o Local government approval for floodplain management
- o Local government approval for critical areas ordinances

The Section 404 permit may take from six months to two years, while the HPA is usually the first aquatic resource permit issued. The one-year timeframe for a Section 401 Water Quality Certification begins upon receipt of a complete JARPA; however, most 401 Certifications are issued months before the one year clock has run out. The local government permits are usually issued prior to the Section 401 and 404 permits.

The Washington Office of Regulatory Assistance (ORA) has recently developed a new One-Stop E-Permitting Service.⁵ The new on-line service provides (1) a centralized portal for complete, accurate, and up-to-date application guidance and material (e.g., JARPA), and (2) a separate and secure "my projects" zone for on-line submittal, review, permitting, and centralized decision-making for multiple regulatory agencies. The new service is being piloted with WSDOT and the JARPA permitting process.

In addition, the E-Permitting Service website provides Final Permit Process Schematics that illustrate the business process for many of the permitting programs that affect transportation projects. Example flowcharts of the environmental permit business processes are included in Appendix 4 of this report. In addition, the Corps of Engineers – Seattle District provided a flow chart (also in Appendix 4) that depicts the business process for the CWA Section 404 application review process.

Due to the considerable amount of information obtained regarding the environmental permitting for each of the ten transportation projects, summary tables are provided in Appendix 3 of this report. Table 3-2 in Appendix 3 summarizes the environmental documentation and environmental permitting performed for each of the ten projects. Table 3-3 in Appendix 3

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⁵ At the time of this report, the URL for the ORA One-Stop E-Permitting Website and On-Line Joint Aquatic Resource Permit Application (JARPA) is: http://www.epermitting.org.

⁶ At the time of this report, the URL for the One-Stop E-Permitting Website and the Final Permit Process Schematics is: http://www.ecy.wa.gov/programs/sea/pac/ppds_info/review.htm.

presents details regarding specific issues and opportunities associated with the environmental documentation and permitting for the study projects.

Discussions of the environmental permitting programs that were most commonly required for the ten study projects are presented in Appendix 5.

Time and Costs Associated with Environmental Permitting

The study attempted to collect information regarding staff time and costs of resources required to complete and process environmental documentation and permit applications. However, this information is not readily available through the current cost accounting and project management systems. Without changes in information systems and accounting practices, it is unlikely that the time and cost associated with each step of the environmental documentation and permitting process can be ascertained, particularly within WSDOT.

WSDOT staff consistently indicated that some of the information related to time and costs associated with environmental documentation and permitting could be obtained, particularly the value of consultant contracts. They were also able to provide anecdotal information regarding specific time and costs associated with environmental permitting. For example, WSDOT staff provided the costs associated with a change order to re-size a culvert for fish passage, the time required to perform a ditch survey for jurisdictional permitting under CWA Section 404, and the cost savings realized by changing a wildlife passage structure. They also stated, however, that environmental activities are rolled into tasks that address a variety of functions, not just environmental documentation and permitting, which makes the accounting of environmental permitting time and costs, including WSDOT process delays, difficult and non-standardized. The anecdotal information regarding time and costs for environmental permitting is presented in Table 3-3 in Appendix 3.

As explained in JLARC Report 05-3 (Overview of WSDOT Capital Project Management), WSDOT recognizes the challenges with its cost accounting and project management systems, particularly for integrating their functions. In May 2005, WSDOT issued a Request for Ideas (RFI) to the consulting industry regarding program delivery, program management, and project control and reporting functions, particularly as these activities are necessary to support the 2005 Transportation Partnership Funding Package. The RFI documents that WSDOT is aware of the need for improved project management and accounting information. An excerpt from the RFI is presented below and includes specific references relevant to this study:

"WSDOT currently relies on legacy mainframe computer systems to manage the capital construction programs. These systems include the Capital Program Management System (CPMS) that was developed in the 1980s as a program management tool with a focus towards the budget development process. CPMS uses antiquated programming language and was not designed with the features to track, analyze or report the delivery of individual projects as line items. This system is linked to, and relies on, the TRAINS legacy mainframe accounting system to track program and project expenditures. Both require multiple software applications and data management processes to perform project analysis and tracking.

"Current project management software used by WSDOT is the Project Delivery Information System (PDIS) that operates using the PS8 scheduling tool developed by Scitor Corporation. One challenge is that PDIS and CPMS do not integrate together. The proprietary file structure of PS8 does not allow data to upload to CPMS directly. Changes to a project schedule and the resulting impacts to aging of project funds made in PDIS do not automatically update to CPMS. The resulting impact requires a manual interface taking schedule information developed from PDIS to update CPMS. This current process is time consuming and inefficient, and introduces errors into the analysis and reporting processes.

"Another shortcoming of PDIS is that it cannot provide individual project managers with real-time expenditure information, nor can it automatically determine the earned value of a project. An objective of this system should be to provide project managers with an early warning of potential schedule and budget problems. This can then be tied to risk assessment and prioritizing resources to maintain scope, schedule, and budget.

On the regulatory side, Ecology has the capacity to track and manage costs on a per project basis. Ecology routinely tracks costs for clean-up projects and cost-reimbursement, but this has not been identified as a WSDOT business priority or need. WDFW does not have a fee structure associated with its regulatory program.

The WSDOT liaison program may provide some insight into the costs associated with permit review. In particular, the WSDOT Multi-Agency Permit (MAP) Team is comprised of both WSDOT and resource agency staff who are supported directly by WSDOT funding. When the MAP Team was initially established, the time and costs for the team members were initially charged to the budgets of more than 40 projects, which had submitted their environmental permit applications for review and permit issuance. However, the work associated with making these individual charges for several people across 40 projects was costly in and of itself; therefore, MAP Team costs are no longer charged against specific transportation projects, but spread out across the WSDOT project budgets. For the first 18 months of MAP Team existence, it cost approximately \$47,000 per month to operate the MAP Team. However, the MAP process is not applied to all projects, and because of the different approach used by the team its costs cannot be extrapolated to other projects. It would also be incorrect to spread the monthly MAP team cost evenly across the projects the MAP team is working on since each project has different permit requirements, and many of the projects were at different stages of development when taken on.

JLARC included similar observations about the data limitations on environmental permitting costs and timelines in another recent report. Based on the information obtained during the current study, as well as insight from this previous permit streamlining study, the time and costs associated with environmental documentation and permitting activities cannot be readily tracked and reported by the cost accounting and project management systems in place at WSDOT and the state resource agencies. The accounting of environmental permitting costs is one part of a larger challenge WSDOT and other agencies face as a result of information systems that have not kept pace with contemporary demands for improved information.

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⁷ See JLARC Report 05-4, Overview of Environmental Permitting for Transportation Projects, January 21, 2005.

BUSINESS PROCESS REVIEW OF ENVIRONMENTAL	Permitting for Transportation Projects

CHAPTER FOUR — ASSESSMENT OF SUCCESSFUL PROJECT-LEVEL STREAMLINING ACTIVITIES

OVERVIEW

As discussed in the previous JLARC study on permit streamlining, making permitting easier and faster is a balanced initiative intended to meet both the transportation and environmental goals of Washington. This chapter will assess the applicability of successful permit streamlining efforts for the ten transportation projects considered in the current study. This assessment will be used to prioritize streamlining activities in terms of their ability to reduce the time and/or costs associated with the environmental approval process, as well as to identify regulatory areas where efficiencies have largely been achieved.

STREAMLINING ACTIVITIES ON SAMPLE TRANSPORTATION PROJECTS

Table 4-1 on page 23 provides a summary of the significant project-level streamlining activities noted among the ten transportation projects considered by this study. Note that the "significance" of the project-level streamlining activity was assessed relative to the effect of that activity on actual streamlining of project delivery. For example, all projects exhibit some level of early communication between WSDOT and the resource agencies, but this activity was noted as significant when regular meetings were held to communicate project plans or when a formal partnering agreement was in place. Additional information on the streamlining activities can be found in Table 3-4 in Appendix 3. In general, the project-level streamlining activities with the most significant impact for the projects examined in this study were people-oriented and process-based, including the following:

- o Early communication, including the development of personal working relationships between staff from WSDOT and resource agencies, has a marked effect on understanding project goals and agency needs. In the case of large or fast-tracked projects, formal partnering mechanisms provide a means to facilitate multi-party concurrence regarding project planning, design, and environmental documentation, permitting, and mitigation. For two high-priority projects (US 12 and I-405), early communication and relationship-building streamlined the environmental permitting process.
- o Timely completion of the environmental analysis phase, including NEPA/SEPA analysis, provides direction to the project through the selection of a preferred alternative as long as the environmental analysis does not have to be reopened to address changes that may affect the analysis. WSDOT's recent move toward the development of reader-friendly documents has proven successful in pragmatically informing stakeholders, particularly

⁸ JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

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the public, about the project. However, based on interviewee comments, technical reviewers are more likely to criticize the new reader-friendly format rather than applaud it. Their criticism is that the EIS is over-simplified and references discipline reports rather than presenting the information within the text of the document. That said, the reader-friendly format presents the project and environmental analysis in a manner that the many stakeholders can readily understand and, thus, facilitates streamlining the public-participation process.

Timely review of permit applications is accomplished through the WSDOT liaison program, including the Northwest Region MAP Team. This program has been advantageous in providing dedicated points of contact for the environmental permitting process for transportation projects.

The survey of sample projects also noted substantial success in the implementation of recent administrative streamlining activities at the project level:

- The TPEAC initiative for watershed-based wetlands mitigation is reflected by mitigation plans proposed for the drainage basins where the study projects are located.
- The Project Delivery Information System (PDIS) has been incorporated into the management tools for the more recent study projects.

The ten study projects were selected for this study since they were recently permitted, or are currently or soon will be in the environmental permitting process. However, there are streamlining initiatives discussed in the previous JLARC streamlining study that were not necessarily available to many of these projects. It is anticipated that additional streamlining initiatives, including technology-based tools, will become integrated with project-level activities, leading to greater reduction in project delivery time and costs, while still promoting environmental performance and stakeholder satisfaction. The effects of the following streamlining initiatives will likely be noted in other projects that are just now in the scoping or environmental documentation stages:

- o TPEAC Initiative for Permit Drafting
- o WSDOT Environmental Geographic Information System (GIS) Workbench
- One-Stop E-Permitting Website, which is focused on rolling out the online Joint Aquatic Resource Permitting Application (JARPA)
- o Online NOAA Fisheries ESA Consultation Initiation Template
- o Section 4(f) Net Programmatic Evaluation

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⁹ JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

Table 4-1 Successful Project-Level Streamlining Activities

Project Number	Project Title	Early Communica tion	Formal Partnering Agreement (e.g., SAC, MOU, Charter)	Early Completion of NEPA/SEPA and/or Reader- Friendly Document	Minimal Update to Prior NEPA Document	TPEAC: Self- Drafting Pilot Project	Permitting Within a Short Timeframe	Liaison Program and MAP Team	Programmatic HPA	TPEAC: Watershed -based Wetlands Mitigation	Project Delivery Information System
1	I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road				X		X				
2	SR31, Metaline Falls to International Border	X	X						X		
3	SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue			X			X	X		X	
4	SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening						X	X		X	
5	SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	X									
6	SR 240, Richland, I-182 to Columbia Center Boulevard									X	X
7	US 12, Southeast of Pasco, McNary Pool to Attalia	X	X	X			X	X		X	
8	I-5, Chehalis, Rush Road to 13 th Street (<u>Note</u> : permitting has not begun)					X				X	X
9	SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	X	X							X	X
10	I-405, Kirkland Nickel Project, from SR 529 to 522	X		X			X	X		X	X

DETAILED DESCRIPTION OF SUCCESSFUL PROJECT-LEVEL STREAMLINING ACTIVITIES

Early Communication, including Formal Partnering

Early communication between WSDOT project teams and the resource agencies and tribal nations were vitally important in establishing a dialogue that encourages understanding of all parties' interests and mutual cooperation in resolving issues. As a result, personal working relationships develop between staff from WSDOT and the resource agencies and tribes, which have a marked effect on understanding project goals and agency needs. In fact, one WSDOT environmental permit coordinator stated that professional friendships with resource agency staff were more important to the efficient permitting of transportation projects than formal streamlining protocols.

It should be noted that each of the ten projects had early and continuous engagement with the area tribes throughout project planning and environmental review. This is consistent with compliance with the Centennial Accord and WSDOT Executive Order 1025.00, which establishes WSDOT's commitment to government-to-government consultation with the tribes.

With that said, however, more formalized partnering mechanisms have been critical for large or fast-tracked projects. A formal partnering mechanism may include a Signatory Agency Committee (SAC) process for NEPA/CWA Section 404 merger, a team charter, a coalition of stakeholders, or an interagency memorandum of understanding (MOU). These mechanisms provide an administrative means to facilitate multi-party concurrence regarding project planning, design, and environmental documentation, permitting, and mitigation. Several study projects used these formal partnerships. The SAC process was used to bring stakeholders together during the scoping and draft programmatic EIS and project-level EIS for the SR 509 project. The SR 31 project employed a chartering agreement between WSDOT and the U.S. Forest Service to work through scoping and NEPA documentation. The US 12 project included a coalition of 30 stakeholders that addressed scoping and NEPA; in addition, WSDOT and the Corps of Engineers-Walla Walla District signed a MOU regarding technical support for environmental requirements.

The I-405 Design-Build Project also employed a partnering approach with a "Re-inventing NEPA" process that worked in a manner similar to the SAC. Design-build projects pose permitting challenges because impacts and mitigation measures are identified over time as the project progresses through design and construction, rather than as a completed proposal submitted ahead of the project construction. Partnering is critically important to initiate early coordination with resource agencies since they prefer to review a complete design in a permit application or a consultation package. Partnering provides a means to communicate the scope of a design-build project, as well as resolve its environmental impacts and proposed mitigation alternatives.

Timely Completion of NEPA/SEPA, including Reader-Friendly Documents

Although projects were selected for this study based on their recent or current permitting activities, several began the environmental documentation process years earlier. For example, the corridor projects, by their very nature, require complex planning and buy-in from

stakeholders during scoping and the environmental documentation process. These activities have historically taken several years to complete. The EIS process for a large complex project, at best, takes about three years (e.g., the I-405 Corridor EIS) and some of the projects take much longer. The SR 509 project, for example, is an extreme example where the timeframe that included NEPA took eleven years due to the complexity of siting a new alignment in an urban area, the change from a programmatic to project-level EIS, and inconsistent funding.

The NEPA/SEPA documentation provides direction to the project through the selection of a preferred alternative. For example, the programmatic combined NEPA/SEPA EIS for the I-405 corridor project presents the alternatives at a level of detail that allows decision-makers to distinguish among the alternatives, to identify the mitigation measures to be employed to address environmental impacts, and to gain insight into the relative contribution of the modal elements. The EIS focuses on broad corridor-wide impacts and transportation system performance. Project improvements contained within the EIS' preferred alternative are reexamined individually and in combination for phased implementation, such as the Kirkland Nickel Project. An EA was developed for the Kirkland segment when more specific proposals for project improvements and phasing were developed. The Kirkland Nickel Project EA was developed as a reader-friendly document and generated only about 20 comments from interested parties. The number of comments was minimal, possibly since many issues were already addressed in the responses to approximately 1,785 comments for the I-405 Corridor EIS. WSDOT plans to use the Kirkland Nickel Project EA as a model reader-friendly document for other projects.

Under specific circumstances, a corridor EIS may require only minimal updating to address NEPA/SEPA for a specific stage. The I-90 corridor in the Spokane area was addressed by an EIS completed in 1989. However, since there were no environmentally sensitive areas (including ESA species and critical habitat, GMA critical area ordinances, or other environmentally sensitive issues) in the study project segment right-of-way from Argonne Road to Sullivan Road, a minimal reevaluation of the EIS was completed in 2002 to address NEPA/SEPA requirements. It is important to note that this reevaluation was dependent upon the stability of 1) the environmental setting for the project, 2) the project design, and 3) the environmental regulatory requirements impacting the location.

Timely Reviews, including WSDOT Liaison Program and MAP Team

As indicated in the previous JLARC streamlining study, the WSDOT liaison program, including the Region Multi-Agency Permitting Team, has been successful in providing permit specialists who are dedicated to transportation projects. The liaison program has been vital to streamlined permitting for several projects, including the US 12 project, which completed critical path permitting of CWA Section 404 in eight months; the Section 404 permit typically has the longest timeframe from JARPA submittal to permit issuance.

The I-405 Kirkland Nickel Project is currently working through the permitting process with the Region Map Team, which includes co-located liaison staff from WSDOT, Ecology, WDFW, COE – Seattle District, and King County. The Section 401 Water Quality Certification has been issued. Early and ongoing communication between the I-405 Project Team and the MAP Team has been important to understanding the design-build program for the Kirkland Nickel Project. For example, WDFW issued the HPA with performance measures, rather than specifics, in order to provide flexibility during the design-build process. It should also be noted that the I-405

Project Team is a co-located group of WSDOT staff and multiple consulting firms, which has been an important factor in completing the environmental documentation and permit applications so efficiently that the advertisement date has been moved up over six months. Also, the I-405 Project Team has dedicated permit coordinators who only work on this corridor project and expedite submittals and responses with the MAP Team; this is critical for this high-priority project. In comparison, some WSDOT regional permit coordinators may have up to 30 projects at various stages of permitting.

Table 4-1 indicates that the SR 16 project accomplished environmental permitting within a short timeframe, but this requires some clarification since the ad date was moved following the near completion of permitting. The SR 16 project essentially completed environmental permitting in eight months, from October 2003 to June 2004, and was literally within hours of finalization when legal appeals were filed regarding permits issued by the City of Tacoma and the Department of Ecology. As a result, the mitigation plan was revised in October 2004 in order to resolve the legal appeals and move forward with the project. WSDOT then reapplied in October 2004 for all permits regarding the CWA Section 404, CWA Section 401, Coastal Zone Management (CZM) Consistency Response, and the City of Tacoma Critical Area Ordinance. This initiated a second round of permitting to support WSDOT's effort to meet the February 2005 ad date. In November 2004, COE – Seattle District issued two new Section 404 permits and Ecology issued two new corresponding Section 401 Water Quality Certifications, as well as a new CZM Consistency Response. The City of Tacoma Wetland Development Permit was issued in mid-January 2005, about three weeks ahead of the revised ad date. Although there were delays in permitting related to third-party appeals, the streamlined process used on SR 16 reduced schedule delays that could have been substantially longer.

TPEAC Initiative: Watershed-Based Wetlands Mitigation

The TPEAC initiative for watershed-based wetlands mitigation has had positive effects throughout the WSDOT regions. Seven of the ten projects have wetlands mitigation requirements that are addressed within the watershed of each project. Mitigation ranges from the SR 509 project's participation in the Des Moines Basin stormwater mitigation project to the I-5 project's plan to participate in a WSDOT-owned, large-scale wetlands mitigation bank along the North Fork Newaukum River. Additional details are presented in Table 3-4 in Appendix 3.

Technology Support for Scoping and Project Management

WSDOT indicated that computer-based technology has benefited project scoping and project management, particularly development of budgets and schedule. These technologies are discussed below.

WSDOT Project Delivery Information System (PDIS)

WSDOT is moving toward the use of an improved management information system, PDIS, for project delivery tracking of schedules, as noted by its use among the more recent projects in the study. The next upgrade of the PDIS will reportedly include environmental permitting timeframes. The WSDOT South Central Region has developed its own upgrade in order to have a PDIS-based environmental schedule for projects already underway. This environmental schedule was used to track requirements and accomplishments during the environmental

documentation and permitting phases for the SR 240 project, which provided more information to the project manager than was previously available.

WSDOT GIS Workbench

The WSDOT Environmental GIS Program is tasked with providing technical support to project planning and delivery. The GIS Workbench includes over 500 GIS data layers, including 125 layers addressing a wide range of environmental topics. These GIS data layers are researched, acquired, re-formatted, and maintained by the Environmental GIS Program. Many of the data layers were acquired from federal and state natural resource, environmental, or mapping management agencies and, therefore, the data layers vary widely in scale and accuracy. It is anticipated that the GIS Workbench will become more refined and provide even greater support and efficiencies to project-level environmental documentation and permitting.

UPCOMING PROJECT-LEVEL STREAMLINING ACTIVITIES

The following are project-level streamlining activities that may be expected to play a role in promoting greater efficiency in environmental documentation and permitting on future projects, or those that are currently in the scoping and environment documentation phases.

TPEAC Initiative: Permit Drafting

The I-5 project near Chehalis is the first WSDOT pilot project under the TPEAC self-permitting initiative. As established under legislation, ESB 1163 and ESB 5279, ten pilot projects are proposed to draft their own environmental permit terms and conditions as part of the permit applications that will be submitted to the state resource agencies. As the first pilot project, it is not known yet whether this will be a successful streamlining activity for the I-5 project. The COE – Seattle District indicated during the interview performed for this study that it is not likely the Corps, as a federal agency, will participate in this TPEAC initiative.

One-Stop E-Permitting and On-line JARPA

The Washington Office of Regulatory Assistance (ORA) has developed a One-Stop E-Permitting Service website that has included the development of an online JARPA package program. ¹⁰ WSDOT, Ecology, WDFW, COE – Seattle District, and King County participated in the development of the One-Stop JARPA Resource Center, which began beta testing in July 2005. A beta-test login for WSDOT projects is provided on the website home page.

The One-Stop JARPA Resource Center will allow online submittal of an application package, facilitate multi-agency review, and accommodate online submittal of review responses, including attachment revisions. It is hoped that the online JARPA will allow WSDOT and other applicants to submit a single JARPA form with attachments and alleviate the customized preparation of up to six different JARPA forms to meet the needs of federal, state, and local permitting authorities. A promising feature planned for development, once funding is secured, is the ability to import draft conditions from permitting agency IT systems. This would allow early comparisons of permits to identify duplicative, contradictory, or unachievable permit conditions that could cause compliance problems. Ideally, final permit conditions would then be exported to WSDOT's Commitment Tracking System, which is likewise under development.

¹⁰ At the time of this study, the URL for the One-Stop E-Permitting Website and Online Joint Aquatic Resource Permit Application (JARPA) is: http://www.epermitting.org.

ESA Consultation Initiation Template

NOAA Fisheries developed an online Consultation Initiation Template to help Federal agencies (e.g., FHWA) and their delegates (e.g., WSDOT) prepare biological assessments and biological evaluations for ESA consultations.¹¹ The standardized template encourages consistency in format and content, reduces NOAA's information requests, and reduces review time according to NOAA. The website also includes links to ESA species lists, consultation regulations, the ESA Section 7 Consultation Handbook, and guidance, as tools to help prepare documents.

Section 4(f) Net Programmatic Evaluation

All of the projects considered by this study have proceeded through the NEPA process; however, future WSDOT transportation projects may be able to take advantage of the Section 4(f) Net Programmatic Evaluation issued on April 20, 2005. This new programmatic evaluation may be used for federally-funded transportation projects that will use Section 4(f) land as part of existing or new alignments, but only if the transportation project provides a net benefit to the Section 4(f) property. The intent of the Section 4(f) Net Programmatic Evaluation is to promote environmental stewardship by encouraging enhancement of Section 4(f) land. The programmatic evaluation was developed to encourage streamlining of the Section 4(f) process by reducing the amount of time required for a Section 4(f) evaluation, particularly for preparation, review, and circulation of draft and final evaluations.

SUGGESTED PRIORITY FOR PERMIT STREAMLINING ACTIVITIES

Based on the ten projects considered by this study, early and ongoing communication between WSDOT and the resource agencies should have the highest priority in order to achieve the greatest streamlining benefit. Communication has been the key to streamlining the time required for the NEPA/SEPA environmental analysis and environmental permitting. For example, the I-405 Corridor FEIS was issued in three years, in large part because of early communication with stakeholders.

For large or complex projects, formal partnering mechanisms provide a means to promote ongoing dialogue and facilitate multi-party concurrence regarding project planning, design, and environmental documentation, permitting, and mitigation. Communication with all stakeholders, including the public, is enhanced by EIS and EA documents that clearly communicate the scope and impacts of the project. When the NEPA/SEPA analysis is completed in a timely manner, there appears to be a reasonable opportunity to streamline the environmental permitting activities as well.

Environmental permitting requires a fraction of the time needed for the NEPA/SEPA analysis. The study projects required from eight months to about a year and a half to complete federal, state, and local environmental permitting in preparation for the ad date. Although prioritization of streamlining activities may be subjective to some degree, analysis of the study projects indicates that communication between WSDOT and the resource agencies provides an umbrella

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¹¹ At the time of this study, the URL for the NOAA Fisheries online ESA Consultation Initiation Template is: http://www.cit.noaa.gov/nosign/default.asp.

effect that benefits all streamlining activities. Communication should be the highest priority activity in order to streamline environmental permitting.

In general, we suggest that streamlining activities be prioritized by general effect on the permitting process, focusing on the following order:

- o Communication between WSDOT and resource agencies, including:
 - Formal partnering
 - Presentations and site visits
- Clear and complete environmental permit applications from WSDOT
 - Clear regulatory process supported by rules, guidance, and policy
 - Consistency of multi-agency permitting requirements (e.g., preparation of a single JARPA, consistency between format and drawing requirements)
 - Agreement between WSDOT and resource agencies regarding design and mitigation prior to permitting
 - Review and discussion of draft permit conditions, where allowed by statute and/or rule
- o Timely reviews of permit applications
 - WSDOT liaison program, including the MAP Team
 - Consistent staffing at the resource agencies
- o Supporting technology
 - Online JARPA
 - GIS workbench

The assessment of the ten sample transportation projects includes an objective to define regulatory areas where streamlining efficiencies have largely been achieved. Based on the present study, however, it appears premature to announce that any particular regulatory area has advanced in its streamlining efforts to a point that further efficiencies cannot be found. Chapter 5 will consider the root causes of project delivery delays. Further, with advances in information technology, such as ORA's One-Stop E-Permitting website and the NOAA Fisheries ESA Consultation Template, it is apparent that project-level streamlining activities are ongoing for permitting under the Clean Water Act (Federal Water Pollution Control Act), State Hydraulic Project Approval, Coastal Zone Management consistency, and the Endangered Species Act.

Although further streamlining opportunities exist for environmental documentation and permitting for transportation projects, the TPEAC initiative for programmatic permitting appears to have matured. Programmatic permits, however, are generally used for maintenance, repair, and minor replacement projects over, in, or near aquatic resources after a transportation project is constructed. These programmatic permits were not used for any of the study projects.

Business Process Review of Environmental Permitting for Transportation Pro	DJECTS

CHAPTER FIVE – ASSESSMENT OF ROOT CAUSES OF SCHEDULE DELAYS

OVERVIEW

The ten transportation projects considered by this study were assessed to identify the root causes of schedule delays. In addition to considering environmental documentation and permitting issues, other factors were assessed for their potential roles in delaying project delivery. These additional issues include design, planning, right-of-way, third-party lawsuits, and funding delays or interruptions. An extensive analysis behind all causes of such delays was not possible given the time available for this study. Instead, the goal of this portion of the study is to indicate the importance of delays attributable to the documentation and permitting process relative to delays caused by other aspects of the highway project delivery process.

For the purposes of this root cause assessment, a schedule delay is considered to be the slowing of progress in the project delivery process. A schedule delay inherently means that streamlining efforts will be muted or ineffective. A delay may include missing an intermediate deadline on the project schedule; however, this does not necessarily entail a corresponding postponement of the advertisement (ad) date for construction.

JLARC's consultant identified projects that faced delays through information obtained from staff interviews and other documentation. As noted earlier in this report, quantified schedules for environmental-related tasks are not readily identified in agency information systems, and consequently it was not possible to measure the exact magnitude of delays on overall schedule accomplishment.

GENERAL ASSESSMENT OF SCHEDULE DELAYS

Table 5-1 on the following page presents a concise overview of the seven factors that were assessed for their contribution as root causes of schedule delays, including slowing of progress in the project delivery process and/or changes to the ad date. This table summarizes the detailed information provided in Tables 3-3 and 3-5 in Appendix 3.

Two factors, planning and design, support the environmental documentation and permitting of each project. When WSDOT revises the planning and design for a project, there will likely be a ripple effect through the environmental documentation and/or permit applications required for approval of construction. In addition, if the resource agencies determine, through their respective reviews of the environmental documentation and permit applications, that there are regulatory or technical issues with the proposed project, then there will be a reversed ripple effect that may affect planning and design issues. Further consideration of root causes of delays and associated effects that are aligned with environmental documentation and permitting are discussed below.

Table 5-1
Root Causes (X) of Delays on Project Delivery and Associated Effects (E) on Other Activities (pre-construction)

Project Number	Project Title	Planning	Design	Environmental Documentation	Environmental Permitting	Right-of-Way Acquisition	Third-Party Lawsuits	Funding Delays or Interruptions
1	I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road		Е	Е	Е			X
2	SR31, Metaline Falls to International Border		Е	Е	X		X	X
3	SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue		Е		Е	Е	X	X
4	SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening				X			X
5	SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	X	Е	Е	Е			X
6	SR 240, Richland, I-182 to Columbia Center Boulevard	Е	Е		X	X		X
7	US 12, Southeast of Pasco, McNary Pool to Attalia							X
8	I-5, Chehalis, Rush Road to 13 th Street (<u>Note</u> : permitting has not begun as of study report)							
9	SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac (<u>Note</u> : permitting has not begun as of study report)	X	E	X	X	E		X
10	I-405, Kirkland Nickel Project, from SR 529 to 522				X			X

Acquisition of right-of-way is based on the outcomes of planning, design, and environmental analysis and permitting. In the case of the SR 240 project, design changes led to the expansion of the right-of-way requirements, including moving businesses in the area of the Richland "Y." Since this was an eleventh-hour design change, the ad date was moved back by two months. The purchase of right-of-way for the SR 16 project was subject to the effects of lawsuits and the

consequent revision of the mitigation plan. The SR 509/I-5 project requires the purchase of right-of-way for a new alignment. The acquisition has been impacted by funding delays, as well as changes in project scope and consequent changes in NEPA/SEPA analysis for the preferred alternative.

The last two factors, third-party lawsuits and funding delays or interruptions, may be independent of the environmental documentation and permitting processes, but have direct impacts on their progress. For example, WSDOT was required to provide additional environmental analysis regarding the Canada lynx for the SR 31 project because of a lawsuit filed against the USFWS, which was then required to enter into a formal ESA consultation when a determination other than "no effect" was made; the legal ruling against USFWS was rescinded once it had developed adequate habitat information for the lynx. The SR 16 project had two independent legal appeals to WSDOT's wetlands mitigation plan proposed for the Union Avenue to Jackson Avenue segment. As discussed previously in Chapter 4, the permitting for the project was performed in eight months, but the legal appeals forced revision of the mitigation plan, resubmittal of federal, state, and local permit applications associated with the wetlands mitigation, and caused an eight-month delay of the ad date. In effect, the legal appeals doubled the length of what had been one of the shortest permitting periods among the ten projects in this study.

Table 5-1 indicates that nine out of ten projects have experienced funding delays or interruptions that were determined to be one of the root causes of schedule delays. Only the most recent project, the Chehalis I-5 project, has had neither a funding delay nor a schedule delay. Additional discussion is provided below regarding funding impacts on environmental documentation and permitting processes.

Planning: Early Communication

The WSDOT project team indicated that, in hindsight, the SR 522 project would have benefited from early planning to formalize communication through a SAC (Signatory Agency Committee) or similar process because of poor communication with resource agencies. In addition, the project team stated that a SAC would have facilitated the NEPA/SEPA analysis and the environmental permitting process, including the negotiation of difficult technical issues associated with changes in design and mitigation, as well as other issues. This is accounted for on Table 5-1 under "Planning."

ASSESSMENT OF SCHEDULE DELAYS OR EFFECTS ASSOCIATED WITH ENVIRONMENTAL DOCUMENTATION AND PERMITTING

Table 5-2 summarizes six factors associated with environmental documentation and permitting that were identified as being root causes of delays for the study projects, or factors associated with effects resulting from the seven root cause types considered in Table 5-1. In some cases, though, there were delays on environmental tasks that did not result in overall delays to the delivery of the project. These factors are discussed below, with examples highlighted from some projects to illustrate the type of issues involved.

Table 5-2
Alignment of Table 5-1 Root Causes (X) and Effects (E) with Environmental Documentation and Permitting Tasks

Project Number	Project Title	Incomplete Applications. Unclear or Changing Permit Process, Document Format, and/or Info Requirements	State Staffing Issues: Retention, Continuity, Limited Specialists	Federal Staffing Issue: WSDOT Liaison Staff on Federally-Required Sabbatical during Permitting	Change in Design or Mitigation Requirements	No Inter- or Intra-agency Coordination between Permit Programs	Changes in Environmental Rules, Guidance, Policy (e.g., CWA, CAA, Talent Decision)
1	I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road				Е		Е
2	SR31, Metaline Falls to International Border	Е		Е	Е	X	X
3	SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	Е	Е		Е		Е
4	SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	Е	Е		Е		X
5	SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	E	E		Е		
6	SR 240, Richland, I-182 to Columbia Center Boulevard	E	Е	X	Е	X	
7	US 12, Southeast of Pasco, McNary Pool to Attalia						
8	I-5, Chehalis, Rush Road to 13 th Street (Note: permitting has not begun as of study report)						
9	SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac (<u>Note</u> : permitting has not begun as of study report)						X
10	I-405, Kirkland Nickel Project, from SR 529 to 522				_		X

Processes for Permitting

Completeness of a Permit Application

Many interviews conducted for this study included a discussion regarding the completeness of a permit application at the time of initial submittal. The regulatory timeframes for the HPA and the CWA Section 404 permit begin when an application is deemed as complete; a schedule delay may result if a resource agency's request for information to complete the application is not addressed in a timely manner. WSDOT regional offices believe they are providing adequate

information to address permitting requirements, while the resource agencies stated that applications usually do not pass the initial completeness review. The COE – Seattle District presented data that indicated approximately 70 percent of the JARPA packages are incomplete when first submitted for CWA Section 404 permit review. Of the 2,100 JARPAs received by WDFW from all applicants, including WSDOT, during the first six months of 2005, 50 percent were incomplete; data were not readily available for only WSDOT applications. Although Ecology interviewees did not have definitive data regarding completeness of permit applications, several indicated that, by agency standards, the JARPAs submitted for CWA Section 401 permitting are likely to be incomplete when first submitted for review.

Agencies determine applications to be incomplete not just because an important document is missing but, more commonly, because the applications do not clearly and consistently identify the project components and environmental impacts. For example, an application is incomplete when it has unclear drawings, the text of the JARPA does not match the illustrations of the drawings, the wetland impact totals differ within the application, potentially risky activities near water bodies are not described, and culvert replacement work is not adequately described.

A JARPA package includes a standardized form application plus the applicant's supporting attachments. WSDOT has found that each agency has different informational needs, which may translate into different information and format needs within the JARPA package. This may contribute to the observations that JARPA packages are initially incomplete. For example, the SR 16 project prepared four separate JARPA packages to address the jurisdictional issues of federal, state, and local permitting agencies. The new online JARPA was developed through interagency cooperation and will hopefully resolve issues arising from the preparation and submittal of a customized JARPA package to each agency with jurisdiction. However, an incomplete application submitted electronically will be as incomplete as when submitted as a paper copy. The online JARPA is now available for WSDOT beta testing.

Corps of Engineers' Permit Review Process

WSDOT region offices regarded the COE – Seattle District's JARPA review process to be a "black box" with little guidance coming from the Corps regarding the JARPA requirements for the Section 404 permit. Several interviewees indicated that the lack of guidance has led to a protracted permitting period; WSDOT submits what it believes to be a complete JARPA, but the Corps finds it incomplete.

During the course of this study, however, the following guidance was found on the COE – Seattle District website:

- COE Standard Operating Procedures for the Regulatory Program, May 15, 1999¹²
- COE Seattle District Regulatory Branch Drawing Checklist¹³

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¹² At the time of this study, the URL for COE Standard Operating Procedures for the Regulatory Program, May 15, 1999, is: http://www.nws.usace.army.mil/publicmenu/DOCUMENTS/ACF590B.pdf.

At the time of this study, the URL for COE – Seattle District Regulatory Branch Drawing Checklist, is: http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=Drawing_Checklist.

The Standard Operating Procedures provide information regarding the Corps' regulatory program, but not the level of guidance that WSDOT would like to see regarding the Corps' permitting process.

In addition, during the interview for this study, the COE – Seattle District provided a flowchart of the application review process, which is presented in Appendix 4. This flowchart does not appear to be available at the Corps' website. This issue should be addressed further through dialog between WSDOT and the Corps.

Conflicting Timeframes of CWA Sections 401 and 404

The CWA Section 401 Water Quality Certification and the Section 404 permit are dependent upon each other, but the permit application timeframes are not always consistent. The COE – Seattle District takes 6-24 months to process a Section 404 individual permit, which makes it the critical path permit for most projects. Ecology, however, is limited to a one-year timeframe for 401 Certification processing, beginning on the date of receipt of the JARPA package. If both the Corps and Ecology receive the JARPA packages on the same date, Ecology may have to issue a 401 decision that could result in approval or denial prior to the determination of the final design during the Corps' review process.

Jurisdictional Authority

The bounds of jurisdictional authority within and between the regulatory agencies are not always clear to WSDOT staff. For example, Ecology issued a CWA Section 401 certification with CWA Section 402 water quality requirements for the SR 240 project. WSDOT interviewees indicated that this appears to be overstepping the bounds of Section 401 authorities, or may create unnecessarily duplicative permit conditions and reviews from the same agency. Ecology, however, stated that Section 401 requires "reasonable assurance" of water quality, which is met by requiring compliance with the Section 402 NPDES water quality permit, including requirements for a Temporary Erosion and Sediment Control (TESC) Plan and Stormwater Pollution Prevention Plan (SWPPP).

WDFW indicated that issues concerning jurisdictional authority require the expenditure of a considerable amount of time. WSDOT reportedly informs WDFW and other regulatory agencies as to their jurisdiction, but it is not typically correct. From WSDOT's perspective, permit agencies sometimes advocate mitigation for impacts unrelated to the project or mitigation that exceeds the scope of the impact. WDFW and WSDOT are working to resolve this issue through a revision to their existing memorandum of agreement.

Stormwater Management

The CWA Section 402 permitting of WSDOT projects addresses stormwater discharges to "waters of the United States." In general, Ecology references the WSDOT Highway Runoff Manual in the NPDES permits issued under CWA Section 402. At the time of this study, the 2004 version of the WSDOT Highway Runoff Manual had received only conditional approval. As a result, Ecology staff must spend additional time to ensure that the Section 401 Water Quality Certification addresses the flow control standard. However, Ecology did not exceed its one-year timeframe for issuing a 401 Certification for any of the study projects.

Stormwater management issues, including design and mitigation, continue to require a significant amount of time on both the part of WSDOT and Ecology. However, the conversation

regarding stormwater management includes parties outside the WSDOT-Ecology dialogue. The WSDOT Highway Runoff Manual is used by local governments throughout Washington, which has a ripple effect through municipal, county, and regional planning and permitting agencies.

Review of Draft Permit Conditions

Ecology has indicated that it does not share draft permit conditions for CWA Section 401 Water Quality Certifications because the public notice process now in place does not accommodate it. Consequently, permit conditions were unavailable to the SR 240 project until the final permit was issued. The project team indicated that a provision requiring a TESC plan, typically found in NPDES construction permits, required that Ecology review the plan. Unfortunately, the requirement was not implementable because the review timeframe conflicted with WSDOT's timeframes between contract award and the construction start date. The project team indicated that if the draft conditions had been available, then they would have attempted to renegotiate the provision. Since review drafts were unavailable, WSDOT said that given enough lead time they would have considered appealing some of the permit conditions, including notification periods and the stormwater management requirement. As it was, the final conditions were received close to the advertisement date and an appeal would have caused unacceptable delays to the project.

Under the existing public notice process, if Ecology and WSDOT discussed conditions, and then WSDOT changed the project in response, a revised project description would have to be included in the Public Notice issued for the project, thereby requiring a new public notice and an extension of the timeframe for permitting. WSDOT has indicated that, given the current public notice process, changes to WSDOT projects based on such discussions would be made within WSDOT's current risk management process, which would necessarily weigh the risk of cost increases and schedule delays. Both WSDOT and Ecology have expressed a desire to work together to improve communications around this issue.

TPEAC Initiative: Permit Drafting

The Chehalis I-5 project is the first pilot effort under TPEAC's "permit-drafting" initiative, which was established by ESB 1163 and ESB 5279. No delays have resulted from this activity. At the time of the interview with staff from the Chehalis project, the WSDOT regional office did not fully understand their role in the legislated permit-drafting process or how it was intended to improve streamlining. Since that time, however, the regional office has received additional guidance regarding "permit drafting," in order to improve the understanding of local staff. At the time of this study, it appears that only State resource agencies will be involved with the pilot project; federal agencies will only participate in this pilot project on a voluntary basis.

State Staffing Issues

Interviewees noted various issues with staffing at state resource agencies. Those issues can be summarized as personnel retention, continuity of staff on a specific project, consistency in decision-making when there is a staff change, and standardization of approach to project permitting. Although noted in the previous JLARC study on permit streamlining, the issues regarding personnel retention among the resource agencies remain. ¹⁴ Interviewees indicated that resource agency personnel were lost for various reasons, including retirement, burn-out, and higher-paying positions.

¹⁴ JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

Interviewees observed that management decisions were made to change staff in order to use more experienced staff or staff with more time available to perform reviews, which appear to be prudent decisions. For example, according to some resource agencies, changes in staffing for various reasons on the SR 522 and SR 240 projects reportedly led to a more detailed consideration of the environmental impacts and mitigation for these projects since the new staff brought a fresh perspective to these projects. On the other hand, WSDOT staff for the SR 240 project felt that staff turnover caused resource agencies to reconsider early agreements, negotiated by well-qualified permit staff, on preferred mitigation strategies. Other study projects experienced short-term delays due to limited numbers of specialized staff to address issues such as wetlands mitigation.

Federal Staffing Issues

Interviewees noted that WSDOT liaisons working at federal resource agencies are required to take a two-month sabbatical after four years of service since they are working within the agencies under an interagency personnel agreement (IPA). The federal Office of Personnel Management (OPM) reportedly has another rule that limits IPA positions to a six-year period. This cap on the IPA period is designed to protect the regular agency employees from being replaced by staff supported by outside agencies. WSDOT is reportedly coordinating a waiver for liaisons at federal agencies.

Several interviewees indicated that the OPM sabbatical rule has led to permitting delays from two federal agencies: COE-Seattle District and U.S. Fish and Wildlife Service. For example, a Corps liaison was nearing finalization of permitting of the CWA Section 404 permit for the SR 240 project when forced to go on sabbatical for two months. The permitting was turned over to another liaison who required substantial changes to the mitigation design, which had been agreed to by key stakeholders during NEPA and early permitting. It should be noted, though, that the design changes led to savings of approximately \$1.2 million on the SR 240 project. However, WSDOT staff believe that the new mitigation plan offered far less benefit to the environment and resulted in WSDOT's commitment to uncertain future mitigation for project, which will likely reduce the overall savings. Similarly, a liaison at the USFWS was required to take a two-month sabbatical during the permitting of the SR 31 project, which affected the short-term project schedule, but did not cause a change in the ad date for the project.

Changes in Designs and/or Mitigation Plans

Six of the ten study projects reportedly required changes in designs and/or mitigation plans in order to address resource agency requirements. Also, in the case of the SR 16 project, the mitigation requirements changed between the time of the final EIS and the permits for the Union Avenue to Jackson Avenue project. These changes impacted stormwater management and wetlands mitigation. The mitigation options in the FEIS differ from what was actually proposed for implementation.

There were changes in the stormwater regulations between the issuance of the SR 16 FEIS and the "Plans, Specifications, and Estimate" (PS&E) was completed. The FEIS was issued in January 2000. The Department of Ecology published the revised Stormwater Management Manual for Western Washington in August 2001. WSDOT published a new version of the Highway Runoff Manual in March 2004. Interim stormwater guidance was published in the form of Instructional Letter 4020.02 which was used in conjunction with the 1995 Highway

Runoff Manual as the basis for hydraulic design on the SR 16 project. The effect of the stormwater changes was that the pond sizes increased, the number of ponds increased, and the wetland impacts were greater.

As mentioned, the wetland impacts increased as a result of stormwater ponds and, therefore, the requirements for compensatory mitigation increased. The FEIS was somewhat vague about the location of the compensatory mitigation, except that wetland impacts to Snake Lake would be mitigated. The project was developed in an urban corridor and there was no opportunity to provide wetland mitigation on site or immediately adjacent to the highway corridor. This led to the development of the mitigation plan to develop an offsite mitigation site in University Place. The development of consent among regulatory agencies and project stakeholders was a time-consuming effort.

Coordination Between Permit Programs

The Department of Natural Resources (DNR) is responsible for classifying streams by type within the State. WDFW makes a stream-type call based on the best-available information at the time of the call, which may or may not include recent typing changes that DNR may have made based on information from another entity. During the SR 31 project, DNR initially used a different stream type for the forest practices permit (under the Forest Practices Act, or FPA) than WDFW used for the HPA. In this case, DNR classified a stream as a jurisdictional Type 4 tributary under the FPA, while WDFW determined it was a non-jurisdictional Type 5 tributary for the HPA. As a result, the DNR forest practices permit required a change in culvert size that caused WSDOT to revise the design and issue change orders to the construction contract; this effort cost approximately \$10,000. After the design change was made, however, DNR retracted the culvert size permit condition, apparently determining that the stream was non-jurisdictional Type 5 tributary. There was no delay in SR 31 project delivery due to these issues, but WSDOT expended additional effort and funding to comply with DNR's initial stream-typing call.

WSDOT pointed out that the City of Richland issued a Shoreline Substantial Development Permit for the SR 240 project and that the Ecology Shorelands and Environmental Assistance (SEA) Program concurred by reviewing and filing the permit. The SEA Program also includes the CWA Section 401 permitting programs, as well as wetlands technical assistance. Six months after the Ecology SEA Program filed the City of Richland's Shoreline Substantial Development Permit, apparently with knowledge of the proposed alternative mitigation, the SEA Program disapproved of the same alternative mitigation program, which contributed to a design change. WSDOT suggests that there should be a connection between the approval of a mitigation plan under the City of Richland's SMA shoreline permit and the anticipated approval of the same mitigation plan under the Section 401 certification. The Ecology Central Region Office, however, had issued a letter to the City of Richland which stated, "Any conditions included by the City as part of the substantial Development Permit or the Critical Area Ordinance should be coordinated with conditions of the 401 Water Quality Certification." Although this letter should have placed Richland and WSDOT on notice regarding coordination between the Shoreline Substantial Development Permit and the Section 401 certification, any efforts at coordination may have been hampered by their inability to review draft 401 certifications.

Changing Environmental Laws and Court Decisions

Recent Congressional revisions to the Clean Water Act and the Clean Air Act impacted corridor projects. In addition, delays may require updates to accommodate rule changes or changes in design elements that must be addressed for 20-year planning timeframes.

For example, the I-90 project used a 1990 EIS, but due to shelving of the project, the noise survey required updating using new modeling software. Also, the project team prepared for a second shelving of the project in 2003, which fortunately did not occur, but would have required an update to the FEIS for traffic analysis, air quality, noise analysis, and design elements changed due to 2025 traffic volume (rather than 2020 design year). In addition, these re-analyses are expensive and may take months to complete.

FHWA required the transition from a programmatic EIS to a project-level EIS for the SR 509/I-5 project due to significant revisions to the federal Clean Water Act and Clean Air Act, as well as an evolving policy for environmental justice.

In addition, case law may affect environmental permitting. The COE – Seattle District has interpreted the "Talent decision" as being applicable to the regulation of roadside ditches under CWA Section 404; these ditches were not previously included in the Section 404 permitting process. At the time of this study, 71 highway projects (including 24 projects covered by the "Nickel" funding package) were at risk of experiencing permit-decision delays related to new COE information requirements for roadside ditches.

IMPACTS OF FUNDING DELAYS OR INTERRUPTIONS

The previous JLARC study ¹⁵ discussed several types of funding issues that affect transportation projects. The present study found that nine of the ten transportation projects experienced funding delays or interruptions, which have caused the "shelving" of projects, as well as their associated environmental documents. In order to re-initiate these projects when funding is available at a later date, any environmental changes that have occurred at the project location must be addressed through updated impact analyses and mitigation plans. This may lead to permitting delays as environmental impacts are reexamined and new mitigation measures are potentially needed. Also, due to the extended time from the beginning of project planning to construction funding, there may be a turnover in staff at both transportation and resource agencies, which results in a loss of institutional knowledge that delays project progress.

Transportation projects typically require multi-year schedules to plan and construct appropriately. The long-term funding needed to support these projects can face uncertainty due to several different decision-making processes. Project funding may be affected positively or negatively by legislation for appropriations and taxes, by citizen initiatives, and by referenda from the Legislature to the voters. Competing decisions through these different avenues over recent years have contributed to funding uncertainties and resulting project delays or interruptions.

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¹⁵ JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

Table 5-3 Funding Impacts on Project Delivery

Project Number	Project Title	Funding Impact	Delay to Ad Date?	Mechanism for Resolution of Project Delivery Delay
1	I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road	Funding interruption shelved project.	Yes, ad date was delayed 14 months by lack of funding, from 11/8/1999 to 1/9/2001. In 3/2003, prepared for second shelving of project.	"Nickel" funding supported a 6/2003 ad date, which stopped the second shelving of the project.
2	SR31, Metaline Falls To International Border	Funding interruption suspended design for 5 months.	Yes, suspended funding delayed the ad date accordingly. The ad date was not delayed due to the environmental process, however, the ESA issues did not allow the project to go to ad earlier than the ad date.	"Nickel" funding was necessary for construction.
3	SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	No funding in January 2003, which delayed permitting.	1) Yes, ad date was delayed 6+ months by lack of funding, from 11/24/03 to 6/9/2004. 2) Bid opening delay to 2/2/2005 was due to third-party appeals permits issued by city of Tacoma and Ecology.	1) Permit applications submitted in 10/2003 since "Nickel" funding was expected in 11/2003. 2) Legal appeals to wetland mitigation plan were dropped when WSDOT revised mitigation plan in 10/2004.
4	SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	Stage 2 began in 1995, but the project was shelved in 1998, reportedly due to a funding interruption that lasted 5 years, until 2003.	Yes, ad date was delayed several years, until 9/27/2004, due to shelving of project.	"Nickel" funding in July 2003 supported reevaluation of NEPA EA.
5	SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	Funding delays shelved Stages 2, 3, and 4, each of which is a segment of the overall corridor.	Yes, ad date was delayed due to project shelving.	Pre-existing state, federal and other partnership funds.

Table 5-3
Funding Impacts on Project Delivery

Project Number	Project Title	Funding Impact	Delay to Ad Date?	Mechanism for Resolution of Project Delivery Delay
6	SR 240, Richland, I-182 to Columbia Center Boulevard	Start-and-stop funding delayed NEPA document, which began in 1998.	Yes, ad date was delayed during NEPA process. Also delayed at end of permitting due to right-of-way condemnation issues.	"Nickel" funding supported completion of permitting process.
7	US 12, Southeast of Pasco, McNary Pool to Attalia	Streamlined permitting completed in 8 months, but funding stopped immediately after permits were issued in 4/2002. Resulted in loss of WSDOT credibility with resource agencies.	Yes, ad date was delayed nearly a year.	"Nickel" funding supported going to ad and construction from 5/2003 to 8/2004.
8	I-5, Chehalis, Rush Road to 13 th Street	Not applicable.	Not applicable.	"Nickel" funding supports this project.
9	SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	Funding cut in 2002 delayed completion of EIS. Submittal of permit applications was on hold as of the drafting of this report.	Ongoing delay.	Currently has "Nickel" funding, but no construction funding.
10	I-405, Kirkland Nickel Project, from SR 529 to 522	Not applicable.	Not applicable. Ad date was moved up 6+ months from 4/1/2006 to 9/15/2005 due to project management and permitting efficiencies.	"Nickel" funding supports this project.

CHAPTER SIX – ASSESSMENT OF RECENT REQUIREMENTS FOR DRAINAGE DITCHES AND STORMWATER MANAGEMENT

OVERVIEW

FHWA Administrator Mary E. Peters has stated: "To ensure environmental streamlining and stewardship, efficient environmental review processes are a priority." To be effective in streamlining, the rules to be applied in the review processes must be known and consistently applied by all parties involved. As a corollary to effective streamlining, any changes in the requirements or in rule interpretations should likewise be made available to and consistently applied by all reviewing entities.

Recently, interpretations by regulatory agency local offices of court decisions (e.g., the *Talent* decision) have raised questions regarding the review and permitting of highway drainage ditches and the collected stormwater runoff. As a result, WSDOT is placed in a position of uncertainty as it attempts to fulfill its responsibilities for effective and efficient project delivery and its commitments to permit streamlining.

This chapter examines the recent history of drainage ditch and stormwater runoff policy as applied in Washington State to determine the basis for changes in assessing and permitting WSDOT drainage ditches. In considering these changes, the chapter will also examine how federal policy regarding drainage ditches in Washington State compares to the federal policies applied to three other state DOTs. The policy changes are summarized along with an assessment of how those changes have impacted transportation project delivery, the source of the policy change (court decision, state agency management decisions, federal agency management decisions, etc.), and any streamlining efforts that could be successful in addressing project delays related to these changes.

In addition, this chapter will summarize recent changes in stormwater management policy adopted by the Department of Ecology. The policy changes are presented in Ecology's Stormwater Management Manuals, which serve as the guidance for WSDOT's Highway Runoff Manual.

DRAINAGE DITCH/STORMWATER RUNOFF REGULATORY INTERPRETATIONS IMPACTING WSDOT

The *Talent* Decision

The Talent decision (Headwaters, Inc. and the Oregon Natural Resources Council v. Talent Irrigation District, 243 F.3d 526 9th Cir. 2001) ¹⁶ is a key federal court decision referenced by

¹⁶ At the time of this report, the URL for the US Ninth Circuit Court of Appeals, *Headwaters, Inc* v. *Talent Irrigation District* is:

http://www.ce9.uscourts.gov/web/newopinions.nsf/0/c5c997adba834e6788256a0d0063c6e3?OpenDocument.

the Corps of Engineers - Seattle District in determining jurisdiction of ditches in specific situations.

The *Talent* decision indicated that irrigation canals connecting jurisdictional "waters of the United States" were subject to the Corps of Engineers' permitting and regulatory authority under Section 404 of the Clean Water Act (CWA). The *Talent* decision applies directly to the 9th Circuit, including Washington, Alaska, Idaho, Montana, Oregon, and California.¹⁷

The Seattle District of the U.S. Army Corps of Engineers (Seattle District, or the Corps) has applied the *Talent* decision as a basis for asserting that WSDOT highway drainage ditches are tributaries also and the stormwater conveyed by these ditches are "waters of the United States." This interpretation has been used by the Seattle District to assert that WSDOT drainage ditches fall under the permitting and regulatory requirements of Section 404 of the Clean Water Act.

COE – Seattle District: District Engineer's Response Regarding Clean Water Act Jurisdiction

The Seattle District presented limited written direction to the regulated community regarding the application of the *Talent* decision to drainage ditches. As of the drafting of this report, the Seattle District's direction is limited to a one-paragraph statement on its website. This statement was derived from an out-of-court Settlement and Release Agreement, dated April 6, 2004, which was signed by and between the Seattle District, Costco Wholesale Corporation, Mark Hinton, and Hinton Development Corporation, regarding jurisdiction over a filled wetland at a Costco store in Vancouver, Washington. It is important to note that this Agreement does not establish case law, but is a negotiated agreement between the specified parties and addresses a specific factual situation.

The Agreement requires, under Article II, that the Seattle District post a statement on its website regarding an interpretation of the *Talent* decision. This statement is entitled "*District Engineer's response regarding Clean Water Act jurisdiction*" and is available for viewing on the Seattle District's website.¹⁸

The last two sentences of the one-paragraph *District Engineer's response* state:

"Corps of Engineers regulations at 33 C.F.R. § 328.3(a) (5) assert CWA jurisdiction over all tributaries to other jurisdictional waters of the United States. In factual situations where the <u>Headwaters</u> precedent applies, it would supercede [sic] any contrary conclusion that might be drawn from previous Corps of Engineers policy statements regarding ditches."

Lack of Formal Policy Guidance

The Seattle District has not issued other formal guidance or rulemaking. Similarly, the Corps Headquarters has not formally established national policy regarding drainage ditch permitting. This observation is supported by the Joint Memorandum between EPA and the Department of

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¹⁷ A WSDOT survey indicated that the *Talent* decision is being implemented in Oregon, Idaho, and Montana, although not as vigorously as in Washington.

¹⁸ At the time of this report, the URL for the Corps of Engineers – Seattle District, *District Engineer's response regarding Clean Water Act jurisdiction* is:

http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=Headwaters.

the Army, published in Federal Register (FR) Vol. 68, No. 10/Wednesday, January 15, 2003/Pages 1995-1998. 19

Without further formal clarification or rules, it is debatable whether the *District Engineer's response* is generally applicable to roadside ditches, or more narrowly applicable to the ditches referred to in the *Talent* decision (i.e., irrigation canals connecting jurisdictional "waters of the United States.")

Examples of the need for more formal clarification include the following:

- The Supreme Court's only guidance has been in regard to isolated waters (those not physically adjacent to navigable surface waters) that are not within the jurisdiction of the Corps' Section 404 permitting responsibilities [Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers, 2001].
- o There has been no further definition of "waters of the United States." The U.S. EPA's Advanced Notice of Proposed Rulemaking (ANPRM) of 2003²⁰ sought comment on the scope of waters that are subject to the CWA in light of *SWANCC*. More than 130,000 comments were received. With respect to the status of this ANPRM, the referenced EPA website states:

"After consideration of public comments received on whether further regulatory clarification was needed, the EPA and the Corps have decided to not undertake a rulemaking but to preserve the federal government's authority to protect wetlands and other waters...The agencies will continue to monitor implementation of CWA programs to ensure their effectiveness."

However, despite the lack of formal guidance or rules, the Seattle District has adopted the *District Engineer's response* as its policy regarding drainage ditch permitting. In practice, the Seattle District asserts that when utilizing the *District Engineer's response* as policy, it will not issue Section 404 permits unless WSDOTs' roadside drainage ditches are addressed. However, because of the lack of more formal clarification, the need to meet Section 404 permitting and regulatory requirements for WSDOT's drainage ditches continues to be questioned by the Department.

WSDOT Response to Policy Changes

Since the *District Engineer's response* is the Seattle District's official policy, WSDOT has worked with the Corps to interpret when the policy requires permitting of drainage ditches. In an initiative directed toward avoiding delays in project delivery, WSDOT has included a discussion on its website regarding the Seattle District's interpretation of the *Talent* decision.²¹ This

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¹⁹ At the time of this report, the URL for the EPA/Army Joint Memorandum, in Federal Register (FR) Vol. 68, No. 10, Wednesday, January 15, 2003, Pages 1995-1998, is:

http://www.epa.gov/owow/wetlands/guidance/SWANCC/Joint Memo.pdf.

At the time of this report, the URL for background information on the Advanced Notice of Proposed Rulemaking (ANPRM) on the Clean Water Act Definition of "Waters of the United States," 2003, is: http://www.epa.gov/owow/wetlands/guidance/SWANCC/anprm-bg.html.

At the time of this report, the URL for WSDOT guidance referenced in the text of this report is: http://www.wsdot.wa.gov/environment/Talent/TalentDecision.htm.

WSDOT initiative provides project staff with programmatic guidance on how to meet the Section 404 permitting requirements, as opposed to having some projects encounter subsequent requests for additional information to be collected and submitted.

The WSDOT web site notes:

"Since March 31, 2004 representatives of Washington State Department of Transportation (WSDOT) and the US Army Corps of Engineers (COE) have participated in an ongoing discussion over how the Talent Decision will affect the review and permitting of WSDOT projects under Section 404 of the Clean Water Act. This online document summarizes what WSDOT has learned from these discussions, and is intended to provide up-to-date guidance to WSDOT and local agency staff on how the COE is currently regulating roadside ditches in light of the Talent Ruling. WSDOT will continue to correspond with the COE and update this guidance as these discussions proceed..."

"...The Corps' interpretation of the Talent decision is that they may exert jurisdiction whenever there is a hydrological connection between a navigable water of the US and another waterbody. It is irrelevant whether that connection is a canal or ditch. It does not matter whether the connecting watercourse is manmade or not, or whether it is intermittent or perennial. If the connecting waterbody is capable of transporting pollutants to other waters of the US, then it too will be considered jurisdictional."

It is important to note that the available guidance to WSDOT personnel was developed by WSDOT in cooperation with the Seattle District. The guidance is based upon the Seattle District's interpretation of the *Talent* decision, which establishes that certain drainage ditches are jurisdictional and subject to Section 404 permitting. Similar guidance was not located on Corps websites, although a Corps interviewee participating in this study noted that non-transportation entities are referred to the WSDOT website for guidance on the applicability of Section 404 to drainage ditches. Despite the lack of formal policy guidance during 2004 and early 2005, WSDOT acted in accordance with the Seattle District's interpretation that Section 404 requirements apply to highway drainage ditches.

This WSDOT website was recently updated with a new page presenting the Seattle District's new Standard Operating Procedure (SOP) 2005-01, Permitting Requirements for Transportation Activities, which became effective June 14, 2005. SOP 2005-01 cautions that permit requirements are generally determined on a case-by-case basis, but it provides general guidelines on Section 404 permitting to Seattle District personnel and to federal, state, and local department of transportation agencies. The SOP presents discussion and conclusions regarding the types of transportation activities that are 1) exempt from permitting, 2) outside the Seattle District's jurisdiction, or 3) authorized under nationwide permits. Among the various transportation activities discussed in SOP 2005-01, references are made to jurisdictional ditches and their general permitting requirements.

WSDOT's internal guidance reflects the reality that the permit process does not begin before the Corps deems an application as being "complete." It was WSDOT's judgment that ignoring the Seattle District's interpretation, prior to establishment of formal guidance and rules, would lead to project delays. WSDOT chose to present its internal guidance on the internet, in order to assure dissemination of information to consultants and local governments that are also responsible for activities associated with WSDOT's transportation project delivery.

WSDOT has conducted meetings to question the Seattle District's approach regarding Section 404 regulation of drainage ditches. These included meetings with each organization's legal representatives, as well as meetings between the WSDOT Secretary and the Seattle District's Colonel. These meetings did not result in changes to the Seattle District's permitting direction, nor did it result in more formal guidance beyond the *District Engineer's response*.

More recently, WSDOT raised awareness at AASHTO's Standing Committee on the Environment meeting (in Chicago in April 2005) regarding the Seattle District's regulation of drainage ditches.

IMPACTS FROM DRAINAGE DITCH/STORMWATER RUNOFF REGULATORY INTERPRETATIONS AFFECTING WSDOT

Policy Effect of Determining that CWA Section 404 Applies to Highway Drainage Ditches

If some or all of the drainage ditches created or maintained by WSDOT are within the Corps' Section 404 authority, then much of the anticipated benefits of the streamlining process available through the use of the WSDOT Highway Runoff Manual, in accordance with Ecology's Section 402 authority, will not be realized. Interpretation of the *Talent* decision and other decisions (not necessarily dealing directly with Washington) may affect how WSDOT meets its obligations for managing drainage ditches.

Extrapolation of the Seattle District's interpretation that Section 404 requirements apply to highway drainage ditches would, on a nationwide basis, have a substantial financial and schedule impact on the Federal Highway Administration's, state DOTs', and municipal transportation organizations' efforts to provide effective and efficient project delivery. Such extrapolation is based on a consistent application of interpretations (and, in turn, the associated impacts) as described in the Joint Memorandum (Federal Register Vol. 68, No. 10, January 15, 2003, Pages 1995-1998) and in a recent Government Accountability Office (GAO) report on the COE (which included a recommendation that guidance affecting the regulated community be coordinated through Corps Headquarters and applied consistently across the United States). The result of this extrapolation is that federal, state, and local transportation agencies would be required to survey millions of miles of roadways to identify certain features (e.g., ordinary high water levels). These surveys could lead to tens of thousands of miles of highway ditches as being subject to Section 404 requirements.

Impact of the Seattle District's Drainage Ditch Interpretation on WSDOT Projects

WSDOT has had over 20 projects that have been affected by the Seattle District's interpretation of the *Talent* decision. The Seattle District rejected Section 404 permit applications as "incomplete" when they did not address ditches. WSDOT was then faced with changing the permit applications to address the ditches or experiencing a permit delay.

Often, the Section 404 permit is on the project's critical path in terms of schedule. For example, the project timeline for the SR 509/I-5 Freight and Congestion Relief project notes that during September - October 2004, project staff spent almost 300 hours cataloguing ditch information related to the *Talent* decision. There was an additional statement: "Overall, 400 staff hours were

expended to document 34 miles of ditches within the SR 509/I-5 project limits." The project timeline entry for May 2005 states: "WSDOT staff continue work on the *Talent* ruling implementation plan for the SR 509/I-5 Project, with hopes of a JARPA submittal by June or July [2005]."

There is evidence the Seattle District's interpretations regarding the *Talent* decision have had an impact on WSDOT project cost and schedule, though this has not been quantified. While some activities related to drainage ditch inspection and characterization could proceed concurrently with other project activities, it still remains that the Corps' decisions regarding application of the *Talent* decision delayed early project activities while WSDOT participated in the "ongoing discussions" noted on the WSDOT *Talent* decision website.

Drainage Ditch Interpretations and WSDOT Environmental Stewardship

Though interpretation of the *Talent* decision to include highway drainage ditches, as regulated under CWA Section 404, is not firmly established, this does not diminish WSDOT's responsibilities to protect and enhance the environment. The SR 509/I-5 Freight and Congestion Relief project serves as an example.

On this project, the assessment of approximately 34 miles of drainage ditches for potential applicability of Section 404 led to a determination that may activate a real "trigger" for permitting and review. However, reaching this "trigger" by the potential addition of less than 0.05 acre of drainage ditch area did not alter the actions that WSDOT would take to mitigate or avoid impacts on wetlands affected by the project. External and internal reviews and approvals that were in place before the *Talent* decision would have led to the same determinations of mitigation on this project.

It is also worth noting WSDOT staff have underscored that the project streamlining processes, which were established in cooperation with various agencies, will remain in effect to protect the environment and improve project delivery despite the ambiguities of application of the *Talent* decision.

DRAINAGE DITCH/STORMWATER RUNOFF REGULATORY INTERPRETATIONS IN OTHER DOTS

Senior managers in a small group of other state Departments of Transportation (DOTs) that were focus group subjects in the recently completed Streamlining Survey were contacted to determine if regulatory interpretations similar to those of the Seattle District affected their activities. ²²

Oregon Department of Transportation

A program manager at the Oregon DOT (ODOT) noted that ODOT has changed its practices in terms of wetland/waterway delineation due to the *Talent* decision. This individual noted that ODOT has assumed for several years that a roadside ditch acting like a tributary is regulated under Section 404 of the CWA and any discharge of fill material would require a permit. This determination was made by ODOT without direction from the COE – Portland District.

²² JLARC, Overview of Environmental Permitting for Transportation Projects, Report 05-4, January 21, 2005.

In addition to any effect the *Talent* decision may have on permitting for roadside ditches, ODOT must comply with the state's Removal-Fill Law, which requires a permit from the Department of State Lands to remove or fill materials in state waters. The law was enacted in 1967 to protect public navigation, fisheries, and recreation uses of state waters. "Waters of the state" are defined as "natural waterways including all tidal and nontidal bays, intermittent streams, constantly flowing streams, lakes, wetlands and other bodies of water in this state, navigable and nonnavigable, including that portion of the Pacific Ocean that is in the boundaries of this state." ODOT and the Oregon Department of State Lands have a partnership that streamlined the state's Removal-Fill Permit application process, which has won a FHWA Environmental Excellence Award.

The same individual noted that the COE – Portland District has been fairly straightforward in addressing jurisdictional issues; i.e., in order to be a tributary the 'ditch' must have a bed and a bank, an ordinary high water mark/line, and must have flow into a "water of the United States." Streams or other waterways that have ample 'ordinary' flow will have some field evidence of ordinary high water. Once the ordinary high water mark disappears, the jurisdiction under CWA Section 404 ends, unless adjacent wetlands are present. (This is a key difference between the Corps' interpretation of Section 404 jurisdiction in Oregon and Washington.) ODOT's current strategy has included descriptions of feature details in a table identifying the following parameters: feature type (e.g., ditch); connection to water of the United States; presence of an ordinary high water mark; and presence of wetlands. The interviewed manager noted that his recommendation to ODOT regional offices has been to determine the category of Corps jurisdiction. For example, is the feature regulated as a category 5 tributary to "waters of the United States," or does it fall under category 7 as a wetlands adjacent to "waters of the United States," or is it a category 2 interstate water since it occurs in more than one state?

Other Departments of Transportation outside the 9th Circuit's Jurisdiction

Because *Talent* is only one case among many that have an impact on the COE's jurisdiction under CWA Section 404, it may be useful to look at other DOTs outside the 9th Circuit's jurisdiction to compare how they are proceeding with similar responsibilities.

Ohio Department of Transportation

A senior manager was contacted at the Ohio DOT since he participates in national panels with AASHTO and FHWA regarding regulatory programs and relationships, including CWA Section 404 concerns. This individual was unaware of the *Talent* decision and its interpretation by the Seattle District. When informed that highway drainage ditches were being considered as tributaries, he noted that he was unaware of such a determination for other DOTs, did not agree with the determination based on his knowledge of CWA Section 404, and was concerned with the financial and schedule impacts that such a determination would place upon DOTs and other entities, including municipalities.

Texas Department of Transportation

A water programs manager in Texas DOT's (TxDOT's) Environmental Affairs Division provided the following information regarding Corps designation of highway ditches that are subject to CWA Section 404 requirements.

- o Highway drainage ditches constructed to replace existing streams (i.e., previously established as tributaries to "waters of the United States") have been subject to Section 404 jurisdiction.
- Highway drainage ditches that are below the ordinary high water mark of designated Section 404 bodies of water and that connect these bodies are subject to Section 404 jurisdiction.
- o "Upland drainage ditches" (i.e., ditches similar to those in question along WSDOT roadways) are <u>not</u> subject to Section 404 jurisdiction.

RECENT CHANGES IN STATE STORMWATER MANAGEMENT REQUIREMENTS

As federal or state requirements change for stormwater management, the Department of Ecology updates its stormwater management guidance. The Stormwater Management Manual for the Puget Sound Basin was issued in 1992 and first revised in 2001 and re-titled as the Stormwater Management Manual for Western Washington. Ecology issued a draft revision to the manual in 2004 and a final manual was issued in April 2005. In addition, Ecology released the Stormwater Management Manual for Eastern Washington in September 2004 to provide specific guidance for areas east of the Cascade crest.

The 2005 Stormwater Management Manual for Western Washington was updated to address best management practices for pollutant control, particularly for enhanced metals treatment. In addition, the manual targets flow control to model predevelopment conditions, which usually means forested conditions in Western Washington. However, it provides for some exemptions to flow control in highly-urbanized areas.

In general, forested areas in the Northwest have little runoff since approximately 30 percent of the precipitation is taken up by the vegetation and passed to the atmosphere via evapotranspiration. An additional 40 percent of the precipitation is absorbed by the forest duff, which acts like a sponge to slowly release the water to the streams, rivers, wetlands, lakes, and other bodies of water. When the forest is removed for development, approximately 70 percent of precipitation becomes available immediately as runoff, unless stormwater management controls are put in place. More water reaches drainages more quickly, which can then increase erosion and result in changes to stream morphology, as well as increase sediment load carried to and deposited in downstream water bodies. The 2005 manual provides best management practices that meter back the release of runoff to the predevelopment flow rate to the drainage.

The 2005 manual includes two exemptions to the flow control requirement for predevelopment conditions. First, in highly-urbanized basins where long-term urban development conditions are present, the pre-existing site conditions may be used when designing stormwater management controls. Second, if development occurs in a location where runoff may be released to an exempt water body (typically a large body of water, such as the lower reach of a large river), then flow control requirements to not apply to the project.

There are major public facility construction projects that are not required by the Department of Ecology to meet predevelopment conditions for flow control, but the project owner's may still be pursuing extensive stormwater management improvements to address the requirements of a local

drainage basin stormwater management plan. For example, the construction of the third runway at SeaTac Airport led to airport-wide changes in stormwater management, but flow control is not required to meet predevelopment conditions of the Ecology Stormwater Manual. SeaTac Airport is located in the Des Moines Creek watershed and is subject to the recent Des Moines Creek Basin Plan, which will improve drainage, reduce erosion, and improve salmon habitat. The Port of Seattle, which manages the airport, is a participant in numerous stormwater management projects that reflect the goals of the Basin Plan. Among these projects are:

- o A regional detention facility (RDF) to provide stormwater storage and reduce peak flows and channel erosion.
- o A bypass pipe to reduce peak flows and optimize storage volume in the RDF.
- o A flow augmentation facility to maintain minimum stream flows during dry periods to ensure fish survival.
- o Habitat enhancement and restoration to improve fish passage, enhance habitat and stabilize eroding stream bed and banks.
- o Marine View Drive culvert replacement to eliminate a significant fish passage barrier and open up more than two more miles of habitat.

It is also important to note that WSDOT's SR 509/I-5 project (study project 9) has contributed \$9 million toward the construction of the Des Moines Basin RDF.

IMPACT OF RECENT CHANGES IN STATE STORMWATER MANAGEMENT REQUIREMENTS ON WSDOT

The WSDOT Highway Runoff Manual (HRM) must be equivalent to the Ecology Stormwater Management Manuals, in order to receive full approval from Ecology. Since the HRM has historically addressed the requirements of the Ecology manual, it has been possible to streamline the CWA Section 401 Water Quality Certification by referencing the HRM as the standard for WSDOT to follow during construction and to maintain compliance for post-construction operations. Last year, the HRM was updated to reflect Ecology's 2004 Stormwater Management Manual for Western Washington, except for three conditions that remain in the HRM:

- o Use of the existing site condition in lieu of the predevelopment flow control target.
- o Use of 30,000 Average Daily Traffic (ADT) as the threshold for applying enhanced treatment for stormwater runoff.
- Exemption from flow control requirements for stormwater discharges to WSDOT's list of exempt rivers.

As a result, Ecology only issued conditional approval of the revised Highway Runoff Manual and the streamlining benefit for the Section 401 Water Quality Certification was temporarily constrained.

During the past year, WSDOT and Ecology have negotiated flow control requirements and appear to be approaching an agreement. WSDOT prefers to design stormwater management to pre-existing site conditions, rather than predevelopment conditions, where possible since there are considerable differences in design and construction costs to address predevelopment flow

control requirements. In long-term, highly-urbanized areas, WSDOT may be able to continue using pre-existing site conditions to determine flow control requirements; however, this is dependent on how the term "highly-urbanized" is defined and applied. In other areas, flow control will likely have to conform to predevelopment site conditions.

The HRM has used 30,000 ADT as the cutoff for the use of basic treatment best management practices (BMPs) for stormwater runoff. WSDOT has proposed using this threshold to determine when to use basic BMPs or enhanced treatment requirements for dissolved metals in runoff. Ecology considers the use of ADT as a legitimate means of establishing the threshold since it is based on the number of vehicles using a segment of roadway; the metals are deposited by the vehicles on the roadway where they are dissolved by runoff. Ecology will allow WSDOT to use 30,000 ADT as the treatment threshold for projects going to bid during the present 2005-2007 Biennium, but is searching for additional data upon which to establish a permanent ADT threshold value.

WSDOT maintained a list for about ten years of waterbodies where it has discharged stormwater without flow controls. The 2005 version of the Western Washington Stormwater Management Manual, however, has an updated list of exempt waters that was developed through joint WSDOT and Ecology funding. WSDOT should be using this updated list. Ecology has also published a list of exempt waters for Eastern Washington that WSDOT should use.

Both Ecology and WSDOT are awaiting Endangered Species Act evaluations of the Stormwater Management Manuals and the HRM, respectively, from NOAA Fisheries and U.S. Fish and Wildlife Service. NOAA is reportedly writing an ESA supplement for both the Ecology and WSDOT manuals. The satisfactory outcomes of these evaluations are critical since WSDOT receives federal funding for transportation projects and, therefore, must address ESA requirements.

NEXT STEPS

The most critical issue related to application of the *Talent* decision is for WSDOT to successfully obtain formal federal guidance on drainage ditch regulation requirements (see Recommendation #5 in Chapter 7). In the mean time, the following points are some suggested next steps to consider while the policy remains ambiguous:

- o Determine whether it is in the continuing interest of WSDOT to maintain or make generally available the WSDOT *Talent* decision website.
- O Continue to use available communications and forums to share information with senior executives and staff of other DOTs about interpretations and policy guidance regarding Section 404 requirements for drainage ditches, survey the application of permitting activities in other states, and participate in relevant FHWA and AASHTO water program task forces and working groups. Such participation will be aimed at: informing other DOTs and the FHWA of Corps decisions regarding drainage ditches, seeking information on relevant drainage ditch determinations that could be applied to WSDOT, and influencing future guidance regarding highway drainage ditches whether the guidance is provided by the Corps or other agencies.

CHAPTER SEVEN – CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Of the ten projects reviewed in this study, there was a range of successes in completing the environmental documentation phase in a timely manner. Environmental permitting only required a fraction of the time needed for the NEPA/SEPA documentation process. Early and ongoing communication between WSDOT and the resource agencies was noted as vital to streamlining of the study projects and appears to be the single most important factor in streamlining the environmental documentation and permitting processes. Formal partnering mechanisms provided a means to promote ongoing dialogue and facilitate multi-agency concurrence, while the use of reader-friendly EIS and EA documents enhanced communication with stakeholders. When the environmental analysis was completed in a timely manner, there appeared to be a reasonable opportunity to streamline the ESA consultation and environmental permitting processes as well.

A variety of project-level activities streamlined environmental documentation and permitting for the study projects. Streamlining was achieved through the cumulative efficiencies of the following activities:

- Communication between WSDOT and resource agencies, including:
 - o Formal partnering
 - Presentations and site visits
- Clear and complete environmental permit applications from WSDOT
 - o Clear regulatory process supported by rules, guidance, and policy
 - o Consistency of multi-agency permitting requirements (e.g., preparation of a single JARPA, consistency between format and drawing requirements)
 - o Agreement between WSDOT and resource agencies regarding design and mitigation prior to permitting
 - o Review and discussion of draft permit conditions, where allowed by statute and/or rule.
- Timely reviews of permit applications
 - o WSDOT liaison program, including the MAP Team
 - o Consistent staffing at the resource agencies
- Supporting technology
 - o Online JARPA
 - o GIS workbench

It is premature to announce that any particular regulatory area has advanced in its streamlining efforts to a point that further efficiencies cannot be found.

Seven factors were assessed for their contribution as root causes of schedule delays, including planning, design, right-of-way, environmental documentation, environmental permitting, third-party lawsuits, and funding delays or interruptions. Planning and design support the environmental documentation and permitting of each project. When WSDOT revises the planning, design, and right-of-way for a project, there will likely be a ripple effect through the environmental documentation and/or permit applications required for approval of construction. In addition, if the resource agencies determine, through their respective reviews of the environmental documentation and permit applications, that there are regulatory or technical issues with the proposed project, then there will be a similar ripple effect that may affect several or all five of these factors. The last two factors, third-party lawsuits and funding delays or interruptions, are independent of the environmental documentation and permitting processes, but were observed to have a direct impact on their progress.

Nine of the ten study projects experienced funding delays or interruptions, which have caused the "shelving" of projects and, consequently, the slowing or halting of the business processes of their associated environmental documents and permits. In order to re-initiate these projects when funding is available at a later date, any environmental changes that have occurred at the project location must be addressed through an updated impact analyses and mitigation plans. This may lead to permitting delays as environmental impacts are reexamined and new mitigation measures are potentially needed.

The management recommendations indicated below focus on continuous improvement in project delivery, including improved project management measures, consistent use of technology advancements, and early communication with stakeholders.

MANAGEMENT RECOMMENDATIONS

Recommendation 1

As part of the Department's Managing Project Delivery practices, WSDOT should coordinate all phases of project scheduling with state regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.

O This coordination will allow resource agencies to analyze the staffing required to support WSDOT's efforts to meet the advertisement dates for transportation projects, as well as corresponding environmental documentation and permitting requirements for each project.

Legislation Required: None

Fiscal Impact: JLARC assumes this coordination could be done within existing

resources.

Completion Date: Ongoing

Benefit: Enhances business process efficiency for environmental

permitting through interagency coordination and cooperation.

Recommendation 2

The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the goal of

assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the state of Washington.

o This cost-benefit analysis should consider all costs of establishing a new regulatory program, including, but not limited to, the costs of hiring and supporting additional personnel, capital costs for office space and equipment, promulgating new regulations and guidance, and communicating with the regulatory community regarding the change in program authority.

Legislation Required: Legislation would be required to adopt the Section 404 permitting

authority and promulgate regulations, if the analysis indicated

this was warranted and feasible.

Fiscal Impact: JLARC assumes this study could be done within existing

resources.

Completion Date: January 2006

Benefit: Inclusion of Section 404 permitting authority within the same

organization that implements the Section 401 permitting authority has the potential to streamline the permitting business process under these Clean Water Act authorities for the entire regulated community. Further, it would make the 404 permitting process

accountable to the state of Washington.

Recommendation 3

The WSDOT Environmental Services Office should encourage project management teams to use online permitting processes, such as the online Joint Aquatic Resource Permit Application (JARPA) developed by the Office of Regulatory Assistance, and WSDOT should periodically report statistics on the proportion of applications submitted on-line. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the online JARPA.

Legislation Required: None

Fiscal Impact: JLARC assumes this agreement could be done within existing

resources. However, consultant costs associated with software development would be incurred if FPA integration proceeds.

Completion Date: March 2006

Benefit: Online environmental permitting processes were developed to

foster consistency in the format and content in permit applications and to facilitate decision making by resource agencies, all of which appear to streamline the business processes for environmental permitting. Inclusion of the FPA could improve consistency and clarify the application process,

particularly for highway project applicants.

Recommendation 4

WSDOT should include cost and schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.

This effort may be coordinated with the Legislature's and TPAB's ongoing roles of assessing WSDOT's project delivery and milestone performance. An interagency workgroup is currently focusing on establishing consistent measures for WSDOT projects.

Legislation Required: None

Fiscal Impact: JLARC assumes the approach for this measure could be

developed within existing resources and coordinated with other efforts by WSDOT to identify project delivery performance measures. Reporting of actual costs and schedule progress may require modifications to accounting processes and/or information

systems.

Completion Date: January 2006 to establish the measure, with reporting applied

subsequently to projects in the pre-construction phase. On-going reporting may need to be phased in to allow for changes to

accounting processes and information systems.

Benefit: Clarify the requirements to collect information on the time and

resources used to complete environmental documentation and permitting. Collecting this information would allow a better

assessment of streamlining efforts.

Recommendation 5

WSDOT should make a formal request of and coordinate with the U.S. Army Corps of Engineers Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the United States," as indicated in the *Talent* decision.

o This request could be coordinated with FHWA regional and headquarters staff, AASHTO, the Governor's office, and Congressional representatives.

Legislation Required: None

Fiscal Impact: JLARC assumes this task could be completed within existing

resources

Completion Date: January 2006

Benefit: The Talent decision is applicable in the states within the

geographic area of the 9th Circuit Court of Appeals. WSDOT projects will benefit by having predictable and consistent application of the ruling to roadside ditches within the states of

the 9th Circuit.

Recommendation 6

WSDOT and the Department of Ecology should complete their definition for historically "highly-urbanized" areas, as applicable to stormwater runoff management.

o WSDOT and Ecology should consider illustrating these "highly-urbanized" areas through a state geographic information system, in order to clarify the lands that would, at present, be exempted from predevelopment flow control requirements.

Legislation Required: None

Fiscal Impact: JLARC assumes this task could be completed within existing

resources.

Completion Date: March 2006

Benefit: The exemption from predevelopment flow control requirements

for roadways in highly-urbanized areas is thought to save

WSDOT time and resources.

Recommendation 7

WSDOT should develop guidelines for suspending environmental documentation activities on projects where construction funding is not provided.

Legislation Required: None

Fiscal Impact: JLARC assumes this task could be completed within existing

resources.

Completion Date: March 2006

Benefit: By identifying criteria for when environmental documentation

work may merit suspension, the inefficiencies resulting from

funding interruptions can be reduced.

Recommendation 8

WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g., early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting technology, and dedicated/multi-agency staffing). In addition, the agencies should establish performance indicators regarding which projects utilize these streamlining approaches and include this information as part of their on-going performance reporting.

Legislation Required: None.

Fiscal Impact: JLARC assumes this task could be completed within existing

resources.

Completion Date: March 2006

Benefit: The consistent implementation of the project-level streamlining

activities, as noted in the report conclusions, are the baseline effort necessary to facilitate efficient project delivery during

environmental analysis and permitting.

AGENCY RESPONSES

We have shared the report with the Department of Transportation, the Department of Ecology, the Department of Fish and Wildlife, and the Office of Financial Management. Their written responses are included as Appendix 2.

ACKNOWLEDGEMENTS

We would like to thank the numerous staff at the Washington State Departments of Transportation, Ecology, and Fish and Wildlife who provided information to assist with this

report. Megan White, Joel Gjuka, Carol Lee Roalkvam, Scott Boettcher, and Gayle Kreitman provided extensive information and direction to ensure the accuracy of the study. We also would like to thank the staff of the U.S. Army Corps of Engineers – Seattle District, U.S. Fish and Wildlife Service, and NOAA Fisheries who provided additional information and assistance. Finally we extend our gratitude to TechLaw, Inc., for their help and expertise with conducting the study.

This study was conducted by Keenan Konopaski of the JLARC Staff.

Ruta Fanning Legislative Auditor

On October 7, 2005, this report was approved for distribution by the Transportation Performance Audit Board.

Doug Hurley Chair

APPENDIX 1 – SCOPE AND OBJECTIVES

Business Process Review of
Environmental Permitting
for Transportation Projects
Conducted for the Transportation
Performance Audit Board
Funded by the Legislative
Transportation Committee

SCOPE AND OBJECTIVES

JANUARY 2005



STATE OF WASHINGTON

JOINT LEGISLATIVE AUDIT AND REVIEW

COMMITTEE

STUDY TEAM

KEENAN KONOPASKI JILL SATRAN

LEGISLATIVE AUDITOR

ANN DALEY

Joint Legislative Audit & Review Committee 506 16th Avenue SE Olympia, WA 98501-2323

> (360) 786-5171 (360) 786-5180 Fax

Website: http://jlarc.leg.wa.gov e-mail: neff.barbara@leg.wa.gov

MANDATE

The Transportation Performance Audit Board (TPAB) and the Legislative Transportation Committee (LTC) have recently approved and funded a targeted set of performance measure reviews, performance audits, and studies to improve the efficiency and effectiveness of state transportation programs. The Joint Legislative Audit and Review Committee (JLARC) is to conduct several of these audits, including this business process review of environmental permitting for transportation projects.

BACKGROUND

A long-running concern associated with enhancing the state's transportation system is how to safeguard environmental quality without imposing untimely delays on transportation solutions.

As a first step in addressing this concern, JLARC recently completed an overview of efforts to streamline the permitting process in Washington and other states. Based on this overview, TPAB has concluded that:

- Although many projects have relatively short timeframes for completion of environmental documentation and permits, a small fraction of projects are complex and require 26 - 42 months for environmental documentation and up to two years for permitting; and
- Programmatic permits have replaced individual project permits for most routine maintenance and repair projects, so that this aspect of permit streamlining is largely complete.

The overview did identify several successful permit streamlining activities. However, it is clear that substantial time and effort is required to complete the permitting process for major projects. Therefore, further questions remain concerning which aspects of the permitting process lead to major project delays and how streamlining efforts can successfully address those delays.

The schedules of major transportation projects are also affected by a variety of factors besides permitting, such as third-party lawsuits and right-of-way issues. Given limited transportation resources, an analysis of the relative impact of all factors contributing to project delay is necessary to evaluate the need for further permit streamlining efforts. As a result, additional research into major project delays attributable to permitting and other "delay factors" has been added to the TPAB work plan.

STUDY SCOPE

As directed by TPAB, this study will analyze the business process flow associated with environmental permitting to identify the major contributors to project delays and cost increases, with the goal of prioritizing streamlining efforts based on their ability to address major delay and cost increase factors.

STUDY OBJECTIVES

- Evaluate the regulatory requirements for a set of major projects, including projects completed in a timely fashion as well as those that have experienced delays, in order to clarify the regulatory business process and identify environmental regulatory barriers that result from federal requirements, policy choices by state and local governments, and management decisions.
- Assess the applicability of successful environmental approval and permit streamlining efforts to various environmental requirements for major transportation projects. This assessment will be used to prioritize streamlining activities in terms of their ability to reduce the time and/or costs associated with the environmental approval process as well as to identify regulatory areas where efficiencies have largely been achieved.
- 3. Analyze recent project histories to identify the root cause(s) of schedule delay attributable to factors in addition to permitting, such as design, planning, third-party lawsuits, and right-of-way.
- 4. Determine the extent to which the regulatory goals concerning drainage ditches and stormwater runoff have changed over time. Identify the impact, if any, of these regulatory changes on the cost and time to completion of major transportation projects.
- 5. Based on the information obtained through the business process review of the environmental approval and permitting process, identify management recommendations to be used as the basis for a regulatory improvement plan that includes an environmental process improvement strategy to be prepared by resource agencies and WSDOT. This may include a requirement for agencies to report on progress in implementing this plan to TPAB.

Timeframe for the Study

Preliminary report to be delivered to TPAB in June 2005, with a final report available in July.

JLARC Staff Contact for the Study

Keenan Konopaski (360) 786-5187 konopaski.keenan@leg.wa.gov Jill Satran (360) 786-5177 satran.jill@leg.wa.gov

JLARC Study Process Legislative JLARC-Legislative Member Mandate Initiated Reauest **Staff Conduct** Study and Present Report Report and Recommendations Adopted at Public Committee Meeting Legislative and Agency Action; JLARC Follow-up and Compliance Reporting

Criteria for Establishing JLARC Work Program Priorities

- ➤ Is study consistent with JLARC mission? Is it mandated?
- ➤ Is this an area of significant fiscal or program impact, a major policy issue facing the state, or otherwise of compelling public interest?
- ➤ Will there likely be substantive findings and recommendations?
- ➤ Is this the best use of JLARC resources: For example:
 - Is the JLARC the most appropriate agency to perform the work?
 - Would the study be nonduplicating?
 - Would this study be costeffective compared to other projects (e.g., larger, more substantive studies take longer and cost more, but might also yield more useful results)?
- Is funding available to carry out the project?

APPENDIX 2 – AGENCY RESPONSES

- Department of Transportation
- Department of Ecology
- Department of Fish and Wildlife
- Office of Financial Management will be included in the final report

BUSINESS PROCESS REVIEW OF ENVIRONMENTAL PERMITTING FOR TRANSPORTATION PROJECTS



Secretary of Transportation

Transportation Building 310 Maple Park Avenue S.E. P.O. Box 47300 Olympia, WA 98504-7300

360-705-7000 TTY: 1-800-833-6388 www.wsdot.wa.gov

RECEIVED

SEP 2 8 2005

JLARC

September 28, 2005

Ms. Ruta Fanning Joint Legislative Audit and Review Committee PO Box 40910 Olympia, WA 98504-0910

Re:

Business Process Review of Environmental Permitting of Transportation Projects

Preliminary Report

WSDOT Agency Response

Dear Ms. Fanning:

Thank you for the opportunity to provide the Washington State Department of Transportation's (WSDOT) perspective on the Business Process Review of Environmental Permitting for Transportation Projects, (revised preliminary draft) dated September 9, 2005. We are pleased the report recognizes the many successes that WSDOT has achieved in streamlining our environmental business processes for WSDOT's largest and most complex projects—reducing the time and cost of preparing environmental documentation and securing environmental permits.

WSDOT and our partner regulatory agencies have long recognized that early and ongoing communication is vital to the efficient project delivery. And together we have taken a number of steps to improve our communication around many of the most difficult environmental issues, which reduces our project schedule risk. Together, we've formed the Signatory Agency Committee, which brings regulatory agencies together with WSDOT and FHWA to integrate aquatic resource issues and NEPA/SEPA requirements. Further, through the WSDOT liaison program and Multi-Agency-Permit-Team, we are funding positions within resource agencies that specialize in transportation project permitting, review coordination, and technical assistance.

Most recently we have obtained programmatic fish protection and water quality permits, funded the development and begun testing of Ecology's Office of Regulatory Assistance online permit system, collaborated with the Department of Natural Resources to simplify Forest Practices permit process, and continued to conduct regular project coordination meetings with Ecology and the Army Corps of Engineers.

September 28, 2005 Ms. Ruta Fanning Page 2

Several of the streamlining tools listed above were not available to the ten projects studied in this JLARC report. However, we agree that, as JLARC's report suggests, there is room to continue to improve the regulatory system. You will find our responses to the study's eight recommendations in the attached table.

If you have any questions, or require any additional information, please feel free to contact me or Megan White, Director, Environmental Services Office at (360) 705-7487.

Sincerely,

John F. Conrad Assistant Secretary

Washington State Department of Transportation

JFC:cr Enclosure

cc:

Victor Moore, Director, OFM
Jeffrey Koenings, Director, WDFW
Jay Manning, Director, Ecology
Paula Hammond, WSDOT
Megan White, WSDOT

Table 1: WSDOT Responses to JLARC Recommendations

Recommendation	Agency Position	Comments
Recommendation 1 As part of the Department's Managing Project Delivery Practices, WSDOT should coordinate all phases of project scheduling with state regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.	Partially concur	WSDOT agrees that much of this recommendation is appropriate for large, complex projects subject to NEPA, similar to those reviewed in this report. And recently passed law (SAFETEA-LU) furthers supports this recommendation, with the inclusion of federal agencies, tribes and public: **Title VI - Transportation Planning & Project Delivery** Section 6002 - Efficient Environmental Reviews for Project Decision-making - Creates a new process, mandatory for EISs (issuing NOI after 8/11/05) and optional for EAs. Adds requirement to develop a "plan for coordinating public and agency participation" which may include schedule with deadlines. By presenting the Managing Project Delivery process as the starting place, JLARC correctly identifies a key area for improvement. We agree it is important to more clearly identify environmental activities and their associated schedules. Further, we believe that building project schedules can be improved by communicating with state regulatory agencies. However, we do not concur with this recommendation as it pertains to interagency establishment of target advertisement dates. The current project prioritization process makes such coordination infeasible. The legislature typically selects—based on legislative priorities, such as safety and mobility—specific projects for biennial funding. Our goal is to provide the legislature maximum flexibility in developing the transportation program to deliver their priorities. Thus, we support the legislature with high level scoping information. However, the legislature retains broad discretion in directing the time frames of projects. These times frames are necessarily developed quickly and fluidly during legislative session as consensus on legislative priorities is developed.
Recommendation 2 The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the	Concur	This recommendation applies specifically to Ecology. We concur with the goal, but recognize that delegation could difficult to achieve.

Recommendation	Agency Position	Comments
goal of assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the State of Washington.		
Recommendation 3 The WSDOT Environmental Services Office should encourage project management teams to use online environmental permitting processes, such as the online Joint Aquatic Resource Permit Application (JARPA) developed by the Office of Regulatory Assistance, and WSDOT should periodically report statistics on the proportion of applications submitted online. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the online JARPA.	Concur	WSDOT will work with the One-Stop E-Permitting steering committee to identify projects anticipating JARPA submittals and set targets for use of online JARPA within the constraints of the existing prototype system. WSDOT will work with Ecology on an implementation plan and standard reporting. WSDOT staff recently met with staff from the DNR Forest Practices Section to develop clear concise permit application instructions for highway transportation projects. We anticipate reducing the instructions from 32 pages to 4 pages and resolving technical issues with the mapping requirements for linear transportation projects. DNR has agreed to meet with the representatives from the E-permitting steering committee, including WSDOT, to discuss an online Forest Practices Application module.
Recommendation 4 WSDOT should include cost and schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.	Concur	As JLARC's early reports found, our ability to track and report project-specific data is hindered by legacy information systems. WSDOT is currently conducting a critical applications assessment of our information systems as recommended in JLARC's recent review of WSDOT's Capital Project Management. Implementation of this recommendation is contingent upon funding for upgrading the agency's IT systems. WSDOT will continue to work with TPAB and the legislature to develop consistent performance measures and to create the systems required to report on them.
Recommendation 5 WSDOT should make a formal request of and coordinate with the Corps of Engineers	Concur	WSDOT is actively pursuing resolving this issue with the Corps. Currently, we are pursuing a limited definition of jurisdiction in the permit application of a particular

Recommendation	Agency Position	Comments
Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the United States," as indicated in the <i>Talent</i> decision.		project. We are hopeful that the Corps will accept this approach. If they cannot, we will pursue legal review and the recommended formal request to Corps of Engineers Headquarters.
Recommendation 6 WSDOT and the Department of Ecology should complete their definition for historically "highly urbanized" areas, as applicable to stormwater runoff management.	Concur	Ecology staff has taken a positive step in developing an initial methodology to mapping "highly urbanized" areas. Staff expects to complete this mapping by the end of September. However, we understand that Ecology's mapping methodology and approach could be subject to further refinement following the NPDES municipal permit public involvement process, in which substantial input is expected from parties other than WSDOT, including affected municipalities and interested stakeholders.
Recommendation 7 WSDOT should develop guidelines for suspending environmental documentation activities on projects where construction funding is not provided.	Do not concur	WSDOT very much supports stable funding to meet Washington State's transportation needs. However, allocating construction funds to projects in the conceptual, preliminary-design phase does not address the problems created by stopand-start funding recognized in the report.
		This recommendation raises serious concerns regarding duplication of effort, and a risk of unintended consequence of poor project scoping.
		First, WSDOT recently established guidelines for managing projects when funding concerns arise. These guidelines are developed in response to recommendation #2 in the January 2005 JLARC report: "Overview for Washington State Department of Transportation Capital Project Management." WSDOT is implementing this recommendation and has issued an Executive Order that requires Project Management Plans for all projects. Project Management Plans—a tool unavailable to the 10 projects reviewed—specifically address project-funding issues, guide teams in risk management, and reduce the likelihood of inefficient investment in environmental work.
		Second, WSDOT and other lead agencies acknowledge that NEPA and SEPA are both environmental analysis and public decision making laws. For complex projects,

Recommendation	Agency Position	Comments
		environmental review must be completed in order to evaluate options, determine the best course of action, and minimize harm to the environment. Often a proposal is funded only through planning, not for construction, because the scope of the project is not known. For example, this recommendation would be detrimental to projects such as the SR 520 Bridge Replacement or the Alaskan Way Viaduct and Seawall Project—WSDOT would have a very difficult time meeting the public and legislative expectations for delivery if we waited to work on projects until construction funding is provided.
Recommendation 8 WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g., early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting technology, and dedicated multi-agency staffing). In addition, the agencies should establish performance indicators regarding which projects utilize these streamlining approaches and include this information as part of their on- going performance reporting.	Concur	For WSDOT, this recommendation can be incorporated into the Managing Project Delivery process. WSDOT and the state regulatory agencies can develop a means of reporting to address this recommendation.



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

SEP 3 0 2005

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000 TTY 711 or 800-833-6388 (For the Speech or Hearing Impaired)

September 28, 2005

Ms. Ruta Fanning, Legislative Auditor Joint Legislative Audit and Review Committee P.O. Box 40910 Olympia, WA 98501-2323

RE: $\underline{\mathbf{E}}$

Business Process Review of Environmental Permitting for Transportation Projects
- Preliminary Report (September 9, 2005)

Dear Ms. Fanning:

I am writing in response to the preliminary report entitled "Business Process Review of Environmental Permitting for Transportation Projects" issued by your office on September 9, 2005, and your subsequent request of September 19, 2005 that the Department of Ecology (Ecology) provide its formal position on each of the report's recommendations.

Our formal position on each of the report recommendations are as follows (using the format provided in your September 19, 2005 letter):

Recommendation	Agency Position	Comments
#1 As part of the Department's Managing Project Delivery practices, WSDOT should coordinate all phases of project scheduling with state regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.	Concur.	Ecology regards this recommendation as a sound and important business practice.

Recommendation	Agency Position	Comments
#2 - The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the goal of assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the state of Washington.	Partially Concur.	Given that only two states have obtained 404 permitting authority from the U.S. EPA (see Michigan and New Jersey at http://www.epa.gov/owow/wetlands/facts/fact23.html), as well that only "non-navigable" waters appear to be delegable, Ecology is not overly optimistic that delegation of 404 permitting authority to Washington would result in significant costeffective streamlining of CWA permitting within Washington. That being said however, Ecology does support updating a prior analysis it conducted in 2001 that looked into this very same issue.
#3 – The WSDOT Environmental Services Office should encourage project management teams to use on-line permitting processes, such as the on-line Joint Aquatic Resource Permit Application (JARPA) developed by the Office of Regulatory Assistance, and WSDOT should periodically report statistics on the proportion of applications submitted on-line. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the on-line JARPA.	Concur.	No additional comment.
#4 - WSDOT should include cost and schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.	Concur.	No additional comment.

Recommendation	Agency Position	Comments
#5 - WSDOT should make a formal request of and coordinate with the U.S. Army Corps of Engineers Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the Unites States," as indicated in the <i>Talent</i> decision.	Concur.	No additional comment.
#6 WSDOT and the Department of Ecology should complete their definition for historically "highly-urbanized" areas, as applicable to stormwater runoff management.	Concur.	Ecology's 2005 manual identified criteria for defining urban areas that would qualify to use the existing land cover condition as the flow control target. WSDOT and Ecology have partnered on a process to determine which basins meet the criteria. The results should be know and available for analysis within a few weeks. Ecology and WSDOT will then be in a better position to determine next steps regarding those basins within which projects may use the existing land cover condition as the flow control target.
#7 - WSDOT should develop guidelines for suspending environmental documentation activities on projects where construction funding is not provided.	Concur.	No additional comment.
#8 WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g., early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting	Concur.	Ecology regards this as a good idea and looks forward to working jointly with WSDOT and WDFW as suggested here.

Ms. Ruta Fanning, Legislative Auditor September 28, 2005 Pg. 4

Recommendation	Agency Position	Comments
technology, and dedicated/multi-agency		
staffing). In addition, the agencies		
should establish performance indicators		
regarding which projects utilize these		
streamlining approaches and include this		
information as part of their on-going		
performance reporting.		

Thank you for opportunity to provide our response to the report. We look forward to receiving the final version. If you have any questions please do not hesitate to contact me at 360/407-7001 (jman461@ecy.wa.gov), or Scott Boettcher at 360/407-7564 (sboe461@ecy.wa.gov).

Sincerely,

Jay J. Manning

Director

cc: Doug MacDonald, WSDOT

Megan White, WSDOT

Paula Hammond, WSDOT

Jeff Koenings, WDFW

Gayle Kreitman, WDFW

Polly Zehm, Ecology

Greg Sorlie, Ecology

Scott Boettcher, Ecology

Victor Moore, OFM

Anne-Marie Sweeten, OFM



State of Washington DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: 600 Capitol Way N • Olympia, WA 98501-1091 • (360) 902-2200, TDD (360) 902-2207 Main Office Location: Natural Resources Building • 1111 Washington Street SE • Olympia, WA September 29, 2005

Ms. Ruta Fanning, Legislative Auditor Joint Legislative Audit and Review Committee Post Office Box 40910 506-16th Avenue Southeast Olympia, Washington 98501-2323

Dear Ms. Fanning:

RE: Business Process Review of Environmental Permitting for Transportation Projects – Preliminary Report

Thank you for the opportunity to provide input and feedback on the "Business Process Review of Environmental Permitting for Transportation Project" dated September 9, 2005. The following is Washington Department of Fish and Wildlife's (WDFW) response to the management recommendations:

RECOMMENDATION	AGENCY POSITION	COMMENTS
Rec. 1: As part of the Department's Managing Project Delivery practices, WSDOT should coordinate all phases of project scheduling with regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.	Concur.	Concur that better coordination is required. Early communication and coordination clearly improves the permitting process and outcomes.
Rec. 2: The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the goal of assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the State of Washington.		No objection to this recommendation, however; costs should include adequate funding to ensure appropriate resources are provided on a continued basis to conduct project review and permitting.

Rec. 3: The WSDOT Environmental Services Office should encourage project management teams to use online environmental permitting processes, such as the online Joint Aquatic Resource Permit Application (JARPA) developed by the Office of Regulatory Assistance. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the online JARPA. Rec. 4: WSDOT should include cost and	Concur.	No objection to this recommendation. No objection to this
schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.		recommendation, provided all costs, including those for impacts to natural resources, as well as benefits are included. We recommend that WSDOT work with the natural resource and regulating agencies to identify these costs and benefits.
Rec. 5: WSDOT should make a formal request of and coordinate with the Corps of Engineers Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the United States," as indicated in the <i>Talent</i> decision.		No objection to this recommendation. Predictable and consistent application of the ruling would be beneficial to WSDOT. The <i>Talent</i> decision has no impact on HPA jurisdiction.
Rec. 6: WSDOT and the Department of Ecology should complete their definition for historically "highly urbanized" areas, as applicable to stormwater runoff management.		"Highly-urbanized" areas significantly contribute to stormwater run-off that ultimately impact the quality of fish habitat, both through degraded water quality and flow impacts to channel structure and integrity. While we are sympathetic with the costs associated with retrofitting stormwater structures in urbanized areas, we are also mindful of the impacts and therefore costs to the aquatic resources of the state. We

Rec. 7: WSDOT should develop guidelines for limiting efforts associated with initial scoping, preliminary design, and environmental documentation, such that projects meeting the guidelines would be "shelved" unless a funding mechanism		would be supportive of an approach that also benefits fish life. No objection to this recommendation. Project "shelving" can significantly contribute to re-design and permit delays.
for construction is provided.		
Rec. 8: WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g. early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting technology, and dedicated/multi-agency staffing). In addition, the agencies should establish performance indicators regarding which projects utilize these streamlining approaches and include this information as part of their on-going performance reporting.	Concur.	

Again, thank you for the opportunity to participate in this process. If you have any questions, please contact Gayle Kreitman at (360) 902-2564 or me at (360) 902-2225.

Director

cc:

Scott Boettcher, Ecology Megan White, WSDOT Greg Hueckel, WDFW Peter Birch, WDFW Don Haring, WDFW Gayle Kreitman, WDFW

Business Process Review of En	VIRONMENTAL	PERMITTING FOR	Transportation	Projects



STATE OF WASHINGTON OFFICE OF FINANCIAL MANAGEMENT

Insurance Building, PO Box 43113 • Olympia, Washington 98504-3113 • (360) 902-0555

October 5, 2005

Ms. Ruta Fanning Legislative Auditor Joint Legislative and Audit Review Committee 506 - 16th Avenue SE Olympia, WA 98501-2323

Dear Ms. Fanning:

Thank you for the opportunity to review your preliminary report on the Business Process Review of Environmental Permitting for Transportation Projects. The Office of Financial Management (OFM) offers the following response to the eight recommendations contained in the report.

Recommendation	OFM Position	Comments
1. As part of the Department's Managing Project Delivery practices, WSDOT should coordinate all phases of project scheduling with state regulatory agencies, including the establishment of target advertisement dates, to ensure they accommodate the agencies' estimates of time required to complete environmental analyses and permit approvals.	Partially concur	While OFM supports coordinating schedules for environmental activities between WSDOT and state regulatory agencies, we are concerned with this recommendation as it relates to the coordination of target advertisement dates. WSDOT must be able to establish and maintain target advertisement dates with certainty.
2. The Department of Ecology should analyze the costs and benefits of obtaining Section 404 permitting authority from the U.S. Environmental Protection Agency, with the goal of assessing whether such changes would result in cost effective streamlining of permitting under the Clean Water Act within the state of Washington.	Concur	No additional comment.
3. The WSDOT Environmental Services Office should encourage project management teams to use online permitting processes, such as the online Joint Aquatic Resource Permit Application (JARPA) developed by the Office of	Concur	OFM supports the use of an online permitting process and the discussion between the One-Stop-E-Permitting steering committee and DNR to integrate forest practices permitting requirements.

Regulatory Assistance, and WSDOT should periodically report statistics on the proportion of applications submitted online. In addition, the One-Stop E-Permitting steering committee should discuss with DNR the benefits and practicality of integrating Forest Practices Act (FPA) permitting for transportation projects in a manner similar to the online JARPA.		
4. WSDOT should include cost and schedule performance on environmental documentation and permitting tasks as an ongoing project delivery performance measure.	Concur	OFM supports WSDOT's efforts to upgrade its information technology systems to include performance on environmental documentation and permitting.
5. WSDOT should make a formal request of and coordinate with the Corps of Engineers Headquarters to establish formal guidance that consistently applies Clean Water Act Section 404 solely to highway drainage ditches which act as conduits between "waters of the United States," as indicated in the <i>Talent</i> decision.	Concur	No additional comment.
6. WSDOT and the Department of Ecology should complete their definition for historically "highly urbanized" areas, as applicable to stormwater runoff management.	Concur	No additional comment.
7. WSDOT should develop guidelines for suspending environmental documentation activities on projects where construction funding is not provided.	Concur	OFM supports the department's executive order requiring project management plans on all projects. This process provides guidelines to identify opportunities where the suspension of environmental documentation activities is the appropriate action.
8. WSDOT, Ecology, and WDFW should distribute a joint policy statement to staff, directing them to focus streamlining activities for complex transportation projects in a prioritized manner on demonstrated areas of success (e.g., early and ongoing communication, clear and complete permit applications, timely reviews of permit applications, supporting technology, and dedicated/multi-agency staffing). In addition, the agencies should establish performance indicators regarding	Concur	No additional comment.

Ms. Ruta Fanning October 5, 2005 Page 3 of 3

which projects utilize these streamlining approaches and include this information as part of their on-going performance reporting.		_	

We would like to take this opportunity to express the Governor's continued support for resource agencies, tribes, cities, and counties to work through permitting barriers that inhibit the best use of mitigation solutions.

We appreciate the work done by your staff in developing this report. If you have questions about our response, please contact Robin Rettew at (360) 902-0609 or Robin.Rettew@ofm.wa.gov.

Sincerely,

Victor A. Moore

Director

cc: Robin Rettew, Office of Financial Management

Rich Struna, Office of Financial Management Louise Bray, Governor's Executive Policy Office

BUSINESS PROCESS REVIEW OF ENVIRONMENTAL PERMITTING FOR TRANSPORTATION PRO	OJECTS

APPENDIX 2A – JLARC'S COMMENTS ON AGENCY RESPONSES

WSDOT indicates it is not feasible to establish interagency target dates for construction advertisement. We agree that the legislative decision-making may not afford WSDOT and regulatory agencies an opportunity to mutually agree on target dates for all budget scenarios under consideration. However, we disagree that coordination is not feasible. We believe it is critical for the agencies to coordinate on target dates necessary to support their initial biennial budget requests to the Legislature. This is a requisite first step in coordinating project scheduling.

Additionally, WSDOT does not concur with developing guidelines for suspending environmental documentation activities. We agree that it would be imprudent to establish guidelines that preclude conducting any environmental work unless all construction funding is identified. However, WSDOT and resource agency staff interviewed for our study have observed the inefficiencies that result from having to repeat work on outdated environmental documentation. We urge WSDOT to incorporate the lessons learned by staff, so that work on select activities is suspended at points when it is clear that such activities will be outdated for the purposes of future construction. We would defer to WSDOT's expertise on identifying the appropriate criteria for such guidelines.

BUSINESS PROCESS REVIEW OF ENVIRONMENTAL PERMITTING FOR TRANSPORTATION PROJECTS	

APPENDIX 3 – DETAILS FOR SAMPLE PROJECTS

Due to the considerable amount of information obtained regarding the environmental permitting for each of the ten transportation projects, summary tables are provided here in Appendix 3 of this report. These tables include:

- o Table 3-1 presents summary project information regarding the ten projects, including project websites, budgets, brief descriptions, and project delivery status.
- o Table 3-2 summarizes the environmental documentation and environmental permitting performed for each of the ten projects.
- o Table 3-3 presents details regarding specific issues and opportunities associated with the environmental documentation and permitting for the study projects.
- o Table 3-4 focuses on streamlining activities noted among the study projects.
- Table 3-5 presents information used during the assessment of root causes of schedule delays.

Table 3-1: WSDOT Projects

Project Number	Project Title (Project Website Address)	Funding	Brief Description	Project Delivery Status
1	WSDOT Eastern Region: I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road (http://wsdot.wa.gov/Projects/I90/Spok aneIdahoStLine/Argonne_Sullivan/)	\$24 million ("Nickel" project)	Constructs additional through lanes in each direction.	Construction began in August 2003 and is scheduled for completed in early 2006.
2	WSDOT Eastern Region: SR31, Metaline Falls to International Border (http://www.wsdot.wa.gov/Projects/SR 31/MetalineFallsIntern/)	\$18 million ("Nickel" project)	12.7-mile project to improve pavement to support legal loads year- round.	Construction began with timber removal in November 2004. Actual roadwork began in May 2005 and is scheduled to be completed in Fall 2006.

Table 3-1: WSDOT Projects

Project Number	Project Title (Project Website Address)	Funding	Brief Description	Project Delivery Status
3	WSDOT Olympic Region: SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue (http://www.wsdot.wa.gov/projects/pier cecountyHOV/SR16_Olympic_Union/)	\$102 million ("Nickel" project)	Add high- occupancy vehicle (HOV) lanes in each direction and modify interchanges.	Construction began in 2005 and is scheduled for completion in 2007, in conjunction with the opening of the new Tacoma Narrows Bridge.
4	WSDOT Northwest Region: SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening (http://www.wsdot.wa.gov/Projects/SR 161/Jovita_S360th_Widen/)	\$29 million ("Nickel" project)	Widen to 5 Lanes.	Construction began in March 2005 and is scheduled for completion in early 2007.
5	WSDOT Northwest Region: SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange (http://www.wsdot.wa.gov/Projects/SR 522/Widen/Fales-EchoIC/)	\$33 million	New interchange, stormwater treatment.	Construction began in 2004 and is scheduled for completion in Spring 2006.
6 SC	WSDOT South Central Region: SR 240, Richland, I-182 to Columbia Center Boulevard (http://www.wsdot.wa.gov/Projects/SR 240/TriCitiesAddLanes/)	\$57.7 Million ("Nickel" project)	Widening of 4 lanes to 6 lanes with auxiliary lanes.	Construction began in March 2005 and is scheduled for completion in Fall 2007.
7 SC	WSDOT South Central Region: US 12, Southeast of Pasco, McNary Pool to Attalia (http://www.wsdot.wa.gov/Projects/US 12/SR124Wallula/SR124_McNary/)	\$11.4 Million ("Nickel" project)	Widening of 2 lanes to 4 lanes.	Construction began in May 2003 and was completed ahead of schedule in August 2004.
8 SW	WSDOT Southwest Region: I-5, Chehalis, Rush Road to 13 th Street (http://www.wsdot.wa.gov/projects/I5/ RushRd13thSt/)	\$41 million ("Nickel" project)	Widen to add one lane in each direction and build a new interchange.	Right-of-way acquisition may start in 2005. Construction is scheduled to begin in 2007 and be complete in 2009.

Table 3-1: WSDOT Projects

Project Number	Project Title (Project Website Address)	Funding	Brief Description	Project Delivery Status
9 UCO	WSDOT Urban Corridors Office: SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac (http://www.wsdot.wa.gov/projects/I5D esMoinesWaySouth188St/)	\$985 million ("Nickel" project)	New corridor and interchanges, as well as updating of I-5.	Preliminary design phase is being completed. Environmental permit applications are being prepared. Project has received \$35 million in "Nickel" funding, but requires an additional \$845 - 935 million.
10 UCO	WSDOT Urban Corridors Office: I-405, Kirkland Nickel Project, from SR 529 to 522 (http://www.wsdot.wa.gov/projects/I- 405/kirkea.htm)	\$164 million ("Nickel" project)	Widen to add one lane in each direction.	Stage 1 construction is scheduled to begin in 2006 and finish in 2008. Stage 2 construction will begin in 2009 and finish in 2011.

Table 3-2: WSDOT Projects – Environmental Documentation and Permits

Project Number	Project Title	Environmental Documentation and Permits
1	WSDOT Eastern Region: I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road	 NEPA: "Interstate 90: Four Lakes to Idaho State Line" FEIS, 1989; reevaluation from February 2001 to December 2002, approved by FHWA. ESA: NOAA, no consultation; USFWS, NE. NHPA 106: Consultation with Spokane Tribe, Coeur d' Alene Tribe, Colville Confederated Tribes, and Washington SHPO. DOT Act Section 4(f): Programmatic evaluation of impact of I-90 widening on Valley Mission County Park. Permits: no major permits due to lack of sensitive areas and wetlands. Ecology: CWA 402 NPDES Construction Permit and Stormwater Site Plan. Spokane County: SMA – Stormwater Facility.
2	WSDOT Eastern Region: SR31, Metaline Falls to International Border	 NEPA: EA, May 2004; USFS was lead agency and issued a FONSI. SEPA: DNS, January 2004. ESA: NOAA, no consultation. USFWS, informal consultation, concurrence in July 2001; however, reopened as formal consultation (due to court decision in June 2001 against USFWS regarding its study of critical habitat/range for the Canada lynx) and USFWS issued BO in February 2004. NHPA 106: Consultation with Kalispel Tribe, Spokane Tribe, Colville Confederated Tribes, and Washington SHPO. Permits: USDA: Approval for geotechnical exploration borehole. DNR: Forest Practices Permit. COE: CWA 404 NWP 14, plus "Talent decision" letter (dated 6/1/2004) with a description of drainage ditches and stormwater runoff. Ecology: CWA 401 Water Quality Certification. Ecology: CWA 402 NPDES Construction Permit. WDFW: Two HPAs for 1) temporary water withdrawal for geotechnical exploration and 2) fish passage. WDFW: General HPA for bridge deck work (programmatic permit entitled "Statewide Bridge and Ferry Terminal Cleaning, Painting, and General Maintenance and Repair"). Pend Oreille County: Floodplain Development Permit, issued as a Shoreline Substantial Development Permit Exemption for 1) normal maintenance and repair of existing state highway, and 2) repair, restoration, and resurfacing (including safety improvements).

Table 3-2: WSDOT Projects – Environmental Documentation and Permits

Project Number	Project Title	Environmental Documentation and Permits
3	WSDOT Olympic Region: SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	 NEPA: FEIS, 2000. SEPA: FEIS, 2000. ESA: NOAA, NE; USFWS, NE. NHPA 106: FEIS cultural resources survey found no historic or archaeological resources. DOT Act Section 4(f): Evaluation of impact of SR 16 bridge span over Snake Lake in The Tacoma Nature Center. Permits: COE: 1) CWA 404 NWP 14 for impacts to Snake Lake and 2) CWA 404 permit changing mitigation areas to Leach Creek mitigation site; both issued in May 2004 and revised in November 2004. Ecology: Two CWA 401 Water Quality Certifications for the above-list CWA 404 permits; both issued in May 2004 and revised in November 2004. Ecology: CZM Consistency Response, pursuant to and consistent with the CZMP. Ecology: CWA 402 NPDES Construction Permit, plus Notice of Phosphorous Impairment for Snake Lake, which was rescinded 11 months later due to inactivation of Snake Lake as a water body on Ecology's CWA 303(d) list since it has historically been a wetland. WDFW: Two HPAs for 1) SR 16 bridge over Snake Lake and 2) pedestrian bridge over Snake Lake. City of Tacoma: Wetland Development Permit.
4	WSDOT Northwest Region: SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	 NEPA: EA FONSI, July 30, 1993. EA Reevaluation, April 13, 2004. SEPA: EA FONSI, adopted for DNS on August 17, 1993. ESA: NOAA, informal consultation, NLAA; USFWS, informal consultation, NLAA. NHPA 106: EA Reevaluation, Cultural Resources Investigations, No Historic Properties Affected, October 2003; SHPO concurrence, January 13, 2004. MAP Team Permits: COE: CWA 404 NWP 14, plus a "Talent Decision" package with a description of drainage ditches and stormwater runoff. Ecology: CWA 401 Water Quality Certification. Ecology: CZM Consistency Response, pursuant to CZMA and consistent with the CZMP. Ecology: CWA 402 NPDES Construction Permit. WDFW: HPA for box culvert replacement and fish passage. King County: Critical Area Ordinance, Clearing Permit.

Table 3-2: WSDOT Projects – Environmental Documentation and Permits

Project Number	Project Title	Environmental Documentation and Permits
5	WSDOT Northwest Region: SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	 NEPA: corridor FEIS, April 1994; DCE updated for Fales Road Interchange, December 2003. SEPA: corridor FEIS, adopted July 1994; SEPA addendum of NEPA DCE, October 2003. ESA: NOAA, formal consultation, LAA. USFWS, formal consultation, NLAA for bald eagle and LAA for bull trout. FHWA reinitiated consultation upon modification of stormwater outfall and received concurrence from USFWS on NLAA determination for bull trout. NHPA 106: Consultation with Washington SHPO, concurrence in March 2003. DOT Act Section 4(f): Evaluation of impact on two residential structures and one commercial building deemed historical after the EIS, December 2003. EPA: Approval for Stages 2/3/4 of SR 522 in the area of the Cross Valley Sole Source Aquifer. Permits: COE: CWA 404 IP. Ecology: CWA 401 Water Quality Certification. Ecology: CZM Consistency Response, pursuant to CZMA and consistent with the CZMP. Ecology: CWA 402 NPDES Construction Permit, Condition Use Designation for chitosan enhanced sand filtration. Ecology: SMA Shoreline Substantial Permit. WDFW: HPA for three culverts and stormwater outfall to Snohomish River. Snohomish County: Shoreline Substantial Development Permit; Erosion Control Certification for Temporary Erosion and Sediment Control Plan; Flood Control Zone Permit. DNR: Forest Practices Permit, obtained by contractor.
6	WSDOT South Central Region: SR 240, Richland, I-182 to Columbia Center Boulevard	 NEPA: EA, 2004. (Does not include the bridge which is a separately-funded project and addressed by a DCE) ESA: NOAA, informal consultation (BA), NLAA; USFWS, informal consultation (BE), NLAA. NHPA 106: Consultation with Washington SHPO, concurrence in October 1999. DOT Act Section 4(f): Evaluation of impact on McNary Wildlife Unit at the confluence at the Yakima and Columbia Rivers; concurrence from the COE – Walla Walla District, which manages the Unit. Permits: COE: CWA 404 IP. Ecology: CWA 401 Water Quality Certification. Ecology: CWA 402 NPDES Construction Permit. Ecology: SMA Shoreline Substantial Development Permit. WDFW: HPA for filling of a disconnected borrow pond within the flood plain. City of Richland: Shoreline Substantial Development Permit; Flood Control Zone Permit.

Table 3-2: WSDOT Projects – Environmental Documentation and Permits

Project Number	Project Title	Environmental Documentation and Permits
7	WSDOT South Central Region: US 12, Southeast of Pasco, McNary Pool to Attalia	 NEPA: EA FONSI, 2001. SEPA: DNS, 2001. ESA: NOAA, formal consultation, LAA, with addendum letter to clarify Reasonable and Prudent Measures within the BO; USFWS, informal consultation, NLAA. NHPA 106: Consultation with the Confederated Tribes of the Umatilla Indian Reservation Cultural Resources Protection Program; Washington SHPO concurrence in August 2000. DOT Act Section 4(f): Evaluation of impact on McNary National Wildlife Refuge, Two Rivers/Peninsula Habitat Management Unit, Wallula Habitat Management Unit, and Madame Dorian Park. Permits: COE: CWA 404 IP. Ecology: CWA 401 Water Quality Certification with Temporary Water Quality Modification Extension for Corps Public Notice 2001-4-00973. Ecology: CWA 402 NPDES Construction Permit. WDFW: HPA for all aquatic construction and demolition activities in the project area. Walla Walla County: Shoreline Substantial Development Permit.
8	WSDOT Southwest Region: I-5, Chehalis, Rush Road to 13 th Street	 NEPA: EA, anticipate signature in June 2005. FONSI anticipated by August 2005. ESA: BA was recently submitted to NOAA and USFWS. NOAA, informal consultation; USFWS, informal consultation. NHPA 106: Consultation with the Cowlitz Tribe, the Chehalis Federated Tribes, the Squaxin Island Tribe, and Washington SHPO. Permits: WSDOT plans to submit permit applications for the following during the summer and fall of 2005: COE: CWA 404 IP (submittal in August/September 2005, after EA FONSI). Ecology: CWA 401 Water Quality Certification (submittal in August/September 2005). Ecology: CWA 402 NPDES Construction Permit (submittal in August/September 2005). WDFW: HPA (submittal in September/October 2005). DNR: Forest Practices Permit. Lewis County: Critical Area Ordinance Permit for stormwater management near critical aquifer recharge area and Flood Plain Development Permit. City of Chehalis: Critical Area Ordinance Permit for stormwater management near critical aquifer recharge area, Shoreline Substantial Development Permit.

Table 3-2: WSDOT Projects – Environmental Documentation and Permits

Project Number	Project Title	Environmental Documentation and Permits
9	WSDOT Urban Corridors Office: SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	 NEPA: FEIS, 2003. ESA: NOAA, informal consultation, NLAA; USFWS, informal consultation, NLAA. NHPA 106: Consultation with the Muckleshoot Tribe, the Puyallup Tribe, the Suquamish Tribe, the Lummi Nation, the Yakama Nation, and the non-federally recognized Duwamish Tribe; Washington SHPO concurrence in October 2001. DOT Act Section 4(f): addressed by FEIS. Permits: WSDOT plans to submit permit applications, beginning during the summer of 2005: COE: CWA 404 NWP. Ecology: CWA 401 Water Quality Certification. Ecology: CWA 402 NPDES Construction Permit. Ecology: CZM Consistency Response, pursuant to CZMA and consistent with the CZMP. WDFW: HPA. DNR: Forest Practices Permit. King County: Critical Area Ordinance Permit. Cities of SeaTac, Des Moines, Federal Way, and Kent: Critical Area Ordinance Permit, Clearing Permit, SeaTac Essential Public Facilities Permit.
10	WSDOT Urban Corridors Office: I-405, Kirkland Nickel Project, from SR 529 to 522	 NEPA: I-405 Corridor Program FEIS, 2002; Kirkland Project EA, February 2005, FONSI in April 2005. SEPA: Adoption of 2005 EA and DNS, March 2005. ESA = NOAA, informal consultation, NLAA; USFWS, informal consultation, NLAA. NHPA 106: Consultation with the Muckleshoot Tribe, the Snoqualmie Tribe, the Tulalip Tribe, the Suquamish Tribe, the Yakama Nation, and the non-federally recognized Duwamish Tribe; Washington SHPO concurrence in February 2005. DOT Act Section 4(f): Evaluation of impact on 9 publicly-owned parks and one waterfowl/wildlife refuge. MAP Team Permits: COE: CWA 404 IP. Ecology: CWA 401 Water Quality Certification. Ecology: CWA 402 NPDES Construction Permit. WDFW: HPA. King County: Clearing/Grading Permit. City of Kirkland: Land Surface Modification Permit. City of Bothell: Critical Areas Alteration Permit.

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
1	WSDOT Eastern Region: I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road	 Initiative 695 delayed funding for the project, which was "shelved" on 11/8/99 and reopened on 1/9/01. Shelving of the project caused inefficiencies in project delivery due to changes in project personnel, design standards (e.g., median increased from 30 feet to 40 feet), and environmental standards. The cultural resources survey was updated due to additional right-of-way purchase and new requirements for stormwater treatment for addition impervious surface area. A new noise analysis was conducted due to a change in modeling software (from Stamina to FHWA TNM 1.0a, Traffic Noise Model), which required an estimated 7+ months of additional time from WSDOT Eastern Region and headquarters staff. In March 2003, an "Off the Shelf To Do List" was developed in preparation for a second shelving of the project, which would have required an update to the FEIS for traffic analysis, air quality, noise analysis, and design elements changed due to 2025 traffic volume (rather than 2020 design year). "Nickel" funding in 2003 kept the project from a second shelving and supported a June 2003 ad date. Without funding by January 1, 2004, FHWA would have required another reevaluation of the NEPA document and the noise analysis.
2	WSDOT Eastern Region: SR31, Metaline Falls to International Border	 Advanced scoping with the USFS began in 1998-99. Initially, the USFS wanted an EIS for the project, although NEPA rules indicated that an EA was adequate. WSDOT chartered a team with USFS in 1999 and established early communication that set the stage for agreement on goals, permitting efficiencies, and commitment on decision making, particularly since there were two USFS ranger districts and a USFS regional office with authority in the project area. Work on the EA began in December 2000 and was approved in May 2004. When environmental documentation began, a source area was not specified, but a potential quarry site within the project limits was recognized during the design process. Also, the project design required more excavation than fill within the project limits, which required designation of areas to accommodate the extra excavated material. The BA and Cultural Resource survey did not address the potential source or the additional fill areas, which required additional time and expense to review these areas. The project ramped up with Referendum 49 funding; however, SR 31 was shelved as a result of Initiative 695. Design work was suspended in April 2002 and resumed in September 2002. Without the "Nickel" gas tax funding in 2003, construction would likely still be delayed. The geotechnical exploration drilling was originally scheduled during the time period that the project was shelved; the corresponding HPA expired on September 15, 2002, and a request for extension through March 15, 2003, was sought and obtained from WDFW. The project design initially included resurfacing three bridge decks and the JARPA was developed accordingly. WSDOT deleted the deck work for two bridges from the contract and, as a result, the general HPA now only addresses deck maintenance on one bridge. WSDOT spent extra time and effort preparing the JARPA for the two bridges that it removed from the general HPA. Through the HPA permitting process, the new criteria for sizing fish p

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		calls higher than "NE" for Canada Lynx were required to be handled as a formal consultations as of January 2002. The project BA was resubmitted to USFWS on October 1, 2003, to reflect project changes (including a quarry site) and a formal consultation was required. USFWS issued a BO on February 26, 2004. The court order was rescinded immediately after the issuance of the BO, which meant that the additional work on the revised BA and BO was for naught. • The WSDOT liaison working at the USFWS office in Spokane was required to take a two-month sabbatical during the SR 31 permitting process, which reduced the available time for the project. The federal Office of Personnel Management requires a minimum two-month sabbatical when an interagency personnel agreement has been active for four years within a federal agency. • Of the ten projects, the SR 31 project is one of only two projects required to have a DNR Forest Practices Act (FPA) Permit. Two issues arose from this permit. First, WSDOT staff met with DNR staff to determine how to apply for the permit, as well as an explanation of the different portions of the 32-page application. After the permit was issued in September 2004, WSDOT learned from other DNR staff that an abbreviated version of the application, taking only about one-third of the time as expended on the full application. Second, the permit itself required larger culvert sizes on cross culvert for drainages. DNR is responsible for classifying streams by type within the State. WDFW makes a stream-type call based on the best-available information at the time of the call, which may or may not include recent typing changes that DNR may have made based on information from another entity. During the SR 31 project, the DNR initially used a different stream type for the forest practices permit than WDFW used for the HPA. In this case, DNR classified a stream as a jurisdictional Type 4 tributary under the FPA, while WDFW determined it was a non-jurisdictional Type 5 tributary under the FPA, while WDFW determ
3	WSDOT Olympic Region: SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	 The work on the EIS began in 1997 and the FEIS was approved in January 2000, which is near-record time for this NEPA process. In January 2003, the plans, specifications, and estimates for the project were at risk since there was no funding, but WSDOT anticipated "Nickel" funding in November 2003. The ad date was moved from November 24, 2003, to March 29, 2004, reportedly to accommodate environmental permitting and schedule optimization. WSDOT, however, did not submit applications for all critical permits until October 2003, or one month prior to the initial ad date; this was reportedly due to issues with the wetlands mitigation plan, which was revised six times during 2003 to 2004. The ad date was moved again to June 9, 2004, which appeared to be a successful timeframe for completion of environmental permitting. The ad date was changed from June 9, 2004, to February 2, 2005, because of two separate appeals of permits issued by the city of

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		Tacoma and Ecology. Appeals were filed with both the city of Tacoma and the Washington Pollution Control Hearings Board. The project schedule did not accommodate either of these legal actions, which forced the ad date delay of nearly 8 months. See details below. o The Tacoma Central Neighborhood Council appealed the City of Tacoma's Wetland Development Permit on June 2, 2004, (a week before the original ad date). A private landowner filed a request for reconsideration, also on June 2, 2004, of the Wetland Development Permit; this request was denied on August 12, 2004. o The same private landowner (the appellant) filed a Notice of Appeal with the Washington Pollution Control Hearings Board on June 9, 2004, (the original ad date) regarding WSDOT's proposed use of 20 acres of land owned by the appellant for mitigation of wetland impacts. Three decisions issued by Ecology were appealed, including 1) modification to the CWA 401 Water Quality Certification which authorized WSDOT to change the mitigation for the original 1990 project addressed by the certification, 2) authorization of WSDOT to fill isolated wetlands, and 3) the CWA 401 Water Quality Certification which authorized WSDOT to fill jurisdictional wetlands under the COE NWP 14. The appellant was unwilling to sell property to WSDOT for the mitigation proposal, which led WSDOT to develop alternative mitigation through a stormwater facility to be built in partnership with the city of University Place. The appeal was settled on October 25, 2004. o As a result of the revised wetlands mitigation plan, WSDOT reapplied in October 2004 for all permits regarding the CWA 404, CWA 401, CZM Consistency Response, and city of Tacoma Critical Area Ordinance. In November 2004, COE issued two new CWA 404 permits and Ecology issued two new corresponding CWA 401 Water Quality Certifications, as well as a new CZM Consistency Response, for placement of fill in Snake Lake and wetlands. The Central Neighborhood Council appeal of the City permit was withdrawn on November 30, 200
4	WSDOT Northwest Region: SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	 Work on SR 161 started in 1990 between SR 18 and Milton Way. Stage 1 was constructed in 1994. Stage 2 began in 1995, but project staff indicated it was shelved in 1998 and delayed further due to Initiative 695 in 1999. After a five-year hiatus, work began again in 2003. Between 1998 and 2003, the ESA documentation was updated to address new species listings in 1999, but otherwise it was shelved. Work on the NEPA EA Reevaluation began after July 2003, when the "Nickel" funding began. In May 2004, a ditch review was conducted with the COE-Seattle District. An additional wetland area was identified and another wetland from the original report was determined to be larger than previously delineated. The COE requested an amendment to the wetlands biology findings report and the mitigation report to address both wetland issues. The CWA 404 permit was issued on September 16, 2004, (11 days before the September 27, 2004, ad date) and included a condition that required written approval of the final mitigation plan prior to commencement of work. Since the permit included this condition, WSDOT believed that there was not a significant risk of approval for the mitigation plan and, therefore, did not change the ad date. WSDOT submitted the final mitigation plan on October 4, 2004, and received approval from COE on October 21, 2004. The Talent decision package submitted for this portion of SR 161 was the first to be submitted by WSDOT to the COE-Seattle District.

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		 The Ecology liaison on the MAP Team resigned during the CWA 401 permitting of this project. A temporary MAP Team liaison took over on this permitting process. Ecology experienced a slight delay on some of the wetland mitigation conditions since a wetlands specialist (non-liaison) was not immediately available for a timely review. In 1998, a box culvert was designed to replace an existing culvert that had a sanitary sewer pipe (from the Lakehaven Utility District) passing through it. WDFW and Lakehaven Utility District indicated their approval of the proposal to run the sewer pipe through the box culvert, but then the project was shelved and the replacement did not occur. The same design was submitted with a JARPA to WDFW in March 2004 and was questioned regarding dimensions and installation of the sewer line outside the culvert. WSDOT designers request Lakehaven's financial assessment to move the sewer line outside the box culvert; Lakehaven estimated \$200,000. In August 2004, a revised design was presented to WDFW that lowers and widens the culvert and raises the sewer pipe above and outside the culvert. Initially, the structural and geotechnical engineers were concerned about the revised design due to the larger spacing of the pilings to accommodate the wider culvert; the solution was to increase the piling diameter from 26 to 38 inches. The HPA was issued on August 18, 2004. Coordination with King County began in July 2002, but the final clearing permit conditions were not received until January 3, 2005, over three months after the project went to ad on September 27, 2004. Riparian buffer mitigation was an issue. King County referred WSDOT to the Friends of the Hylebos (FOH) for a mitigation site on public land. WSDOT met with the city of Milton and FOH in January 2003 to discuss using the West Milton Nature Preserve for buffer mitigation. In August 2004, WSDOT contacted FOH again to discuss how the DOT mitigation design may fit with the FOH design, but FOH did not expect to have a
5	WSDOT Northwest Region: SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	 Work on the SR 522 corridor between Woodinville and Monroe was divided into five stages for funding purposes. The FEIS was completed in 1994, but funding was only available for Stage 1, which was fully constructed. Stages 2 and 3 remain shelved. The Fales Road Interchange is Stage 4 and is currently under construction. Stages 2, 3, and 4 were documented together for the ESA BA and a NEPA DCE to update the FEIS. The DCE was developed to meet the test of independent utility and logical termini per direction from FHWA. NOAA and USFWS wanted the assessment to address the combined impacts of all five stages, but accepted that Stage 1 was completed in 2001, that Stages 2, 3, and 4 would be constructed in the foreseeable future, and that Stage 5 construction will undergo a separate NEPA review. FHWA supported WSDOT through a prolonged formal consultation with NOAA (January 2002 to June 2003) and USFWS (January 2002 to May 2003). After modifications to the stormwater outfall design were made, FHWA reinitiated the ESA consultation process with the USFWS in February 2004. In March 2004, USFWS issued a concurrence letter for bull trout. The WSDOT project team noted that environmental permitting can usually be accomplished in nine-12 months, but the Fales Road Interchange project took about twice as long. Due to the complexity of the project, permit application review and comment generally went back and forth a couple times. The stormwater management design required significant modifications and caused delays for virtually all of the aquatic- and shoreline-related permits.

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		 There was a change in WDFW staff during this project. This project initially went through the traditional queue (first come, first served), but was transferred to a WSDOT liaison. The first area habitat biologist (AHB) and fisheries engineer provided concurrence on all pre-JARPA preliminary designs, including WDFW requirements for stream modeling. Emails documented this concurrence, but were not held to be official communication since they were not on WDFW letterhead. The first AHB retired and a second AHB reviewed the JARPA when it was submitted for three culverts and a stormwater outfall to the Snohomish River. The second WDFW area habitat biologist addressed the entire JARPA review period and requested design changes since there were impacts to fish life that required mitigation. WSDOT elevated this issue to the biologist's supervisor and then to WDFW headquarters since there was earlier concurrence from the first AHB, but the original concurrence on design did not hold since mitigation was found to be necessary. Additional related issues include the following: WSDOT indicated that the HPA addresses in-water work or in-water species, but WDFW requested habitat structures above the high water mark, but WSDOT graced to provide. WDFW also requested non-ESA habitat structures above the high water mark, but WSDOT contested this requirement. WSDOT noted that the COE requested the same non-ESA habitat structures during the CWA 404 permitting, using nearly identical language to that proposed by WDFW, which led WSDOT to question the source of the language. In response, WDFW indicated that its jurish diction under the HPA is for all fish life, not just ESA-listed fish species. Also, HPA authority does not stop at the ordinary high water line. The statute states that HPA authority applies for "any work that uses, obstructs, diverts or changes the natural bed or flow of state waters." WSDOT noted that the HPA process took about a year from JARPA submittal to resolution of design requirements.

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
6	WSDOT South Central Region: SR 240, Richland, I-182 to Columbia Center Boulevard	 The NEPA documentation began in 1998, but started and stopped due to funding issues. The bridge is considered a separate project due to "scour critical" priority and had its own priority funding. The rest of the project area received construction funding through the 2003 "Nickel" gas tax package. The ad date was originally in October 2004, but was changed to December 20, 2004, due to right-of-way condemnation issues at the Richland "Y" along the north end of the project site. NHPA Section 106 cultural survey issues were important because of the earlier discovery of the "Kennewick Man" burial site located downstream of the project site. A cultural monitor is required during construction and an inadvertent discovery plan was developed. Three different CDE reviewers were involved with the project: the first with early scoping, the second addressed the majority of the CWA 404 review and permitting. The following are issues that arose as a result of the transfer of the project between the second and third reviewers: The second WSDOT liaison was required to take a two-month sabbatical toward the end of the SR 240 permitting process, which broke up the continuity of the permitting process. The federal Office of Personnel Management requires a minimum two-month sabbatical when an interagency personnel agreement has been active for four years within a federal agency. In this case, the WSDOT liaison had worked at the COE – Seattle District for four years. The third reviewer, also a WSDOT liaison, disallowed a prior agreement for a bridge with a conductivity (overflow) structure addressed the deer crossing standard and was ascepted by NOAA and USFWS for ESA. This change to a culvert structure pushed the approval of the CWA 404 permit to November 22, 2004, which was a month after the initial ad date (but changed to December 20, 2004 due to right-of-way issues). On the other hand, the design change saved approximately \$1.2 million per the following: \$2.5 million for supe

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		 Although not required by any of the various permits, WSDOT cooperated with the Audubon Society to place voluntary restrictions on construction in certain portions of the project site during birding season. In addition, WSDOT rebuilt a nesting perch. Actions, such as this, create good will among WSDOT's stakeholder community. As of May 26, 2005, Ecology was considering enforcement action against WSDOT for being out of compliance with three notification requirements in the CWA 401 Water Quality Certification. In addition, Ecology Toxics Cleanup Program was investigating sediment contamination, which was found during bridge piling excavation. These issues may divert WSDOT project staff from the activities associated with efficient project delivery.
7	WSDOT South Central Region: US 12, Southeast of Pasco, McNary Pool to Attalia	 Walla Walla County perceived US 12 as a key corridor that required widening to four lands for safety and congestion. There were13 organizational members of the original scoping committee, which is now called the US 12 Coalition and includes 30 partners. Partnering is good, but it takes time. The initial funding for partnering included \$37,000 from local sources, \$250,000 from WSDOT, and approximately \$250,000 from COE – Walla Walla District. All NEPA, SEPA, and environmental mitigation planning was completed right up front, which increased streamlining efficiencies. COE – Walla Walla District was a cooperating agency; both FHWA and COE rules for NEPA documentation were followed. A FONSI was issued due to the mitigation plans and design considerations to narrow the footprint of the roadway, including the use of jersey barriers rather than a wide ditch median. WSDOT partnered on environmental issues with federal and state agencies and stakeholders. The US 12 project included 12 miles of assessment; Phase I from McNary Pool to Attalia included Casey Pond, which is the most environmentally-sensitive location along the entire length of the project. If WSDOT could build Phase I in the Casey Pond area, it could satisfy the environmental requirements for the remaining portions of the 12-mile section. COE – Walla Walla District is tigned a memorandum of understanding in 1999. The COE – Walla Walla District is the primary owner of public resource lands along US 12, including the Two Rivers/Peninsula Habitat Management Unit, the Wallula Habitat Management Unit, and Madame Dorian Park. The USFWS owns the McNary National Wildlife Refuge; the Pasco office addressed the land issues with McNary. All other Section 4(f) resources are owned by the COE and managed by the USFWS. Since there were so many 4(f) properties along US 12, including the Two Rivers/Peninsula namaged by the USFWS. Since there were so many 4(f) properties along US 12, minor alignment shifts in the existing right-of-way were

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		disappointed resource agencies that had facilitated permitting to meet the ad date. This reportedly had a huge impact on WSDOT's credibility with the resource agencies. • The cost estimate for environmental-related activities was estimated at \$933,816, including \$118,090 for environmental documentation and design, \$103,620 for environmental permitting, and \$712,106 for construction mitigation measures. • "Nickel" funding was critical for construction. Phase I construction from McNary Pool to Attalia was begun in May 2003 and completed in August 2004. • The US 12 project received the WSDOT Excellence in Environmental Design Award.
8	WSDOT Southwest Region: I-5, Chehalis, Rush Road to 13 th Street	 This is the first WSDOT pilot project under TPEAC to draft permit terms and conditions, per ESB 1163 §305(11) which references §(1)(b), chapter 8 (ESB 5279), Laws of 2003. ESB 5279 extends TPEAC to March 31, 2006, including a proviso that requires TPEAC to identify ten pilot projects where WSDOT will draft permit terms and conditions as part of the permit application submittals to resource agencies. The WSDOT Southwest Region has a policy of meeting early with resource agencies as part of its "no surprises" policy. The following meetings have been held: WSDOT held a public scoping meeting and invited all of the resource agencies, however, only the COE and a representative of the Cowlitz Indian Tribe attended. Pre-application meetings were held with COE-Seattle District and Ecology. Meetings regarding flow control and stormwater were held with Ecology and Lewis County. Site meetings were held with WDFW regarding the HPA for a culvert on the fish barrier list. Three stormwater workshops were held in 2004 with FHWA, WSDOT, COE, Ecology, and Lewis County. The EA and other environmental documentation (BA, cultural resources survey, and discipline reports) were prepared by a consultant at a cost of nearly \$1 million. WSDOT staff level of effort associated with this work is approximately \$200,000. In addition, the preliminary design used to identify alternatives was about \$450,000. The costs associated with the TPEAC "self-permitting" pilot project (see description below) are not known. The pre-draft EA was submitted to FHWA on April 28, 2005, and comments were expected by mid-May 2005. The draft EA should be ready by early June 2005 for submittal to WSDOT and FHWA for signatures. A FONSI is anticipated by mid-August 2005. The cultural resource survey was received from the consultant on May 6, 2005, and was already submitted to the WSDOT Environmental Services Office and SHPO. WSDOT recently submitted the BA to NOAA and

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		▲ The WSDOT Project Delivery Information System (PDIS) is being used to track the schedule.
9	WSDOT Urban Corridors Office: SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	 Early project scoping began in 1987 and continued into 1988. In 1990, a memorandum of understanding established a multi-agency advisory committee. From 1992 to 1995, FHWA initiated the environmental documentation process with a Tier I programmatic corridor DEIS since several corridors were being addressed. FHWA increased the project scope to address deficiencies in the area of the SR 509/1-5 junction, which increased the project length to 9.9 miles. The state of Washington established a Signatory Agency Committee (SAC) process in 1995 to facilitate early communication on transportation projects where a NEPA/CWA 404 merger would streamline environmental documentation. After three years of work on the corridor EIS, a public comment period was held regarding a preferred alternative, but FHWA Headquarters stated during the comment period that a project-level EIS was needed rather than a programmatic EIS, in order to address revisions to the Clean Water Act and the Clean Air Act, as well as to address an evolving environmental justice policy. A preferred alternative was selected in 2001, but in early 2002, approximately one-quarter of the project funding was pulled, which shut down the project design activities. Three WSDOT staff members were laid off and nearly all consultant support was stopped. In February 2003, the Puget Sound Regional Council provided a grant to continue work on the project. By April 2003, consulting staff began to return and the full consulting staff returned from other projects by September 2003. The SAC and project team focused on the completion of the project-level EIS, which was finalized in 2003. The FEIS was signed by the parties to the SAC, including FHWA, WSDOT, the Port of Seattle, King County Transportation, and the cities of Des Moines and SeaTac. Unlike the other nine projects in this study, this project includes the design and construction of a new alignment. This project will complete SR 509 around SeaTac Airport. As a result, real estate costs will be very larg

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		area, SR 509 and I-5 have a combined total of 34 miles of drainage ditches, of which less than 1,000 feet of ditches may be considered to discharge to "waters of the United States" based on the Seattle District's application of the ordinary high water mark. Since the SR 509/I-5 project does not have construction funding at this time, it may become a test case regarding the Corps' interpretation and implementation of the <i>Talent</i> decision, particularly since the inclusion of the ditch area impact will trigger the IP process. WSDOT has prepared a package addressing all 34 miles of ditches, as well as a technical memorandum package regarding only the sections of ditches that actually discharge to "waters of the United States." o In 2003, Ecology issued guidelines for programmatic and individual CWA 402 permits for stormwater management. WSDOT met with Ecology in 2004 and was advised that an IP was needed due to the proximity of the new SR 509 alignment to the third runway at SeaTac Airport. WSDOT conterted that SR 509 is in a different drainage basin than the runway and proposed using Ecology's best management practices for stormwater. Ecology then issued a letter to WSDOT requiring an IP for the project, however, the letter referenced criteria that did not match the 2003 guidelines for programmatic/individual permits. As a result, WSDOT Headquarters entered into negotiations with Ecology management. Although Ecology has issued a second version of the letter requiring an IP, the three-tiered criteria referenced in the letter differ from the 2003 guidelines. WSDOT had not yet responded to the letter at the time of the project team interview for this study. o A number of years ago, a former ASARCO smelter discharged air emissions that contaminated soils with arsenic in the area of SR 509 and SeaTac Airport. The SR 509/I-5 project will generate a surplus of one million cubic yards of soil that has to be removed. The arsenic concentrations in the soil are generally below the state's Model Toxics Cleanup Act (MTCA) c

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		 The JARPA will encompass the entire project and will be submitted concurrently to COE, Ecology, and WDFW. The project JARPA will address reprofiling of roadway at South 200th Street and WDFW staff has indicated that credit may not be given to WSDOT for the mitigation effort at the Des Moines Basin wetlands for surface water management. As indicated in the previous bullet point, a JARPA was prepared and submitted for the Des Moines Basin Plan; WSDOT has contributed funding for the Des Moines Basin project, but it is not a WSDOT project. WSDOT agreed to provide funding for the Des Moines Basin project as a result of the SR 509/1-5 SAC and thought that this served as mitigation for all aquatic resources. WSDOT enhanced Des Moines Creek and removed a major fish passage blockage as part of the Des Moines Creek Basin Plan. WSDOT wants to use these creek enhancements and the removal of the fish blockage as mitigation for the culvert extension and replacement under S. 200th St. Initially, the project office had reached conceptual agreement with WDFW on this approach to mitigation. Following a change in WDFW staff, discussions are continuing to reassess the appropriateness of the mitigation plan. Final decisions have not been made at this time. WDFW was a party to the SAC that concurred on WSDOT's participation in the wetlands mitigation, but has indicated that there are additional fish passage impacts associated with the culvert replacement that is part of the roadway reprofiling. The Port of Seattle and FAA may become involved with this fish passage issue since part of the problem involves an airport-owned weir upstream of the culvert, which serves to block fish passage onto the airport property. The FAA reportedly does not want fish passage on to the airport since it may attract birds that will be a potential danger to air traffic. This issue requires further consideration by WSDOT and WDFW at the time the project JARPA is submitted. The WSDOT Project Delivery Information System (PDIS) is b
10	WSDOT Urban Corridors Office: I-405, Kirkland Nickel Project, from SR 529 to 522	 From 1999 to 2002, WSDOT partnered with Sound Transit, King County, FHWA, and the Federal Transit Administration to look at alternatives for the I-405 corridor. This developed into a "Re-inventing NEPA" process, similar to the state's Signatory Agency Committee (SAC) process. This process included a concurrence point for a preferred alternative, which was a \$10.9 billion proposal for two additional lanes in each direction, plus multi-modal transportation. The project was divided into four segments, including the Kirkland Nickel Project, which received funding from the 2003 Legislative Transportation Package (i.e., the Nickel gas tax). The I-405 project uses a concept of "Early Environmental Investments," which includes performing mitigation prior to construction. For example, the I-405 Project Team worked with the city of Bothell to perform mitigation in areas selected by the city. The Kirkland Nickel Project is a design-build program, which is an iterative process. A conscious decision was made to dedicate resources (i.e., money and staff) to fast-track the environmental documentation and permitting since it is time-critical for the design-build process. WSDOT is employing a non-standard approach to contracting to fast-track project delivery, including environmental documentation and permitting. The I-405 Project Team is comprised of WSDOT staff and consulting firm personnel who are co-

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		located in the same office in Bellevue. A general engineering contractor serves as the prime contractor, which directs work to a dozen subcontracted environmental consulting firms. The co-location of staff fosters communication within the contractor team, as well as with WSDOT and FHWA staff who have offices embedded with the project team. According to the WSDOT interviewees on the 1 405 Project Team, this approach may cost more at the front end of the project, but appears to save time and money for overall project delivery. Proof of this is the revised ad date, which was moved up from April 1, 2006, to a new proposed ad date of September 15, 2005. **WDFW** was not comfortable with the permitting for a design-build project since the design is an iterative process and the HPA is the first permit issued. Early meetings were held with WDFW to establish communication. WDFW provided a draft version of the HPA, which eliminated the possibility of surprises in the permit conditions. The HPA was performance-based in order to allow flexibility in the design-build process. The HPA was issued in early May 2005. **In addition to the co-located team organization, the environmental permitting process has been focused and has proactively involved stakeholders. **O Permit coordinators are dedicated to the I-405 Project, whereas some permit coordinators in the WSDOT region offices have 30 projects at different stages of development. **O The EA for the Kirkland Nickel Project followed WSDOT's recently adopted format for "reader-friendly documents" and is now the model document for EAs. **O Scoping meetings are held during daytime business hours with regulatory agencies and at night for the public. **The WSDOT Project Delivery Information System (PDIS) is being used to track the schedule. **Although the Kirkland Nickel Project has expedited the project delivery schedule, the interviewees provided a list of environmental process issues and project delays, including: **O The project design was changed numerous times in orde

Table 3-3: SDOT Projects – Permitting Issues

Project Number	Project Title	Project Delivery Issues
		 Local permitting for the I-405 Project has led to the most substantial permitting challenges. Local government wanted WSDOT to apply for clearing permits or grading permits anywhere that work is performed. WSDOT maintains that these permits are not necessary within the right-of-way. For example, WSDOT agreed to apply with Kirkland for a grading permit in a city-owned wetland mitigation area, but did not agree to a grading permit within the I-405 right-of-way. Local governments have are challenged with this situation since there is no memorandum of agreement with WSDOT that explains this distinction between permitting inside and outside the right-of-way. The I-405 Project made separate agreements with local jurisdictions. WSDOT provided an Attorney General's office memo regarding this issue after the region interview. There are several long lead-time issues associated with environmental documentation and permitting that must be considered, including 1) fish passage decisions and mitigation, 2) sensitive areas inventories, 3) avoidance of environmentally sensitive areas (e.g., wetlands) wherever possible and minimization of impacts when not, 4) identifying scientific protocols that are appropriate and applicable, and 5) coordination with the Indian Tribes. The Legislature expects WSDOT to be aggressive in meeting the ad date and accountable for transportation project delivery, but the resource agencies are not held accountable to coordinate with WSDOT to meet this schedule.

Table 3-4: WSDOT Projects – Streamlining Successes

Project Number	Project Title	Environmental Permit Streamlining Successes
1	WSDOT Eastern Region: I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road	 Due to the location of the project in an area with no sensitive environmental areas, WSDOT and FHWA were able to support updating (in 2002) of the 13-year-old FEIS. This required minimal effort compared to development of new NEPA documentation, thereby saving considerable time and money. DOT Act Section 4(f) programmatic evaluation of the impact of I-90 widening was performed for Valley Mission County Park. Although funding is not an environmental permit streamlining initiative, the 2003 "Nickel" funding package was critical to keep this project from being shelved a second time.
2	WSDOT Eastern Region: SR31, Metaline Falls to International Border	 Early communication efforts resulted in a formal chartering agreement between WSDOT and USFS, which created a "collaborative effort to develop a project which will provide an all weather roadway on SR 31from the Metaline Falls vicinity to the Canada/USA International Border in order to promote economic development in the area." USFS initially thought a NEPA EIS was necessary, but early communication led to an agreement that an EA was appropriate. This saved considerable time and money for the project. Also, USFS was the lead federal agency for the NEPA EA. The general HPA was a streamlined statewide programmatic permit resulting from a memorandum of agreement between WSDOT and WDFW.
3	WSDOT Olympic Region: SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	 The work on the EIS began in 1997 and the FEIS was approved in January 2000, which is near-record time for the NEPA process. WSDOT's goal is to complete the Union Avenue to Jackson Avenue portion of the overall project by the time the Tacoma Narrows Bridge opens in 2007. WSDOT applied for all critical permits in October 2003 and was on track to receive all of them by early June 2004 (i.e., in 8 months), if not for the appeals of the wetlands permits. In order to accommodate the shortened construction timeframe following the appeals process, WSDOT compressed the construction schedule from three years to two years through project management efficiencies. The WSDOT liaison at the COE was critical to the time re-issuance in a very short timeframe of the CWA 404 permits for 1) the modification to the 1990 permit for an existing wetland project and 2) the NWP 14 for wetlands. The Union Avenue to Jackson Avenue portion of the SR 16 project has established the shortest ad to bid period in the state, while at the same time requiring a record number of addendums to do so.
4	WSDOT Northwest Region: SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	• The Project Team stated that the MAP Team process for permitting improved the resolution of contentious issues; however, the process timeline was not streamlined on this project and they believe took longer than it reasonably should have. The project team felt that clear and quantitative performance measures (for the Liaison program in general) would help differentiate areas of success and allow program improvements to be targeted and measured.

Table 3-4: WSDOT Projects – Streamlining Successes

Project Number	Project Title	Environmental Permit Streamlining Successes
5	WSDOT Northwest Region: SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	• Early coordination with the resource agencies was initiated; however, due to the complexity of the technical issues the coordination was not adequate. In hindsight, WSDOT indicated that the Signatory Agency Committee (SAC) process should have been initiated.
6	WSDOT South Central Region: SR 240, Richland, I-182 to Columbia Center Boulevard	• The new WSDOT Project Delivery Information System (PDIS) was used to track what was planned and what actually happened. The PDIS was updated monthly. A separate environmental schedule, which was based on PDIS, was created.
7	WSDOT South Central Region: US 12, Southeast of Pasco, McNary Pool to Attalia	 WSDOT's partnering with the thirty US 12 Coalition members was critical to the successful environmental permitting of the project. Local, state, and federal funding supported the partnering process. All NEPA, SEPA, and environmental mitigation documents were completed up front with the support of the US 12 Coalition, which increased streamlining efficiencies when the actual permitting process began. All NEPA, SEPA, and environmental mitigation planning was completed right up front, which increased streamlining efficiencies. COE – Walla Walla District was a cooperating agency; both FHWA and COE rules for NEPA documentation were followed. A FONSI was issued due to the mitigation plans and design considerations to narrow the footprint of the roadway, including the use of jersey barriers rather than a wide ditch median WSDOT partnered on environmental issues with federal and state agencies and stakeholders. The US 12 project included 12 miles of assessment; Phase I from McNary Pool to Attalia included Casey Pond, which is the most environmentally-sensitive location along the entire length of the project. If WSDOT could build Phase I in the Casey Pond area, it could satisfy the environmental requirements for the remaining portions of the 12-mile section. COE – Walla Walla District technical assistance provided critical support. WSDOT and the Walla Walla District signed a memorandum of understanding in 1999. The CWA 404 permit was a critical path permit among the aquatic resource permits. The JARPA was submitted in August 2001 and the permit issued in April 2002. Good investment in early cooperation yielded fast permitting from the resource agencies, including WSDOT liaisons. All permitting was completed within the eight-month period required for the CWA 404 permit. The US 12 project received the WSDOT Excellence in Environmental Design Award, which was at least in part due to the partnering with the US 12 Coalition.
8	WSDOT Southwest Region: I-5, Chehalis, Rush Road to 13 th Street	 Permit applications will be submitted after the EA is issued, possibly during the late summer and early fall of 2005 in order to meet the ad date in January 2007. This is the first WSDOT pilot project under TPEAC to draft permit terms and conditions, per ESB 1163 and ESB 5279, as part of the permit applications that will be submitted to the resource agencies. As the first pilot project, it is not known yet whether this will be a

Table 3-4: WSDOT Projects – Streamlining Successes

Project Number	Project Title	Environmental Permit Streamlining Successes
		successful streamlining initiative. WSDOT should coordinate with the Ecology project manager as much as possible, which would ensure better streamlining for the pilot permitting. • Wetland mitigation will be proposed within a WSDOT-owned wetlands mitigation bank along the North Fork Newaukum River. This will provide large-scale wetlands mitigation within the same watershed, which is a TPEAC initiative. This effort will also benefit from coordination with Ecology's project manager and the mitigation banking contact. • The WSDOT Project Delivery Information System (PDIS) is being used to track the schedule.
9	WSDOT Urban Corridors Office: SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	 The SAC process provided the early and ongoing collaborative process necessary for: NEPA documentation for the SR 509/ I-5 project, Reduction of wetlands impacts from eight acres to less than a half acre, and Negotiation of WSDOT's participation in the Des Moines Basin stormwater management wetland. The SR 509/I-5 project team has developed an Environmental Permit Strategy Memorandum. All permits will be submitted toward the goal of a performance-driven permit, rather than a permit with traditional terms and conditions, with the direction that the design builder will provide the permit specific details prior to construction. The project team will 1) communicate early and throughout the design process with the permitting agencies, 2) establish meetings to help the project team clarify permit requirements and collect information from agency staff on existing natural resources and issues of concern, and 3) brief agency staff on the project design progress and design options will be explored as needed. As of the drafting of this report, the project permit applications had not been submitted to the resource agencies. The success of any streamlining efforts remains to be assessed. The WSDOT Project Delivery Information System (PDIS) is being used to track the schedule.
10	WSDOT Urban Corridors Office: I-405, Kirkland Nickel Project, from SR 529 to 522	 The Kirkland Nickel Project is a design-build program, which is an iterative process. A conscious decision was made to dedicate resources (i.e., money and staff) to fast-track the environmental documentation and permitting since it is time-critical for the design-build process. WSDOT is employing a non-standard approach to contracting to fast-track project delivery, including environmental documentation and permitting. The I-405 Project Team is comprised of WSDOT staff and consulting firm personnel who are colocated in the same office in Bellevue. A general engineering contractor serves as the prime contractor, which directs work to a dozen subcontracted environmental consulting firms. The co-location of staff fosters communication within the contractor team, as well as with WSDOT and FHWA staff who have offices embedded with the project team. According to the WSDOT interviewees on the I-405 Project Team, this approach may cost more at the front end of the project, but appears to save time and money for overall project delivery. Proof of this is the revised ad date, which was moved up from April 1, 2006, to a new proposed ad date of September 15, 2005. In 1999 to 2000, WSDOT partnered with Sound Transit, King County, FHWA, and the Federal Transit Administration to look at alternatives for the I-405 corridor. This developed into a "Re-inventing NEPA" process, similar to the state's Signatory Agency Committee (SAC) process and included input from local governments and the state and federal resource agencies. This process included a concurrence point for a preferred alternative, which was a \$10.9 billion proposal for two additional lanes in each direction, plus multi-modal transportation. The project was divided into four segments, including the Kirkland Nickel Project, which received funding from the 2003 Legislative Transportation Package (i.e., the Nickel gas tax). The I-405 project uses a concept of "Early

Table 3-4: WSDOT Projects – Streamlining Successes

Project Number	Project Title	Environmental Permit Streamlining Successes
		 Environmental Investments," which includes performing mitigation prior to construction. For example, the I-405 Project Team worked with the city of Bothell to perform mitigation in areas selected by the city. WDFW was not comfortable with the permitting for a design-build project since the design is an iterative process and was not complete for the JARPA submittal. Early meetings were held with WDFW to establish communication. WDFW provided a draft version of the HPA, which eliminated the possibility of surprises in the permit conditions. The HPA was performance-based in order to allow flexibility in the design-build process. The HPA was issued in early May 2005. In addition to the co-located team organization, the environmental permitting process has been focused and has proactively involved stakeholders. Permit coordinators are dedicated to the I-405 Project, whereas some permit coordinators in the WSDOT region offices have 30 projects at different stages of development. The EA for the Kirkland Nickel Project followed WSDOT's recently adopted format for "reader-friendly documents" and is now the model document for EAs. A relative sense of the success of the "reader-friendly" format is apparent by considering that the I-405 Project EIS (which used the "traditional" format) received approximately 1,785 public comments, while the EA for the Kirkland Nickel Project received about 20 comments for a 7-mile segment of the 30-mile corridor project. Scoping meetings are held during daytime business hours with regulatory agencies and at night for the public. Concurrence from NOAA and USFWS regarding informal ESA consultations was expedited by close coordination. The USFWS commended the project to the WSDOT Environmental Services Office, which presented a Gem Award for performance above and beyond expectations. The BA language used in the Kirkland Nickel Project is now being used in the environmental documentation for the next segment of the I-405 Project.<!--</th-->

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
1	WSDOT Eastern Region: I-90, Spokane, Build Lanes from Argonne Road to Sullivan Road	• Initiative 695 reportedly delayed funding for the project, which was "shelved" on 11/8/99 and reopened on 1/9/01. Shelving of the project caused inefficiencies in project delivery due to changes in project personnel, design standards (e.g., median increased from 30 feet to 40 feet), and environmental standards. The cultural resources survey was updated due to additional right-of-way purchase and new requirements for stormwater treatment for addition impervious surface area. A new noise analysis was conducted due to a change in modeling software (from Stamina to FHWA TNM 1.0a, Traffic Noise Model), which required an estimated 7+ months of additional time from WSDOT Eastern Region and headquarters staff. In March 2003, an "Off-the-Shelf To Do List" was developed in preparation for a second shelving of the project, which would have required an update to the FEIS for traffic analysis, air quality, noise analysis, and design elements changed due to 2025 traffic volume (rather than 2020 design year).
2	WSDOT Eastern Region: SR31, Metaline Falls to International Border	 The project ramped up with Referendum 49 funding; however, Initiative 695 reportedly delayed funding, which suspended design activities for five months. As a result, geotechnical exploration was not performed by the time that the corresponding HPA expired on September 15, 2002. WSDOT requested an extension of the HPA through March 15, 2003, which was approved by WDFW. The application process and information requirements for a Forest Practices Permit was questioned by the WSDOT regional office and was referred to WSDOT headquarters, which has begun discussions with DNR to clarify the application requirements, on a statewide basis, for transportation projects. Through the HPA permitting process, the new criteria for sizing fish passage culverts was applied. Previously, ordinary high water mark (OHWM) was used to calculate culvert sizing. The new criteria required bank-full width to be used. The culvert was redesigned and enlarged from a circular cross-section to an arch design. The initial HPA was issued with an incorrect work window and was reissued. The project design initially included resurfacing three bridge decks and the JARPA was developed accordingly. WSDOT deleted the deck work for two bridges from the contract and, as a result, the general HPA now only addresses deck paving on one bridge. WSDOT spent extra time and effort preparing the JARPA for the two bridges that it removed from the general HPA. DNR is responsible for classifying streams by type within the state. WDFW makes a stream-type call based on the best-available information at the time of the call, which may or may not include recent typing changes that DNR may have made based on information from another entity. During the SR 31 project, the DNR initially used a different stream type for the forest practices permit than WDFW used for the HPA. In this case, DNR classified a stream as a jurisdictional Type 4 tributary under the FPA, while WDFW determined it was a non-jurisdictional Type 5 tributary f

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
		USFWS had not collected enough information to designate critical habitat/range for the Canada Lynx. As a result, all effect calls higher than "NE" for Canada Lynx were required to be handled as a formal consultation as of January 2002. Since the revised project BA was submitted to USFWS on October 1, 2003, a formal consultation was required. USFWS issued a BO on February 26, 2004. The court order was rescinded soon after the issuance of the BO, which meant that the additional work on the revised BA and BO was for naught. • The WSDOT liaison working at the USFWS office in Spokane was required to take a two-month sabbatical during the SR 31 permitting process, which reduced the available time for the project. The federal Office of Personnel Management requires a minimum two-month sabbatical when an interagency personnel agreement has been active for four years within a federal agency. • The COE verbally requested additional information for the CWA Section 404 permit, per its interpretation of the <i>Talent</i> decision regarding drainage ditches and stormwater runoff. The project environmental staff noted that the <i>Talent</i> decision interpretation was very unclear, but the request for information was minimal since the COE had just begun asking for drainage ditch descriptions as part of the Section 404 permit process.
3	WSDOT Olympic Region: SR 16, Tacoma, HOV Improvements, Union Avenue to Jackson Avenue	 In January 2003, the plans, specifications, and estimates for the project were at risk since there was no funding, but WSDOT anticipated "Nickel" funding in November 2003. The ad date was moved from November 24, 2003, to March 29, 2004, reportedly to accommodate environmental permitting and schedule optimization. Applications for all critical permits were not submitted until October 2003, or one month prior to the initial ad date; this was reportedly due to issues with the wetlands mitigation plan, which was revised six times during 2003 to 2004. The ad date was moved again to June 9, 2004, which would have been a successful timeframe for completion of environmental permitting, if not for property condemnation appeals. It appears that the constraints on project funding directly delayed the project by a minimum of six months. Four different JARPAs were prepared to meet the jurisdictional issues of the COE, Ecology, DFW, and the City of Tacoma. The JARPA is a standardized form, but was used to present customized information to each of the regulatory agencies. This takes additional time and does not create the efficiency that could be achieved through standardization. WSDOT reportedly wanted to have the permits issued quickly for this project, i.e., by September 2003, although Ecology thought December 2003 was possible. However, due to issues with the wetlands mitigation plan, the JARPAs were not submitted until October 2003. This was exacerbated by the limited number of wetland specialists within Ecology. Moreover, since the wetland specialists are not dedicated to WSDOT projects (as liaisons), their project staffing requirements often do not coincide with the WSDOT project timeframes. The project team lost a staff member for a significant period of time due to full-time deployment for the current national war effort. Many site visits were held, but the city of Tacoma staff did not attend regularly. The mitigation rules changed between the time of the FEIS and

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
4	WSDOT Northwest Region: SR161, Milton to Federal Way, Jovita Blvd. To S 360 th Widening	 Stage 2 of the SR 161 project began in 1995, but project staff indicated it was shelved in 1998 and delayed further, reportedly due to Initiative 695, in 1999. After a five-year hiatus, work began again in 2003. Between 1998 and 2003, only work on the ESA documentation was performed, in order to update the BA to address new species listings in 1999. Work on the NEPA EA Reevaluation began after July 2003, when the "Nickel" funding began. The Ecology liaison on the MAP Team resigned during the CWA 401 permitting process. Change in culvert design requirements for HPA between 1998 and 2004, which is not uncommon when a project is shelved. The surrounding environmental conditions are dynamic and changes in conditions affecting the HPA must be addressed. The <i>Talent</i> decision package submitted for this portion of SR 161 was the first to be submitted by WSDOT to the COE-Seattle District. Coordination with King County began in July 2002, but the final clearing permit conditions were not received until January 3, 2005, over three months after the project went to ad on September 27, 2004. Riparian buffer mitigation was an issue.
5	WSDOT Northwest Region: SR 522, Woodinville to Monroe, Fales Road – Echo Lake Road Interchange	 Work on the SR 522 corridor between Woodinville and Monroe was divided into five stages for funding purposes. The FEIS was completed in 1994, but funding was only available for Stage 1, which was fully constructed. Stages 2 and 3 remain shelved. The Fales Road Interchange is Stage 4 and is currently under construction. The WSDOT project team noted that environmental permitting can usually be accomplished in nine-12 months, but the Fales Road Interchange project took about twice as long. Due to the complexity of the project, permit application review and comment generally went back and forth a couple times. The stormwater management design required significant modifications and caused delays for virtually all of the aquatic- and shoreline-related permits. There was a change in WDFW staff during this project. This project initially went through the traditional queue (first come, first served), but was transferred to a WSDOT liaison. The first area habitat biologist (AHB) provided concurrence on all pre-JARPA preliminary designs, including WDFW requirements for stream modeling. E-mails documented this concurrence, but were not held to be official communication since they were not on WDFW letterhead. The first AHB retired and a second AHB reviewed the JARPA when it was submitted for three culverts and a stormwater outfall to the Snohomish River. The second WDFW area habitat biologist addressed the entire JARPA review period and requested design changes since there were impacts to fish life that required mitigation. WSDOT elevated this issue to the biologist's supervisor and then to WDFW headquarters since there was earlier concurrence from the first AHB, but the original concurrence on design did not hold since mitigation was found to be necessary. There was a change in COE reviewers during the JARPA review. After the public comment period, a new reviewer began working on the project in February 2003. COE indicated that, due to the complexity of the project, a more experienced re

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
		technical requirements for a programmatic permit. The COE has indicated that the format requirements are simpler than the technical submittals provided by WSDOT; the COE wants drawings that can be understood by the general public. The COE-Seattle District presents Standard Operating Procedures for the Regulatory Program and a Drawing Checklist on its website. It appears that further discussion regarding this issue should be held between WSDOT and the COE-Seattle District. • In hindsight, WSDOT noted that the poor communication with WDFW and the negotiation of technical issues would have been resolved through the Signatory Agency Committee (SAC) process. • There was a change in COE reviewers during the JARPA review. The COE presented the IP for public comment for the required 30-day period, which ended in October 2002. WSDOT requested the public comments, but the COE indicated that it was holding open the comment period based on a verbal notification from WDFW that comments were forthcoming. WSDOT noted that a written request is required to extend the public comment period an additional 30 days. After the public comment period, a new reviewer began working on the project in February 2003. COE indicated that, due to the complexity of the project, a more experienced reviewer was needed and, hence, the staff change. • WSDOT indicated that the initial COE reviewer requested a particular format for the application document, which WSDOT addressed through a change order with its consultant. This was followed by a request from the reviewer's supervisor to use the original format, which required a second format change. WSDOT's change orders with its consultant for the document changes and printing totaled approximately \$140,000. Additional WSDOT staff time, required to address the format changes, was above and beyond these costs. • The project team observed that there is inconsistency between DNR offices regarding whether a forest practices permit is necessary for a transportation project.
6	WSDOT South Central Region: SR 240, Richland, I-182 to Columbia Center Boulevard	 The JARPA for the CWA 401 certification was submitted to Ecology on January 20, 2004 and public notice was given on March 17, 2004. The CWA 401 Water Quality Certification was issued on November 5, 2004. WSDOT indicated that the original ad date was in October 2004 and, if not for delays due to right-of-way issues, the CWA 401 certification would have been post-ad. However, per statute and case law, Ecology has one year from the date of receipt of the JARPA to issue the certification. With that in mind, Ecology really issued the CWA 401 certification two and a half months ahead of the certification deadline of January 20, 2005. It appears that WSDOT did not submit the JARPA in a timely manner for Ecology to have its full year of consideration for the CWA 401 Water Quality Certification. In the future, WSDOT estimates of permitting timeframes should consider statutory and case law requirements, as necessary, rather than using only its estimated timeframes for the permitting process. Ecology did not provide a draft of the CWA 401 Water Quality Certification to WSDOT for review and comment prior to issuance as a final permit. Ecology has indicated that it does not share draft conditions for the Section 401 Certification because the public notice process now in place does not accommodate it. Ecology stated that if it discusses permit conditions with WSDOT, which leads to WSDOT-initiated changes to the project, then Ecology would be required to revise the project description included in the Public Notice issued for the project, thereby extending the timeframe for permitting. WSDOT has countered, however, that following review of draft 401 Certification conditions and based on its risk management processes, WSDOT could determine that it was in its best interest to change the project and extend the permitting timeframe. WSDOT indicated that the time window from the construction contract award to the construction start date was of such short duration that it did not provide enough time to accomplish t

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
		401 Water Quality Certification. If a draft 401 Certification had been available for review, WSDOT reportedly would have negotiated with Ecology to revise a notification provision that otherwise could not be implemented to meet the schedule presented in the 401 Certification. Since the public notification process precludes Ecology's release of a draft 401 Certification, negotiations were not possible. WSDOT indicated that if the certification had been received with more time prior to the ad date, WSDOT would have considered appealing some of the permit conditions, including notification periods and the stormwater management requirement. Both WSDOT and Ecology have expressed a desire to work together to improve communications around this issue. • Although WSDOT did not receive a draft of the CWA 401 certification, it would seem that the notification periods are a standard requirement among the many certifications issued to WSDOT each year and could have been accommodated by incorporating them into the project schedule, or alternatively, WSDOT could have negotiated up front with Ecology regarding preferred time periods for anticipated notifications. • WSDOT pointed out that the city of Richland issued a Shoreline Substantial Development Permit on April 29, 2004, and that the Ecology Shorelands and Environmental Assistance (SEA) Program concurred by issuing a Substantial Development Permit on May 14, 2004. The SEA Program issued the Shoreline Substantial Development Permit with knowledge of the proposed alternative mitigation, the SEA Program disapproved of the same alternative mitigation plan under the SMA shoreline permit and the anticipated approval of the same mitigation plan under the SMA shoreline permit and the anticipated approval of the same mitigation plan under the SMA shoreline Permit of the Ecology Central Region Office issued a letter on March 16, 2004, to the city of Richland which stated, "Any conditions included by the City as part of the substantial Development Permit or the Critical Area Ordin

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number Project Title		Project Delivery Issues					
		mitigation credit/acreage. Additionally, WSDOT project staff had made design commitments to the expensive secondary bridge and felt they could not later justify the added costs for mitigation that resulted from Ecology's review of the draft plan. Progress on permitting was delayed as WSDOT was unable to accept Ecology's requirements for mitigation. The permitting delays related to mitigation problems for this project are associated with the 401 Certification process, but not with the Shoreline permitting process. • A WDFW area habitat biologist resigned during the HPA review for the SR 240 project; he left WDFW to work in private industry. Although attrition will always occur to some degree, this situation exemplifies the challenges with employee retention at WDFW and Ecology.					
7	WSDOT South Central Region: US 12, Southeast of Pasco, McNary Pool to Attalia WSDOT's credibility with the resource agencies that had facilitated permitting to meet the ad date. WSDOT staff indicated interruption, particularly since it occurred immediately after the completion of environmental permitting WSDOT's credibility with the resource agencies that had streamlined the permitting process for complicated environmental permitting process for complicated environmental permitting was critical for construction. Phase I construction from McNary Pool to Attalia was completed in April 2002, the construction funding was pulled alm disappointed resource agencies that had facilitated permitting to meet the ad date. WSDOT staff indicated permitting was completed in April 2002, the construction funding was pulled alm disappointed resource agencies that had facilitated permitting to meet the ad date. WSDOT staff indicated permitting was completed in April 2002, the construction funding was pulled alm disappointed resource agencies that had streamlined the permitting process for complicated environmental permitting was critical for construction. Phase I construction from McNary Pool to Attalia was completed in April 2002, the construction funding was pulled alm disappointed resource agencies that had facilitated permitting to meet the ad date. WSDOT staff in the permitting was constructed in April 2002, the construction funding was pulled alm disappointed resource agencies that had facilitated permitting to meet the ad date.						
8	WSDOT Southwest Region: I-5, Chehalis, Rush Road to 13 th Street	 Permitting is in progress, with no apparent delays to project delivery. As the first WSDOT pilot project under TPEAC to draft permit terms and conditions, per ESB 1163 and ESB 5279, it is not know whether this effort will successfully streamline the permitting process at the resource agencies. At present, it appears that only resource agencies will be involved with the pilot project. WSDOT staff does not anticipate any significant streamlining will a since the resource agencies are unlikely to give up any legal authority regarding environmental permitting. The COE – Seattle Di indicated that, as a federal agency, it will not be a participant in this pilot project. 					
9	WSDOT Urban Corridors Office: SR 509/I-5 Freight and Congestion Relief Project, City of SeaTac	 From 1987 to 1995, FHWA initiated the environmental documentation process with a Tier I programmatic corridor DEIS since several corridors were being addressed. FHWA also increased the project scope to address deficiencies in the area of the SR 509/I-5 junction, which increased the project length to 9.9 miles. The state of Washington established a Signatory Agency Committee (SAC) process in 1995 to facilitate early communication on transportation projects where a NEPA/CWA 404 merger would streamline environmental documentation. After three years of work on the corridor EIS, a public comment period was held regarding a preferred alternative, but FHWA Headquarters stated during the comment period on the programmatic EIS that a project-level EIS was needed in order to address revisions to the Clean Water Act and the Clean Air Act, as well as to address an evolving environmental justice policy. In 2003, Ecology issued guidelines for programmatic and individual CWA 402 permits for stormwater management. WSDOT met with Ecology in 2004 and was advised that an IP was needed due to the proximity of the new SR 509 alignment to the third runway at SeaTac Airport. WSDOT countered that SR 509 is in a different drainage basin than the runway and proposed using Ecology's best management practices for stormwater. Ecology then issued a letter to WSDOT requiring an IP for the project, however, the letter referenced criteria that did not match the 2003 guidelines for programmatic/individual permits. As a result, WSDOT Headquarters entered into negotiations with Ecology management. Although Ecology has issued a second version of the letter requiring an IP, the three-tiered criteria referenced in the letter differ from the 2003 guidelines. WSDOT had not yet responded to the letter at the time of 					

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number Project Title Project Delivery		Project Delivery Issues
		the project team interview for this study. • The JARPA will encompass the entire project and will be submitted concurrently to COE, Ecology, and WDFW. The project JARPA will address reprofiling of roadway at South 200th Street and WDFW staff has indicated that credit may not be given to WSDOT for the mitigation effort at the Des Moines Basin wetlands for surface water management. As indicated in the previous bullet point, a JARPA was prepared and submitted for the Des Moines Basin Plan; WSDOT has contributed funding for the Des Moines Basin project, but it is not a WSDOT project. WSDOT agreed to provide funding for the Des Moines Basin project as a result of the SR 509/1-5 SAC and thought that this served as mitigation for all aquatic resources. WSDOT enhanced Des Moines Creek and removed a major fish passage blockage as part of the Des Moines Creek Basin Plan. WSDOT wants to use these creek enhancements and the removal of the fish blockage as mitigation for the culvert extension and replacement under S. 200th St. Initially, the project office had reached conceptual agreement with WDFW on this approach to mitigation. Following a change in WDFW staff, discussions are continuing to reassess the appropriateness of the mitigation plan. Final decisions have not been made at this time. • A number of years ago, a former ASARCO smelter discharged air emissions that contaminated soils with arsenic in the area of SR 509 and SeaTac Airport. The SR 509/1-5 project will generate a surplus of one million cubic yards of soil that has to be removed. The arsenic concentrations in the soil are generally below the state's Model Toxics Cleanup act (MTCA) cleanup concentrations, the soil would have to be managed as a solid or hazardous waste. If arsenic concentrations are found which are below MTCA-established thresholds, King County may still require special management of the soil. It is possible that, at least at the local level (King County Health Department), there would be three cost components for the soil: It is possible
10	WSDOT Urban Corridors Office: I-405, Kirkland Nickel Project, from SR 529 to 522	 The project design was changed numerous times in order to avoid and minimize impacts. This delayed the development of a "project footprint design," which was necessary in order to initiate environmental review for the discipline reports. This appears to be part of the iterative process associated with the design-build process, although full development of the environmental context prior to design may have facilitated the design process. This concept regarding environmental context development is being used in the Oregon Bridge Replacement Program, which will replace and repair about 400 bridges statewide during an estimated 8-year period. The permit drawing requirements vary from agency to agency, which has led to confusion regarding the adequacy of drawings used in permit applications. The I-405 Project Team expended time and resources to address the permit drawing requirements, but did not

Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

Project Number	Project Title	Project Delivery Issues
		adequately scope the level of effort required for drawings submitted to the COE – Seattle District. This situation points out the challenges involved with the multi-agency use of the JARPA. Although the JARPA provides a single application form for all aquatic permits in Washington State, the various local, state, and federal agencies impose their own requirements upon its use, which may indeed make it easier for WSDOT to submit a separate and unique JARPA to each agency for the same project. The development of the new on-line JARPA required an increased level of cooperation from the resource agencies that may reduce the variation between agency requirements. The on-line JARPA was expected to be released for WSDOT beta testing in July 2005 and, therefore, the impact of its success in reducing JARPA variation remains to be seen. **SEPA requirements are linked separately to permitting requirements for the HPA from WDFW and the CWA 402 NPDES permit from Ecology. The I-405 Project Team noted that the HPA and NPDES permit processes use the information provided within the SEPA document, which is available prior to the completion of the SEPA process and, therefore, not dependent on the completion of SEPA. However, a review of the HPA and NPDES regulations indicates that SEPA must be completed. The HPA is codified at Chapter 77.55 RCW. The HPAs for all ten study projects are specifically codified under authority of RCW 77.55.100(2), which addresses standard HPAs. RCW 77.55.100(2) and WAC 220-110-030(4) address standard HPAs, and require WDFW to grant or deny approval of a standard permit within 45 calendar days of the receipt of a complete application and notice of compliance with any applicable requirements of the State Environmental Policy Act (SEPA) (hapter 43.21C RCW)." In addition, WAC 220-110-030(6), which is specific to expedited HPAs as defined under authority of RCW 77.55.100(3), states, "All SEPA requirements shall be met prior to issuance of an expedited HPA." The State NPDES general permit rules at WAC 173-

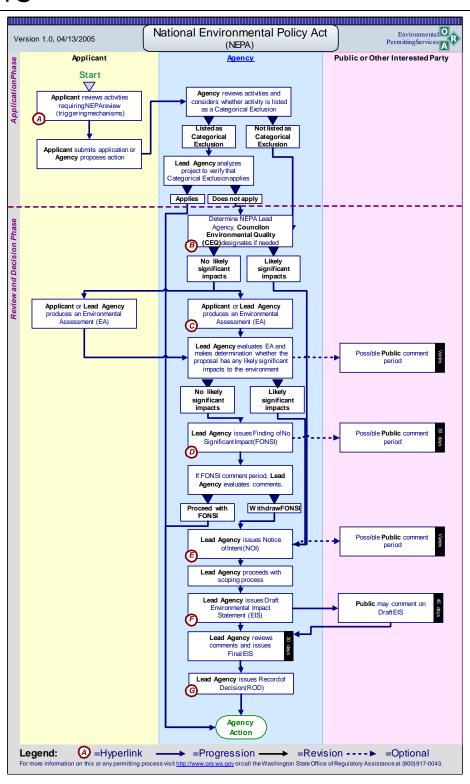
Table 3-5 - WSDOT Projects – Root Causes of Project Delivery Inefficiencies

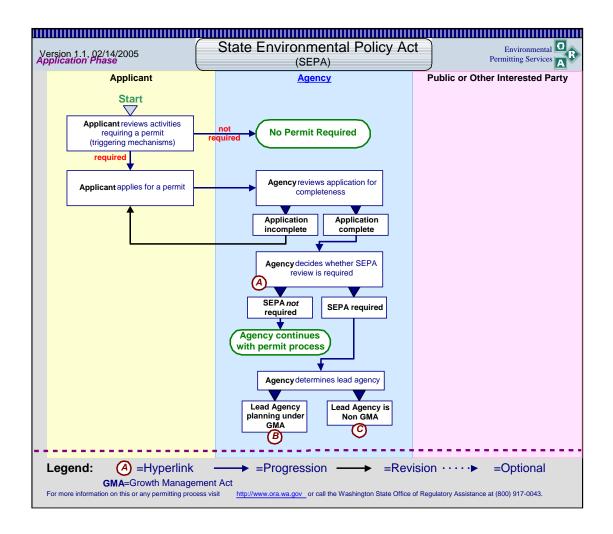
Project Number Project Title		Project Delivery Issues			
		 There are several long lead-time issues associated with environmental documentation and permitting that must be considered, including 1) fish passage decisions and mitigation, 2) sensitive areas inventories, 3) avoidance of environmentally sensitive areas (e.g., wetlands) wherever possible and minimization of impacts when not, 4) identifying scientific protocols that are appropriate and applicable, and 5) coordination with the Indian Tribes. The Legislature expects WSDOT to be aggressive in meeting the ad date and accountable for transportation project delivery. The Legislature has not placed a similar responsibility on the state resource agencies to help WSDOT deliver aggressively-scheduled projects. The Muckleshoot Tribe voiced concerns with WSDOT's conclusions presented in environmental documentation regarding tribal fishing in specific streams. WSDOT entered into a dialogue with the Tribe and revised the documentation accordingly. 			

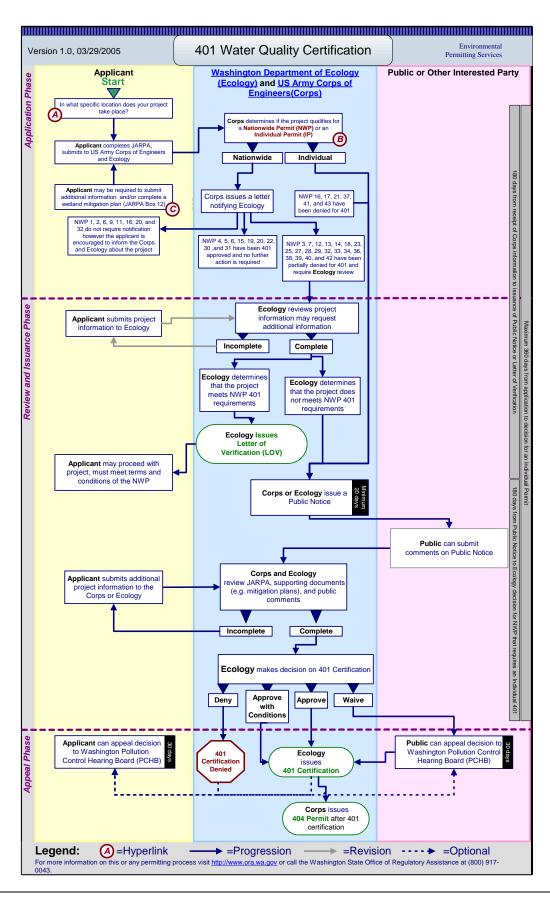
	Explanation of Acronyms			
BA	ESA Biological Assessment			
ВО	ESA Biological Opinion			
CWA	Clean Water Act			
CWA 303(d)	Clean Water Act Section 303(D)			
CWA 401	Clean Water Act Section 401			
CWA 402	Clean Water Act Section 402			
CWA 404	Clean Water Act Section 404			
CZM	Coastal Zone Management			
CZMA	Coastal Zone Management Act			
CZMP	Washington Coastal Zone Management Program			
DCE	Documented Categorical Exclusion (NEPA Document)			
DEIS	Draft Environmental Impact Statement (NEPA Document)			
DNR	Washington Department Of Natural Resources			
DNS	Determination Of Non Significance (SEPA Threshold Decision Equivalent, In General, To NEPA DCE)			
DOT Act	Department Of Transportation Act Of 1966			
EA	Environmental Assessment (NEPA Document)			
Ecology	Washington Department Of Ecology			
EIS	Environmental Impact Statement (NEPA Document)			
ESA	Endangered Species Act			
FEIS	Final Environmental Impact Statement (NEPA Document)			
FHWA	Federal Highway Administration			
FONSI	Finding Of No Significant Impact			
GMA	Washington Growth Management Act			
HPA	Hydraulic Project Approval			
IP	Individual Permit			
JARPA	Joint Aquatic Resource Permit Application			
LAA	May Affect, Likely To Adversely Affect (ESA Effects Determination For Listed Species And Designated Critical Habitat)			
NE	No Effect (ESA Effects Determination For Listed Species And Designated Critical Habitat)			

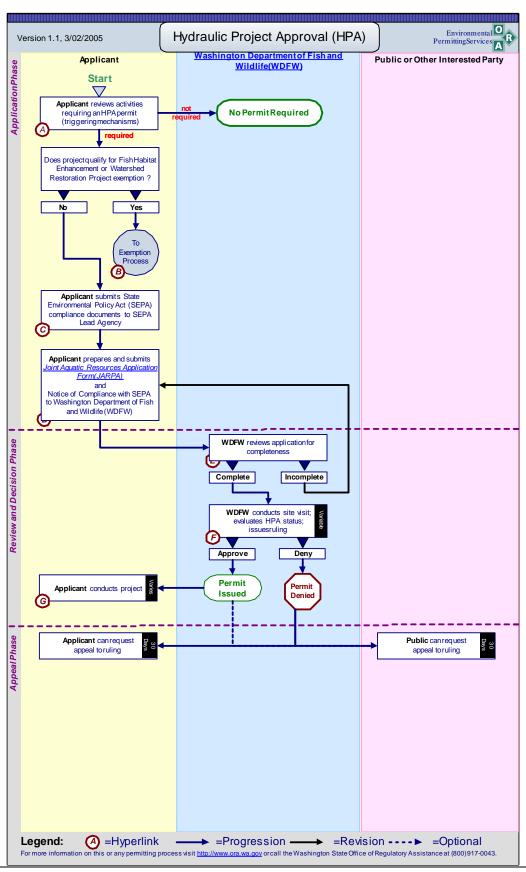
NEPA	National Environmental Protection Act
NHPA	National Historic Preservation Act
NHPA 106	NHPA Section 106 Consultation
NLAA	May Affect, Not Likely To Adversely Affect (ESA Effects Determination For Listed Species And Designated Critical
	Habitat)
NOAA	National Marine Fisheries Service Or NOAA Fisheries
NPDES	National Pollutant Discharge Elimination System (Under Clean Water Act Section 402)
NWP	Nationwide Permit
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer
SMA	Washington Shoreline Management Act
USDA	U.S. Department Of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish And Wildlife Service
WDFW	Washington Department Of Fish And Wildlife
WSDOT	Washington State Department Of Transportation

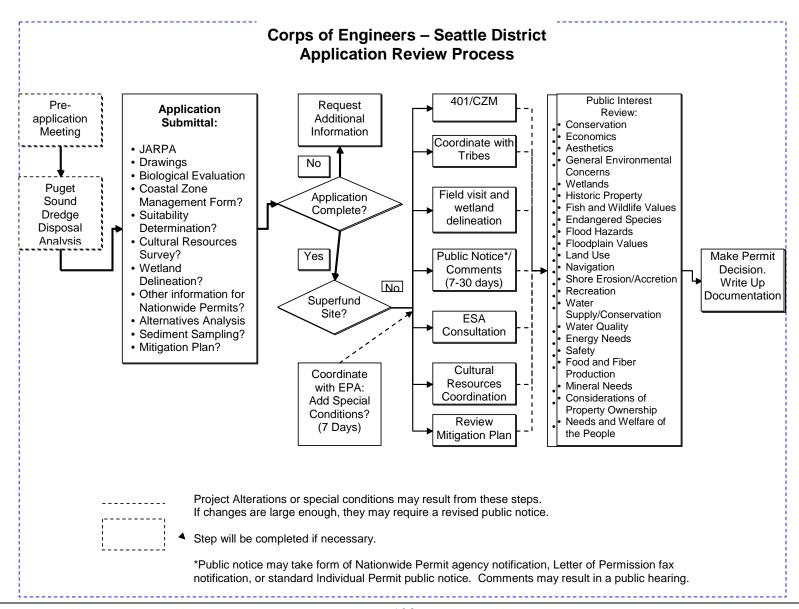
APPENDIX 4 — EXAMPLES OF PERMIT FLOW CHARTS











Business Process Review of Environmental Permitting for Transportation Projects				

APPENDIX 5 – DETAILS ON COMMON PERMITS

Hydraulic Project Approval

The WDFW issues an HPA for "any form of work that uses, diverts, obstructs, or changes the natural flow or bed of any fresh water or saltwater of the state." The HPA is issued, conditioned or denied solely for the protection of fish life. Permit processing can take up to 45 days following receipt of a complete application package, although WDFW's goal is to issue the HPA within 30 days of the applicant's submittal of a complete application package. The ten-year average is 13 days.

A complete application package for an HPA must include:

- o A completed JARPA form
- o General plans for the overall project
- o Complete plans and specifications for the activities proposed within the mean higher high water line in salt waters or within the ordinary high water line in fresh waters of the state
- o Complete plans and specifications for the protection of fish life
- o Notice of compliance with any applicable requirements of SEPA.

Clean Water Act Section 404

Section 404 of the Clean Water Act prohibits the discharge of dredge or fill material into the "waters of the United States" without a permit. Typical activities that require Section 404 permits include:

- o Depositing fill, dredged, or excavated material in "waters of the United States" and/or adjacent wetlands
- o Grading or mechanized land clearing of wetlands
- o Placement of spoils (soils?) from ditch excavation activities in wetlands
- o Soil movement during vegetation clearing in wetlands
- o Site development fill for residential, commercial, or recreational developments
- o Construction of revetments, groins, breakwaters, beach enhancement, jetties, levees, dams, dikes, and weirs
- Placement of riprap and road fills
- o Return water from dredge material disposal on the upland
- o Generally, any fill material used to construct fast land for site development, roadways, erosion protection, etc.

The Secretary of the Army, acting through the Chief of Engineers, is authorized directly under Section 404 of the Clean Water Act to issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites." The U.S. EPA website provides the following summary in regard to the Section 404 program:

"The 404 permit program is administered jointly by EPA and the U.S. Army Corps of Engineers. The Corps handles the actual issuance of permits (both individual and general); it also determines whether a particular plot of land is a wetland or water of the United States. The Corps has primary responsibility for ensuring compliance with permit conditions, although EPA also plays a role in compliance and enforcement.

"The U.S. Fish and Wildlife Service and National Marine Fisheries Service play special advisory roles because of their expertise regarding wildlife habitat.

"EPA issues certain guidelines and policies, including methods for determining whether a particular tract is a wetland. EPA can actually veto a Corps-issued permit (a step rarely taken.).

"EPA is also responsible for determining whether portions of the 404 program should be turned over to a state, territory, or tribe. (To date only a few states have assumed 404 responsibility for nontidal waters.) When 404 authority has been given to a state, EPA oversees implementation of the program. If necessary, EPA can "take back" the program."

Other laws may affect the processing of the JARPA for a Section 404 permit, including NEPA, NHPA, ESA, the Coastal Zone Management Act (CZMA), the Fish and Wildlife Coordination Act, the Deepwater Port Act, the Federal Power Act, the Marine Mammal Protection Act, the Wild and Scenic Rivers Act, and the National Fishing Enhancement Act of 1984. Also, any Section 404 permit requires a Section 401 Water Quality Certification from Ecology. In addition, a Section 404 permit issued in any of Washington's 15 coastal counties requires a Coastal Zone Consistency Determination from Ecology.

Not every activity requires an individual permit. Certain activities and work can be authorized by a letter of permission, a nationwide permit, or a regional permit. Some activities authorized by these permits are permitted in advance. The Corps of Engineers currently administers over 40 programmatic nationwide permits.

The processing time for individual Section 404 permits, which generally address complex projects, can range from six to 24 months. The Corps' Nationwide Permits are programmatic and can usually be processed within three to six months, although they can take up to 12 months. Within 15 days of the submittal of a complete permit application, the Corps must issue a public notice to indicate that an application for an individual permit was received for a project, or that a general permit will be issued. The Corps of Engineers–Seattle District indicated that a complete application includes the following:

- Location of the proposed project
- o Description of the proposed project
- O Description of the impacts on wetlands (delineation is not required, but the Corps needs to ensure that the maximum area of jurisdiction is known)
- o Drawings that are clear, indicating the locations of wetlands and the project footprint, yet simple enough for the general public to understand

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²³ At the time of this study, the URL for this quotation is: http://www.epa.gov/watertrain/cwa/cwa56.htm.

After the Seattle District determines that an application is complete, the following additional information is needed from the applicant (including WSDOT):

- Mitigation plan
- o Section 404(b)(1) alternatives analysis (for large projects)
- o Federal lead provides ESA Section 7 consultation
- o NHPA Section 106 report concurrence
- o Coastal Zone Management concurrence from Ecology
- o Section 401 Water Quality Certification from Ecology

The Section 404 statute requires that the USFWS provide comments to the Corps within 90 days of the public notice. In addition to the USFWS, Section 404 directs the Corps to obtain comments within 90 days from other federal agencies:

"...the Secretary [of the Army] shall enter into agreements with the Administrator [EPA], the Secretaries of the Departments of Agriculture, Commerce, Interior, and Transportation, and the heads of other appropriate Federal agencies to minimize, to the maximum extent practicable, duplication, needless paperwork, and delays in the issuance of permits under this section. Such agreements shall be developed to assure that, to the maximum extent practicable, a decision with respect to an application for a permit under subsection (a) of this section will be made not later than the ninetieth day after the date the notice of such application is published...."

The 15-day period to public notice and the 90-day comment period provide for a total of 105 days to process the permit application, which is also referred to as a Pre-Construction Notification (PCN). The application processing time is dependent on the complexity of the impacts on aquatic resources and endangered species, archaeological or tribal concerns, and on workload. The Seattle District issues a permit decision, which is a combined decision document based on the NEPA document, the 404(b)(1) alternatives analysis, the public interest review, and additional laws.

WSDOT expressed concern regarding the timeliness of Section 404 permitting, once an application package is determined to be complete. Also, WSDOT indicated that the information requirements for an application for a nationwide permit have been almost the same as that required for an individual permit. As the critical path permit, WSDOT may suggest performance measures for the liaison program to assess timeliness of permit processing and target performance improvements. This, however, requires further discussion with the Seattle District.

Clean Water Act Section 401 Water Quality Certification

Transportation projects that require a CWA Section 404 permit from the U.S. Army Corps of Engineers are also required to obtain a CWA Section 401 Water Quality Certification from Ecology. The state's authority is derived directly from the CWA; it is not a delegated authority. This certification indicates that Ecology anticipates the transportation project will comply with state water quality standards and other aquatic resource protection requirements under Ecology's authority. The Water Quality Certification may address both the construction and operation of

the proposed transportation project. In addition, the permit conditions of the 401 Certification also become conditions of the federal Section 404 permit.

Ecology takes action to approve, deny, or partially deny specific Section 404 Nationwide Permits through its Section 401 authority regarding state water quality standards. If the COE–Seattle District can determine that the transportation project will satisfy all of the requirements for a Section 404 Nationwide Permit, the Corps may issue a "no further action" letter, which informs the applicant that they do not have to contact Ecology for a 401 Certification. If Ecology partially denies a 404 Nationwide Permit without prejudice, an individual certification or letter of verification from Ecology is required. If the 404 Nationwide Permit is denied without prejudice, then an individual Water Quality Certification is required for all activities addressed under that Nationwide Permit.

Ecology has up to one year from the date of receipt of the JARPA package to approve, condition, or deny the Water Quality Certification. CWA Section 401 requires a "reasonable assurance" of water quality. In addition to enforcing the Section 401 requirements, Ecology may also include conditions in the Water Quality Certification that assure water quality protection through compliance with the CWA Section 402 NPDES permit.

Ecology does not share draft conditions because the public notice process now in place does not accommodate it. If Ecology and WSDOT discussed conditions, and then WSDOT changed the project in response, the revised project would have to be described in the Public Notice issued for the project, requiring a new public notice and then a new timeframe.

Clean Water Act Section 402

WSDOT designs, maintains, and operates stormwater management facilities that are associated with the state's highways. Section 402 regulates stormwater discharges to surface water bodies, including creeks, streams, rivers, wetlands, lakes, estuaries, and marine waters. The National Pollutant Discharge Elimination System (NPDES) program for point source discharges is addressed under Section 402.

A stormwater management permit is required for all construction activities (e.g., grading, stump removal, and demolition) on sites that are at least one acre in size and that also discharge stormwater to surface water or storm drains that discharge to surface water. Ecology has issued stormwater permits to WSDOT to address stormwater management in transportation project construction areas. Depending on the transportation project, WSDOT may use a statewide NPDES General Stormwater Permit for Construction Activities. If the site conditions are complex or are not addressed by the programmatic permit, WSDOT applies for an individual NPDES Construction Stormwater Permit. The construction stormwater permits generally require the development and implementation of a Temporary Erosion and Sediment Control (TESC) Plan. In addition, the minimum requirements of the WSDOT Highway Runoff Manual must be

Ecology also regulates post-construction stormwater runoff from roadways. Currently, WSDOT has coverage under the NPDES Municipal Stormwater Permit to address the collection, conveyance, and discharge of stormwater from Municipal Separate Storm Sewer Systems (MS4s) associated with roadways within the Phase I jurisdictions. The MS4s are not combined sewer systems and do not include publicly-owned treatment works (POTW). WSDOT is

preparing to address the NPDES Phase II stormwater requirements that apply to smaller municipalities. WSDOT is in the process of obtaining coverage under the Phase II permit as well as re-issuance of the Phase I. At this time, the discussion about these permits has been to issue one statewide permit to WSDOT which will cover the requirements of both, rather than have piecemeal coverage only within the Phase I and Phase II areas.

Coastal Zone Management Certification

Ecology must provide a written Coastal Zone Management (CZM) Consistency Determination for federal activities, federal licenses or permits, and federal assistance programs (funding) that include activities and development affecting coastal resources in the fifteen coastal counties (e.g., all counties that "touch" saltwater, including Wahkiakum). Federally-aided transportation projects require a CZM Consistency Determination that states the project is consistent with Washington's Coastal Zone Management Program (CZMP) to the "maximum extent practicable." Transportation projects must demonstrate compliance with the following state laws to ensure consistency with the CZMP:

- o Shoreline Management Act, including local government shoreline master programs
- o State & Federal Water Quality Requirements
- State & Federal Air Quality Requirements
- o State Environmental Policy Act
- The Ocean Resource Management Act

If the COE–Seattle District issues a Section 404 permit in any of Washington's 15 coastal counties, a CZM Consistency Determination must be submitted to Ecology for objection, concurrence, or concurrence with conditions. Ecology has 60 days to issue a CZM Consistency Determination for federal projects and 180 days for licenses, permits or funding projects.

Forest Practices Act Permit

The Forest Practices Act defines a plan to protect public resources while assuring that Washington continues to be a productive timber growing area. The Act regulates activities related to growing, harvesting or processing timber on all local government, state and private forest lands in order to protect water quality, provide fish and wildlife habitat, protect capital improvements, and ensure that harvested areas are reforested. The Washington Department of Natural Resources (DNR) regulates forest practices related to growing, harvesting or processing timber, which may include road construction and maintenance, thinning, salvage, harvesting, reforestation, brush control, and using fertilizers or pesticides. When a transportation project performs "forest practices" in the course of road construction, the project must apply for a Forest Practices Permit. Only two of the projects (Nos. 2 and 5) considered in the study were documented as requiring a Forest Practices Permit.

Aquatic Use Authorization

None of the study projects were documented as applying for state Aquatic Use Authorization, however, it is likely that WSDOT will construct roads across state-owned aquatic lands and require this permit. The DNR is steward of about 2.4 million acres of state-owned aquatic lands.

If WSDOT plans to use state-owned aquatic lands for roadways, it must obtain authorization from DNR.

Local Government Shoreline Substantial Development Permit

The Shoreline Management Act (SMA) defines "development" as a use consisting of:

- o Construction or exterior alteration of structures
- Dredging
- o Drilling
- o Dumping
- o Filling
- o Removal of any sand, gravel, or minerals
- o Bulkheading
- o Driving of piling
- o Placing of obstructions

A development may also be any project of a permanent or temporary nature that interferes with the normal public use of the surface of waters overlying lands subject to the SMA at any stage of water level.

All "developments" within the shorelines of the state must be consistent with the policies of the SMA and the requirements of the local Shoreline Master Program (SMP). However, only "substantial developments" require a substantial development permit (SDP). Although a proposed development may be found exempt from substantial development permit requirements, it may still require a variance or conditional use permit and must comply with the local SMP.

A JARPA is submitted to the local government with jurisdiction over substantial development of the shoreline area. The local government issues a written permit for development on shorelines, though many types of development are exempt from this permit requirement. After the local government completes the permitting process, the permit is sent to Ecology for filing. Ecology does not have any authority to approve or deny the substantial development permit. The date Ecology receives a local government's SDP decision is considered to be the permit 'filing date.' Anyone may appeal the SDP decision to the Shorelines Hearings Board within the 21-day period beginning on the 'filing date.'

Local Government Flood Plain Development Permit

Local governments that participate in the National Flood Insurance Program (NFIP), which is administered by the Federal Emergency Management Agency (FEMA), are required to review proposed development projects to determine if they will be located in floodplain areas shown on FEMA maps. The local government having jurisdiction over a mapped 100-year floodplain must require submittal of a JARPA for a flood plain development permit.

Proposed projects are reviewed by the appropriate governmental body. The flood plain development permit includes conditions to reduce the potential for damage from floodwater. Permits are required for any development, as well as for filling or grading activities in the

floodplain. Permit processing time can be expected to vary by jurisdiction and to be lengthened to address project complexity. A public hearing is usually not required, but there are exceptions. Also, state law requires that a local government with flood plain jurisdiction must have a local floodplain ordinance that meets or exceeds the NFIP requirements. Ecology has approval authority over these flood plain ordinances.

Local Government Critical Areas Ordinance

The Washington State Legislature passed the Growth Management Act (GMA) in 1990 to encourage wise land use and planning at the local government level. The Legislature found that uncoordinated and unplanned growth posed a threat to the environment, sustainable economic development, and the quality of life in Washington. The GMA requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans and implementing them through capital investments and development regulations. The GMA defines "critical areas" as including the following areas and ecosystems:

- o Wetlands
- o Areas with a critical recharging effect on aquifers used for potable water
- Fish and wildlife habitat conservation areas
- o Frequently flooded areas
- o Geologically hazardous areas.

Local city and county governments that meet specified growth criteria in the GMA are required to develop comprehensive development plans, as well as critical areas ordinances. The GMA requires inclusion of the best available science (BAS) in developing policies and development regulations to protect the functions and values of critical areas.

Where a transportation project may impact an aquatic resource critical area, WSDOT will submit a JARPA to the local jurisdictional government to request the appropriate permit established under the local critical areas ordinance. Four of the study projects were required to obtain critical areas ordinance permits; several addition projects were required to obtain local permits for listed critical areas including wetlands, aquifer recharge areas, and flood plains, although these permits were not specifically referred to as critical areas ordinance permits.

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