

TABLE E-1  
Comparison of Regulatory Requirements

Program/Service	Description of Requirement										
	PSWQMP <sup>1</sup>	NPDES Phase 1 Municipal Stormwater Permits	NPDES Phase 2 Municipal Stormwater Permits <sup>2</sup>	Draft Tri-County ESA 4d Rule <sup>3</sup>	Final OR, WA ESA 4(d) Rule <sup>4</sup>	401 Certifications	TMDLs	WDFW HPA	Shoreline Management Act	2514 Watershed Planning	Underground Injection Control (UIC)
1) Management Zones (buffers)	Local stormwater management ordinances must protect streams, aquatic habitat and wetlands	Does not apply.	Does not apply.	Within 2 years of the anniversary date of the final 4(d) rule for the Puget Sound, cities and counties need to have enacted ordinances implementing management zones (i.e., buffers), including the definition of development (p. 10; note that appropriate setbacks for urban areas still under discussion).	Require adequate riparian buffers along all perennial and intermittent streams. Because of the intensity of disturbance in surrounding uplands, riparian buffers are at least as critical in urban areas as in rural areas greater than or equal to 200 feet (p. 184).	The 401 process reviews buffers on a case-by-case basis and makes appropriate recommendations.	TMDLs look at riparian conditions, but they are not specifically considered in TMDL setting.  Management zones might be a BMP for achieving TMDLs in the implementation phase.	There is a broad relationship between Shoreline Management rules and the HPA program's goals for protecting buffers, streambanks, etc.  WDFW is working on streambank protection guidelines and white papers.	Path A of the 2000 Shoreline Master Program guidelines allows local governments to use buffer requirements as one way to protect ecological functions of shorelines. Path B is more specific in how local governments protect these functions. New structures or activities that are not "water dependent" must be set back from the edge of water bodies to protect the quality and natural functions of the shoreline, and to protect people and businesses from floods. Natural vegetation along shorelines must be preserved to help prevent erosion and to provide habitat for aquatic life, such as endangered salmon.	Watershed plans may address in optional habitat component.	The new Ecology Stormwater Management Manual requires that infiltration facilities on commercial and industrial sites be no closer than 100 feet to drinking water supplies. This distance may be more in Wellhead Protection Areas.

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2) Improved Technical Standards for Stormwater Discharges and Water Quality	<p>Ordinances are required for all new development and redevelopment which address control of offsite water quality, the use of source control BMPs, the effective treatment of the water quality design storm, the use of infiltration where appropriate, the protection of stream channels and wetlands, and erosion and sediment control.</p> <p>The adoption of Ecology's Stormwater Manual or a substantially equivalent manual is required.</p>	<p>Operators of regulated large municipal stormwater systems are required to design their programs to reduce the discharge of pollutants to the maximum extent possible, protect water quality, and satisfy the appropriate water quality requirements of the CWA.</p> <p>Phase 1 covers jurisdictions with populations more than 100,000 (6 municipalities and WSDOT) for general permits, in addition to industrial and construction-related (&gt; 5 acres of land-disturbing activity). Phase 1 permits are expected to be re-issued in April 2001.</p>	<p>Operators of regulated small municipal stormwater systems are required to design their programs to reduce the discharge of pollutants to the maximum extent possible, protect water quality, and satisfy the appropriate water quality requirements of the CWA.</p> <p>Phase 2 will apply to approximately 95 municipalities in Washington (including all "census urban areas" and construction sites &gt;1 acre). Phase 2 permits are expected to be issued in April 2002.</p>	<p>Tri-County jurisdictions will adopt stormwater standards and programs equivalent to or better than the revised Ecology manual (p. 18).</p> <p>Jurisdictions will ensure that developers are encouraged to experiment with innovative construction and development techniques that reduce stormwater runoff, and that development that reduces effective impervious surfaces and enhances retention of native vegetation is promoted (p. 21).</p>	<p>Diversion of flow that results in excessive temperature or excessive fluctuation of stream temperatures is considered take (p. 172).</p> <p>Violation of federal or state CWA discharge permits through actions that impact water quality is considered take (p. 172).</p>	<p>Implementing Ecology's Stormwater Manual is meant to ensure compliance with 401 standards. BMPs in the manual are intended to meet compliance with water quality standards.</p>	<p>Section 303(d) of the CWA requires that Ecology prepare a list of water bodies that are not meeting, or will not meet, water quality standards after application of the required technology-based effluent limits. If a water body is out of compliance with water quality standards, the CWA requires that a TMDL be calculated for specified pollutants. The TMDL includes stormwater sources in both point and nonpoint source load allocations.</p> <p>In the implementation phase, local stakeholders develop a plan to address runoff pollution identified as over the TMDL. Ecology manual BMPs may be components of this plan.</p>	<p>WDFW has the authority through HPAs to regulate stormwater discharges in NPDES jurisdictions. WDFW prefers to work with Ecology and local gov'ts to address stormwater.</p> <p>The update to Ecology's Stormwater Manual is intended to be best available science for the HPA program.</p>	Does not apply.	<p>Watershed plans may recommend stormwater management improvements under the optional water quality component.</p>	<p>The UIC program requires the use of all known, available and reasonable methods of prevention, control and treatment (AKART) for stormwater discharges. BMPs are required to prevent or reduce pollution of groundwater.</p>
3) Source Control of Runoff Pollution	<p>Source control BMPs shall be applied to all projects to the maximum extent possible (p. A-9).</p>	<p>Post construction site controls required. Appropriate enforcement must be implemented.</p> <p>Construction site source controls: developing, implementing, and enforcing an erosion and sediment control program to address discharges of post-construction stormwater runoff for construction activities that disturb 5 or more acres of land.</p>	<p>Post construction site controls required. Appropriate enforcement must be implemented.</p> <p>Construction site source controls: developing, implementing, and enforcing an erosion and sediment control program to address discharges of post-construction stormwater runoff for construction activities that disturb 1 or more acres of land.</p>	<p>Source control standards will be adopted by the jurisdictions that will reduce runoff pollution (p. 20).</p>	<p>Discharges or dumping of toxic chemicals or other pollutants into waters or riparian areas supporting the listed salmonids is considered take (p. 172).</p>	<p>401 can require source control, especially if there is no existing NPDES permit.</p>	<p>In the implementation phase, local stakeholders develop a plan to address runoff pollution identified as over the TMDL. Source control BMPs may be components of this plan.</p>	Does not apply.	Does not apply.	<p>Watershed plans may address in optional water quality component.</p>	<p>The Groundwater Standards include AKART requirements for source control.</p>

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4) Inspection and Enforcement	<p>Inspection, compliance, and enforcement measures are required for urbanized areas (p. 29).</p> <p>Each county and city shall develop and enforce within local governments' authority, operation and maintenance programs and ordinances for new and existing public and private stormwater systems (p. 20).</p>	<p>The NPDES permit that the operator of a large municipal separate storm sewer system is required to obtain is federally enforceable. The permittee could be subject to potential enforcement actions and penalties.</p> <p>Must enforce:</p> <ul style="list-style-type: none"> <li>• Illicit discharge prohibition</li> <li>• Construction site and post-construction site BMPs</li> </ul>	<p>The NPDES permit that the operator of a small municipal separate storm sewer system is required to obtain is federally enforceable. The permittee could be subject to potential enforcement actions and penalties.</p> <p>Must enforce:</p> <ul style="list-style-type: none"> <li>• Illicit discharge prohibition</li> <li>• Construction site and post-construction site BMPs</li> </ul>	<p>Local jurisdictions have the authority to regulate stormwater pursuant to their general police power authority (p. 19).</p>	<p>Under ESA section 9(a), it is illegal for any person to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect) ... any wildlife species listed as endangered, unless with written authorization for incidental take (p. 170).</p> <p>Enforcement activities may be initiated for activities that harm protected salmonids; however, NMFS preference is for the entity to immediately modify activity and actively pursue an incidental take statement of permit through negotiations with NMFS (p. 172).</p>	<p>401 projects are subject to inspection and enforcement provisions of RCW 90.48. Ecology can issue notices of correction or fines of up to \$10,000 per day for violations. 401 projects are also subject to 404 inspection and enforcement provisions by the U.S. Army Corps of Engineers.</p>	<p>WAC 90.48 gives authority to cite pollution violations.</p> <p>Four-year 309(d) review provides measure of success at improving water quality in a stream reach.</p>	<p>HPAs sometimes serve as the "last line of defense" to address projects with potential stormwater impacts.</p>	<p>WAC 173-27 establishes enforcement provisions for shoreline permits.</p> <p>Both Path A and Path B of the 2000 guidelines rely on existing enforcement provisions.</p>	<p>No enforcement authority.</p>	<p>The UIC regulations require inspection and enforcement of facilities; enforcement actions are taken infrequently.</p>
5) Public Education	<p>Public education programs are required for residents, businesses, and industries.</p> <p>Proper management and disposal of pesticides, herbicides, fertilizers, and oil.</p> <p>Training construction contractors in ESC.</p> <p>Explain illicit connections to individual property owners.</p>	<p>Public education programs required.</p>	<p>Public education programs required.</p>	<p>Jurisdictions will implement programs to educate their citizens about water quality, stormwater runoff, and protection of endangered species (p. 21).</p>	<p>Does not apply.</p>	<p>Does not apply.</p>	<p>Role of Ecology Regional Coordinator, who takes completed technical TMDL to public for education and to generate support of Summary Implementation Strategy, which is submitted to EPA with TMDL for approval.</p>	<p>WDFW has materials related to salmon protection which can include water quality issues.</p> <p>WDFW has a complete web site on its programs.</p>	<p>Ecology has a Web site with informational materials on the Shoreline Management Act and the 2000 Shoreline Master Program guidelines.</p>	<p>Ecology developed a Web site to provide information on watershed planning activities across the state and to encourage planning groups to network and share progress.</p>	<p>Information on the Ecology and EPA program requirements are available on both agencies websites. Ecology has staff dedicated to education.</p>
6) Public Involvement	<p>Public involvement is sought during plan review and update.</p>	<p>Public must be involved in developing local SWM program</p>	<p>Public must be involved in developing local SWM program</p>	<p>Jurisdictions will implement programs to ensure public involvement in the jurisdiction's decisionmaking process involving stormwater management programs and priorities.</p>	<p>Governments, organizations and citizens need to assess the consequences of their activities and implement adjustments needed to protect threatened fish and comply with the 4(d) rules. After time to review the rules, NMFS will hold public workshops to help people understand and comply with these regulations.</p>	<p>Does not apply.</p>	<p>Stakeholder input processes are built in, first to engage stakeholders in developing the Summary Implementation Strategy before EPA approval, and later to develop the Detailed Implementation Plan during the implementation phase.</p>	<p>WDFW requires that SEPA be complete prior to HPA issuance. Any rulemaking would involve public input.</p>	<p>All changes to Shoreline Master Programs require public involvement. At a minimum, local governments must hold public hearings.</p>	<p>Ecology has sponsored a training workshop for watershed planning units and lead agencies called "Getting in Step: A guide to effective outreach in your watershed."</p>	<p>Development of new UIC rules will involve a public comment period.</p>

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7) Elimination of Illicit Discharges	<p>Education programs are required to educate citizens about stormwater and its effects on water quality, flooding, and fish/wildlife habitat, and to discourage illicit dumping into storm drains.</p> <p>All pollutants other than sediment that occur onsite during construction shall be handled and disposed of properly</p> <p>Investigate sources of pollutants.</p> <p>Eliminate illicit connections.</p> <p>Respond to spills (p. A-8).</p>	<p>Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system are required.</p> <p>Must develop a map of receiving waters and outfalls.</p> <p>Must prohibit discharges of pollutants.</p>	<p>Developing and implementing a plan to detect and eliminate illicit discharges to the storm sewer system are required.</p> <p>Must develop a map of receiving waters and outfalls.</p> <p>Must prohibit discharges of pollutants.</p>	<p>Jurisdictions must have or participate in a program for preventing, detecting, and removing illicit discharges from industrial, commercial, and residential sites (p. 21).</p>	<p>Discharges or dumping of toxic chemicals or other pollutants into waters or riparian areas supporting the listed salmonids is considered take (p. 172).</p>	<p>Does not specifically apply. Usually covered by NPDES permits.</p>	<p>Applies only as discharges lead to violations of TMDL.</p>	<p>Does not specifically apply. Usually covered by NPDES permits.</p>	<p>Does not apply.</p>	<p>Watershed plans may address in optional water quality component.</p>	<p>Included in Groundwater Standards (AKART).</p>
8) Intergovernmental Coordination	<p>Taking cooperative actions in watersheds shared by other jurisdictions for urbanized areas is required (p. 25).</p> <p>Each local jurisdiction in the Puget Sound Basin is expected to coordinate with neighboring jurisdictions in stormwater growth management and basin planning (p. 22).</p>	<p>Public participation is required in developing the municipality's stormwater program.</p>	<p>Public participation is required in developing the municipality's stormwater program.</p>	<p>Jurisdictions shall have a program or policy directive for ensuring that adequate inter-jurisdictional agreements exist for controlling stormwater runoff conveyed between jurisdictions and for coordinating of watershed planning efforts and activities (p. 21).</p>	<p>NMFS anticipates and encourages consideration of comprehensive proposals for the conservation of salmonids in Washington (e.g. the Tri-county 4(d) rule).</p>	<p>401 staff are placed in regional Ecology offices and are available for guidance to 2514 Watershed Planning Groups.</p>	<p>Ecology often teams with a local partner (e.g., King County, local conservation district) to develop the TMDL.</p> <p>Implementation plans are developed by stakeholders. Memoranda of agreement could be used in this process but have been an uncommon mechanism for partnering to date.</p>	<p>WDFW coordinates with other gov't agencies including Ecology, Salmon Team, NMFS, USFWS, Puget Sound Action Team, and Tri-County.</p>	<p>Shoreline Management Act establishes a balance of authority between state and local government. Cities and counties are the primary regulators, but the state (through Ecology) has the authority to review local programs and permit decisions.</p>	<p>HB 2514 created a framework for governments, interest groups, and citizens to collaboratively address water resource problems in each of the state's 62 Water Resource Inventory Areas (WRIAs).</p>	<p>Ecology and EPA are working together on program coordination; working with local governments is coming along slowly.</p>

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9) Monitoring	Measures to assess program effectiveness are required.	Measures to assess program effectiveness are required. Monitoring requirements to be determined by state.  Local government must evaluate: <ul style="list-style-type: none"><li>Program compliance</li><li>Appropriateness of BMPs</li><li>Progress toward goals</li></ul>	Measures to assess program effectiveness are required. Monitoring requirements to be determined by state.  Local government must evaluate: <ul style="list-style-type: none"><li>Program compliance</li><li>Appropriateness of BMPs</li><li>Progress toward goals</li></ul>	Must have or participate in a program for monitoring implementation, and gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities (p. 22).	Identify a commitment to regularly monitor and maintain any detention basins and other management tools during the long term, and to adapt practices as needed based on monitoring results (p. 185).	401 process requires project-specific monitoring procedures to be established, especially in approving a wetland mitigation plan.	Phase 1 permits require monitoring, which is used to identify 303(d) water bodies, which are then subject to a TMDL. Monitoring results are used to develop the TMDL, and to guide development of implementation plans.  Monitoring will be used for TMDL compliance.	Monitoring requirements are project-specific. Larger projects may have long-term effectiveness monitoring programs.	Both Path A and Path B require local governments to maintain records of project review actions in shoreline areas.	Watershed plans may address monitoring in required water quantity component and in optional water quality and habitat components.	Monitoring requirements are included in the new western Washington stormwater manual.
10) Consideration of Ecosystem Impacts in Zoning/Land Use Decisions	The goals of the local stormwater program shall be incorporated into the goals of the comprehensive plan and incorporate the ordinances required by the element into the development regulations (p. 22).  Development of local government stormwater management programs should include compliance with Chapter 43.21C RCW, the State Environmental Policy Act (SEPA); and Chapter 34.05 RCW, the Administrative Procedures Act (p. 33).	Phase 1 municipalities have land use planning responsibilities that affect stormwater management performance and costs.	Phase 2 municipalities have land use planning responsibilities that affect stormwater management performance and costs.  Jurisdictions shall use best available science and adaptive management to continue to evaluate development regulations and permit programs that may jeopardize the continued existence of listed salmon, adversely modify their critical habitat, or both. Improvement could potentially be made to SEPA procedures (p. 17).  Jurisdictions will ensure that impacts are assessed when land use decisions are made (p. 21).  Experiment with innovative construction and development techniques that reduce impervious areas and retain native vegetation (p. 22).	During the first 2 years of Phase I, cities and counties will analyze their existing comprehensive planning policies and plans as required by the state Growth Management Act (p. 10).  Jurisdictions shall use best available science and adaptive management to continue to evaluate development regulations and permit programs that may jeopardize the continued existence of listed salmon, adversely modify their critical habitat, or both. Improvement could potentially be made to SEPA procedures (p. 17).  Jurisdictions will ensure that impacts are assessed when land use decisions are made (p. 21).  Experiment with innovative construction and development techniques that reduce impervious areas and retain native vegetation (p. 22).	Land use activities that adversely affect salmonid habitat (e.g., urban development or road construction in riparian areas) will be considered take (unless within an "exception"; p. 172).  Must assure that development is in accordance with Metro's Urban Growth Management Functional Plan. NMFS must agree in writing that the city or county ordinances or Metro's Functional Plan are sufficient to assure that plans and development complying with them will result in development patterns and actions that conserve listed salmonids (p. 184).	Does not apply.	TMDL setting identifies primary sources and associated contributors of pollutants. Stakeholders are then responsible for implementing a plan to reach the TMDL, which may include land use tools used in stormwater management.	WDFW considers good land use planning to be critical in the connection between stormwater and HPAs.	The broad policy of the SMA is to protect the state's shorelines, the quality of the water, and the natural environment. The act requires that each city and county adopt a shoreline master program.	Watershed plans may address in required water quantity component and in optional water quality and habitat components.	Recommendations for land use planning will be included in Ecology's new stormwater manual.

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11) Surface Water Maintenance Standards	Each county and city shall develop and enforce within the local governments' authority, operation and maintenance programs, and ordinances for new and existing public and private stormwater systems (p. 20).	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required.  Must assure that private stormwater management facilities are maintained.	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required.  Must assure that private stormwater management facilities are maintained.	Jurisdictions must have maintenance standards and programs for ensuring proper and timely maintenance of public and private stormwater facilities (p. 22).	Take prohibitions do not apply to routine road maintenance work performed consistent with the ODOT guide by ODOT staff (p. 181). Other agencies should use ODOT guide as a guideline to develop their own maintenance standards.	401 conditions are project-specific and incorporate both construction and long-term maintenance standards.	Does not apply.	Water quality concerns need to be addressed to protect fish habitat. Ecology standards or permits may be referenced.	Does not apply.	Watershed plans may address in optional water quality and habitat components.	Ecology's new UIC registration forms include space for maintenance activities.
12) Shorelines Management Program Updates	The plan recommends local governments develop a comprehensive program for marine and freshwater habitat, including updating shoreline master programs in accordance with Ecology guidelines.	Does not apply.	Does not apply.	During Phase I, cities and counties will review their shoreline master program and make changes to conform with NMFS-approved state shoreline regulations (p. 11).	There is no relationship between the SMA and the 4(d) rule. Instead, there will be a relationship between the SMA and Section 7. NOAA/OCRM funds Ecology \$3.6 million/year to implement shorelines and CZMA in Washington. Approval of the new rules by NOAA/OCRM constitutes a "federal action," requiring a Section 7 consultation with NOAA/NMFS and USFWS because of potential effects to ESA listed species.	A SMA permit or exemption must be in place before 401 review takes place.	The SMA focused on nonpoint source runoff concerns in coastal watersheds prior to TMDL program development, due to the high proportion of forested and agricultural lands in these watersheds.	There is a broad relationship between SMA rules and the HPA program's goals for protecting buffers, streambanks, etc.	Local governments have until November, 2002 to prepare new shoreline master programs based on the guidelines adopted in November 2000.  A two-path approach gives cities and counties a choice in how they write and implement their shoreline master programs. Path A allows local governments flexibility and creativity in how they meet the standards of the SMA, while Path B contains specific measures for protecting shoreline functions. NMFS and the U.S. Fish and Wildlife Service have agreed that any local master program that complies with Path B will automatically get an exception under the ESA.	Watershed plans may address in optional water quality and habitat components.	UIC facilities will be subject to Shoreline rules if they are located in shorelines areas.

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13) Integrated Pest Management Regulations	The plan recommends establishment of a Puget Sound pest management program. The program will work through existing institutions and groups to conduct research, work on a pesticide-use database, provide education on integrated pest management and promote alternatives to pesticide use.	Local government regulations and actions related to pesticide applications are part of a pollution prevention strategy to reduce water quality problems.	Local government regulations and actions related to pesticide applications are part of a pollution prevention strategy to reduce water quality problems.	The Tri-County rule recommends implementation of a Integrated Pest Management Plan (IPM), and use of pesticides only as a last resort. IPM is a natural, long-term, ecologically based systems approach to controlling pest populations. IPM encourages optimal selective pesticide use and maximizes natural controls to minimize the environmental effects.	Pesticide and herbicide applications that adversely affect the biological requirements of the species will be considered take (unless within an "exception") (p. 172). Portland Parks Integrated Pest Management Program provides adequate protection (p. 183).	Project-specific conditions (especially for wetland mitigation) may restrict the use of pesticides.	Integrated pest management approaches may be a BMP component of an implementation plan to meet TMDLs, depending on the contaminants in question.	Does not specifically apply. Usually covered by NPDES permits.	Does not apply.	Watershed plans may address in optional water quality component.	Included in Groundwater Standards (AKART).
14) Road Maintenance BMPs	Does not apply.	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required. The program must include municipal staff training on pollution prevention measures and techniques (e.g., regular street sweeping).	Developing and implementing a program with the goal of preventing or reducing pollutant runoff from municipal operations is required. The program must include municipal staff training on pollution prevention measures and techniques (e.g., regular street sweeping).	Road maintenance BMPs will be part of the early action program (p. 9).  In the first 2 years, beginning on the effective date of the final 4(d) rule for the Puget Sound, the Early Action Program will require development of road maintenance standards (p. 6).	Take prohibitions do not apply to routine road maintenance work performed consistent with the ODOT guide of ODOT staff (p. 181). Other agencies should use ODOT guide as a guideline to develop their own maintenance standards.	WSDOT's Highway Runoff Manual is referenced for BMP's and maintenance standards.	Road maintenance authorities may be partners in developing and stakeholders in implementing TMDLs, in which case road maintenance BMPS may be a component in the implementation plan.	HPA may reference WSDOT's Highway Runoff Manual or 4(d) Road Maintenance manual.	Activities must comply with local Shoreline Master Program requirements.	Watershed plans may address in optional water quality component	Maintenance activities must meet requirements for AKART.
15) Critical Areas Protection	Requirements in wetland areas and water quality sensitive areas (p. A-10-11).	Developing, implementing and enforcing a program to address discharges of post construction stormwater runoff. Applicable controls could include preventive actions, such as protecting sensitive areas (e.g., wetlands).	Developing, implementing and enforcing a program to address discharges of post construction stormwater runoff. Applicable controls could include preventive actions, such as protecting sensitive areas (e.g., wetlands).	Within 2 years of the anniversary date of the final 4(d) rule for the Puget Sound, cities and counties need to have enacted ordinances implementing management zones (i.e., buffers adjacent to streams, lakes, wetlands, and marine shorelines; p. 12).	Avoid unstable slopes, wetlands, and areas of high habitat value. Require adequate riparian buffers along all perennial and intermittent streams $\geq 200$ feet. Avoid stream crossings. Protect historic meander patterns and flood plains. Protect wetlands (p. 184-5).	The 401 process reviews local critical areas ordinances on a case-by-case basis and makes appropriate recommendations to ensure consistency and compliance with local regulations.	Any TMDL implementation plan cannot negatively impact a water quality sensitive area or reach.	Requirements are project-specific. Certain provisions, such as alternative off-site mitigation, may be established for projects in critical areas.	SMA is now the 14th goal in the Growth Management Act. Shoreline master programs become an element of comprehensive plans and development regulations.	Watershed plans may address in optional water quality and habitat components.	Registration is especially important if the well is located in a Wellhead Protection Area, Critical Aquifer Recharge Area, or other sensitive water quality protection area.

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16) Implement Projects to Restore Habitat and Water Quality	The plan has recommendations for acquisition and restoration of high quality marine and freshwater habitats and restoration of processes that maintain the natural conditions of watersheds and shorelines.	One of the goals of the Clean Water Act is to restore beneficial uses that have been impaired or lost. NPDES program components include restoration of water quality. Habitat restoration indirectly benefits water quality. For example, riparian restoration may help reduce temperatures and improve water quality.	One of the goals of the Clean Water Act is to restore beneficial uses that have been impaired or lost. NPDES program components include restoration of water quality. Habitat restoration indirectly benefits water quality. For example, riparian restoration may help reduce temperatures and improve water quality.	In the first 2 years, beginning on the effective date of the final 4(d) rule for the Puget Sound, the Early Action Program will include commitments to habitat acquisition and restoration (p. 6).  Jurisdictions shall have or participate in a program for constructing habitat enhancements and ensuring their long-term viability and protection through formal stewardship (p. 22). Commit to implementing WRIA plan recommendations (p. 46).	State, local, and private habitat restoration activities are exempt from take prohibitions (p. 171).	Does not apply.	CIP projects that affect reaches with TMDLs may have elevated priority.  According to Ecology, any restoration elements not included in Phase 2 permits could be a TMDL implementation mechanism.  Ecology Stormwater Manual may be an implementation mechanism for TMDLs.	HPAs are intended for protection of fish life. HPAs are project-driven: projects in waters of the state may include mitigation as a component.	Projects would be required to meet the standards of local Shoreline Master Programs.	Watershed plans may recommend management improvements for water quality, habitat, and in-stream flows.	UIC facilities must meet groundwater quality standards.
17) Adaptive Management	Information needed to monitor and adapt plans and programs is obtained from several sources including the Puget Sound Ambient Monitoring Program; tracking of environmental and program performance measures; and case studies on specific performance measures.	Ecology learned a lot during the first round of Phase 1 permits as they developed the NPDES program. During the next round of permits, Ecology will be revising the permits, incorporating technical changes, and moving toward a more proactive watershed-based planning approach.	The Phase 2 program will evolve from Ecology's work on the Phase 1 program in both timing and substance. Local governments will need help to develop Phase 2 stormwater programs. Ecology will be able to assist local governments based on "lessons learned" during Phase 1.	Must have a formalized process to monitor progress and modify actions as appropriate including policies, procedures, programs, and projects (p. 37-43).	Identify a commitment to regularly monitor and maintain any detention basins and other management tools over the long term, and to adapt practices as needed based on monitoring results (p. 185).	As new components of projects come on-line, the 401 can be re-evaluated to ensure projects are using most current BMPs.	Implementation plans consider non-structural controls with adaptive management as a possible approach, along with implementing capital facilities.	Monitoring should include the concept of adaptive management.	Along with maintaining records of project review actions in shoreline areas, Path B requires Ecology together with participating local governments to conduct a program of site inspections and reporting for all developments that will evaluate level of compliance and identify needed changes to SMA implementation at least once every 5 years.	Watershed plans may address in optional water quality and habitat components.	Monitoring of UIC facilities will be used to evaluate effectiveness.

TABLE E-1  
Comparison of Regulatory Requirements

Program/Service	Description of Requirement										
	PSWQMP <sup>1</sup>	NPDES Phase 1 Municipal Stormwater Permits	NPDES Phase 2 Municipal Stormwater Permits <sup>2</sup>	Draft Tri-County ESA 4d Rule <sup>3</sup>	Final OR, WA ESA 4(d) Rule <sup>4</sup>	401 Certifications	TMDLs	WDFW HPA	Shoreline Management Act	2514 Watershed Planning	Underground Injection Control (UIC)
18) Comprehensive Stormwater Program	A comprehensive stormwater program was required to be in place by June 1999.  Elements: ordinances containing minimum requirements for new development and redevelopment; operation and maintenance programs, and ordinances; technical manual containing source control and treatment BMPs; education programs; growth management planning and interlocal coordination; implementation schedule; identification and ranking of significant water pollution sources; investigation and correction of problem storm drains; inspection, compliance and enforcement measures; water quality response program; adequate funding, and local coordination agreements.	Permit holders are required to control pollutants in stormwater to the maximum extent practicable by the implementation of a stormwater management program.  At a minimum: Specify BMPs for the following control measures and implement them to the maximum extent possible: public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site stormwater runoff control, post construction stormwater management in new development and redevelopment, and pollution prevention/good housekeeping.  Identify measurable goals for control measures.  Show an implementation schedule.  Evaluate and assess effectiveness of program.	To ensure certainty for the Services, the Tri-County Plan includes a Stormwater Management Checklist that includes the following program elements: Technical Standards; Inspection and Enforcement; Maintenance Standards/Programs; Source Control; Illicit Discharge Reduction; Public Education; Public Involvement/Outreach; Intergovernmental Coordination; Monitoring; Stormwater Planning; Capital Improvement Programs; Land Use Decisions/Regulations; Habitat Enhancement/Rehabilitation; Habitat Acquisition.	The Phase 1 NPDES is part of a Stormwater 4(d) proposal from the Tri-County group. NMFS has been meeting with representatives from the Tri-County group for over a year to flesh this out. There is still some work that needs to be done before NMFS can give a 4(d) limitation to local governments for their stormwater programs. The big one is land-use/development with some preservation of forest/native vegetation and native soils (low impact developments).	Comprehensive stormwater programs are not specifically mentioned in the rule; however, many components of a comprehensive program will facilitate compliance with the rule and exemptions from take.	Does not apply.	Comprehensive stormwater programs might be an implementation mechanism for meeting TMDLs.	If a jurisdiction has a comprehensive stormwater program in place, conditions related to stormwater should probably be unnecessary in the HPA.	Does not apply.	Watershed plans may address in optional water quality and habitat components.	Meeting groundwater quality standards should be met through an integrated stormwater program.

<sup>1</sup>Washington State Department of Ecology, Stormwater Program Guidance Manual for the Puget Sound Basin (July 1992).

<sup>2</sup>Various sources from the Environmental Protection Agency Web site.

<sup>3</sup>Draft Proposed Tri-County 4(d) Rule Framework, January 21, 2000.

<sup>4</sup>Federal Register, Department of Commerce, 50 CFR Part 223, January 3, 2000.