

APPENDIX F

FEDERAL RESPONSE—  
HABITAT MATRIX

Recent concerns raised by western Washington treaty tribes as part of their “Treaty Rights at Risk” initiative have led to a renewed federal effort to contribute to the protection and restoration of Puget Sound habitat. This effort is led by the Environmental Protection Agency (EPA), National Marine Fisheries Service (NMFS), and U.S. Department of Agriculture’s (USDA’s) Natural Resource Conservation Service (NRCS). Under the leadership of the three co-chairs, federal agencies with authorities in Puget Sound are re-focusing existing efforts and working together to protect and restore habitat important to salmon, shellfish and other species. This coordinated approach includes a review of existing policies, authorities, and funding programs to identify opportunities for strengthening the ability of those programs to contribute to Puget Sound habitat restoration.

Through this effort, federal agencies in the region agreed to coordinate their programs with one another and with the state and tribes to protect and restore habitat in Puget Sound; coordinate funding to support habitat protection and restoration; prioritize protection and restoration of shoreline and nearshore habitats, flood plains, and water quality; and develop a coordinated reporting mechanism to ensure the initiative results in steady improvements in habitat. Next steps include the development of a federal-tribal forum, creation of a system for measuring results, and crosswalking this effort with the work contained in the Habitat Strategic Initiative to further highlight areas for cooperation and support.

The response to tribal concerns consisted of an action plan that describes this inter-agency approach and highlights key actions agencies are taking. The following table was included as an appendix to that plan and provides a detailed description of specific agency commitments, accountability measures, and timeframes for implementation.

## **2012–2015 Planned Puget Sound Related Total Maximum Daily Loads**

- Sinclair-Dyes Inlet Tribs
- Whatcom Lake
- Whatcom Creek
- Cranberry, Johns, and Mill Creeks
- Deschutes
- Drayton Harbor
- Clark’s Creek
- Squalicum Creek
- Soos Creek
- S. Fork Nooksack
- Skykomish
- French-Pilchuck
- Blackman’s Lake
- Des Moines, Massey Creeks
- Jaunita Creek
- Newaukum
- Lower White
- Green River

## Acronyms and Abbreviations

BiOp	Biological Opinion	FS	United States Forest Service	NPS	National Park Service
BMP	Best Management Practice	FTA	Federal Transit Administration	NPS	Nonpoint Source Program
CAA	Clean Air Act	FTE	Full-Time Employee	NRCS	National Resources Conservation Service
CAC	Community Assistance Contacts	FY	Fiscal Year	NWFSC	Northwest Fisheries Science Center
CAFO	Concentrated Animal Feeding Operations	GRP	Grassland Reserve Program	NWP	Nationwide Permit
CAP	Community Assistance Program	HFRP	Healthy Forest Reserve Program	OLE	Office of Law Enforcement
CAV	Community Assistance Visit	HPA	Hydraulic Project Approval	PPA	Performance Partnership Agreement
CCMP	Comprehensive Conservation and Management Plan	HQ	Headquarters	PPG	Performance Partnership Grant
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	HUD	United States Department of Housing and Urban Development	PS	Puget Sound
CIG	Conservation Innovation Grants	ILF	In-Lieu Fee	PSCIS	Puget Sound Cumulative Impacts Study
Corps	United States Army Corps of Engineers	IRT	Interagency Review Team	PSP	Puget Sound Partnership
CREP	Conservation Reserve Enhancement Program	JBLM	Joint Base Lewis-McChord	RFP	Request for Proposal
CRS	Community Rating System	LMR	Living Marine Resources	RPA	Reasonable and Prudent Alternative
CWA	Clean Water Act	MAP Teams	Multi Agency Permit Teams	SEE	Senior Environmental Employee
DO	Dissolved Oxygen	MB	Mitigation Bank	SLOPES	Standard local operating procedures for endangered species
DoD	United States Department of Defense	MOU	Memorandum of Understanding	SRF	State Revolving Fund
DOH	Washington State Department of Health	MPS	Marine Protected Species	SSSE	State Support Services Element
DOT/WSDOT	Washington State Department of Transportation	MS4	Municipal Separate Storm Sewer Systems	TMDL	Total Maximum Daily Load
Ecology	Washington State Department of Ecology	MSA	Magnuson-Stevens Act	USDA	United States Department of Agriculture
EMD	Washington State Emergency Management Division	NEI	National Enforcement Initiative	USFWS	United States Fish and Wildlife Service
EPA	Environmental Protection Agency	NEP	National Estuary Program	USGS	United States Geological Survey
EQIP	Environmental Quality Incentives Program	NEPA	National Environmental Policy Act	WHIP	Wildlife Habitat Incentives Program
ESA	Endangered Species Act	NFIP	National Flood Insurance Program	WQS	Water Quality Standards
FA	Financial Assistance	NHPA	National Historic Preservation Act	WRP	Wetlands Reserve Program
FEMA	Federal Emergency Management Agency	NMFS	National Marine Fisheries Service	WWTP	Wastewater Treatment Plant
FHWA	Federal Highway Administration	NOAA	National Oceanic and Atmospheric Administration		
FRPP	Farm and Ranch Land Protection Program	NPDES	National Pollutant Discharge Elimination System		

# Coordination

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<b>Enforcement</b>								
EPA	CWA §404	EPA will convene a meeting with the Corps and Ecology to assess the best ways of improving CWA 404 compliance and enforcement in Puget Sound. EPA will hire a senior environmental employee (SEE) to support compliance/enforcement actions.	EPA, Corps, Ecology	Initial meeting held 1/24. Timing of additional work will depend on filling 2 vacant positions and selecting SEE.	Meeting to assess 404 compliance -> recommendations to improve compliance -> implementation of recommendations -> improved compliance -> improved habitat conditions -> improved salmon, other finfish, and shellfish health	Staff and SEE support redirected toward 404 compliance work OR implementation of other effective enforcement action measures.	New	EPA currently has 2 vacancies: Enforcement Coordinator and Puget Sound enforcement support, that will be key to implementing any new enforcement strategies.
EPA	CWA §404	A field level agreement between all four Corps Districts and EPA was recently revised. EPA and the Corps meet quarterly to discuss enforcement actions and issues. In the past 5 years, EPA has issued §404 enforcement orders or has ongoing case work involving violations on the Blair/Hylebos Peninsula, in Bothell, on the Skykomish River, in Arlington, and in Lynden. Two of these cases involve farming operations.	EPA, Corps	Last quarterly meeting held 1/24. Will continue meeting quarterly. Timing of additional enforcement/compliance work will depend on filling 2 vacant positions.	Improved enforcement of regulations -> improved habitat conditions -> improved salmon, other finfish, and shellfish health	# of enforcement and compliance assistance actions taken	Ongoing	EPA currently has 2 vacancies: Enforcement Coordinator and Puget Sound enforcement support that will be key to implementing any new enforcement strategies.
NOAA	Endangered Species Act (ESA), Magnuson-Stevens Act (MSA)	NOAA OLE will initiate an enforcement initiative in conjunction with the Corps and EPA to reduce the number and effect of unpermitted bank armoring projects.	Co-Leads: NOAA and Corps, State Department of Ecology and WDFW possible partners	Initial NOAA meetings completed December 2011; NOAA regulatory guidance to be completed by April 2012	Complete programmatic consultation for overwater structures in nearshore marine habitat-> Implement streamlined permit process ->	Revised permitting approach should lead to expanded use of bioengineered alternatives to bank hardening -> improved habitat for salmonids	New initiative between NOAA and Corps	The joint agency habitat enforcement initiative aims to prevent additional incremental habitat loss
Corps	CWA §404 and Rivers and Harbors Act	Dependent on funding increase efforts on enforcement. Will need assistance from NOAA to complete after the fact consultation in order to complete actions. Work with EPA on potential to lower the threshold for their involvement to increase effort.  Regulatory Compliance and Enforcement: The Seattle District will continue to maintain an appropriate balance among permit, compliance, and enforcement actions. Among the Corps Regulatory Program balanced scorecard metrics in Fiscal Year 2011, Seattle District exceeded its compliance inspection targets two-fold and meets enforcement targets. It seeks to continue to be responsive to reports of violations from Tribes, agencies, and the public.	Corps with assistance from NOAA, EPA	Ongoing; annual reporting on enforcement	Area of jurisdiction and district boundaries	Enforcement of permits and noncompliance with permit requirements->increased compliance with CWA 404 ->better protection of existing habitat and improved mitigation measures	Enforcement statistics	Ongoing
<b>Mitigation</b>								
EPA	CWA §404	EPA will serve on the Interagency Review Team (IRT) for In-Lieu Fee (ILF) and Mitigation Bank (MB) programs in the Puget Sound Basin, with	EPA, Corps, Ecology	Ongoing - multiple projects & multiple monthly meetings	Participation on IRT-> ability to positively influence ILF programs -> more effective mitigation -> improved	Participation on IRT and adoption of policies that increase mitigation	New	

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		priorities given to all ILF and all Tribal MB development. EPA will continue to participate as an IRT member on the Policy Level Meetings with the Corps and Ecology for both ILF and MBs.			habitat conditions -> improved salmon, other finfish, and shellfish health	effectiveness		
Corps	CWA §404	Mitigation Banking and In-Lieu-Fee (ILF) Programs: The Seattle District will continue to encourage the use of mitigation banks and ILF programs that provide high quality compensatory mitigation for unavoidable impacts associated with permitted projects. Presently, mitigation banks totaling over 1,600 acres exist in Washington, with the majority of acreage in the Puget Sound basin, with another 1,500 acres and four proposed ILF programs in the basin. Among these are the first Tribal mitigation banks and ILF program, and the first marine ILF program. Further, the Seattle District continues to explore opportunities for joint mitigation-conservation banks and ILF programs with the Federal Services.  Existing Mitigation Banks and In Lieu Fee programs to serve compensatory mitigation requirements (not purely restoration). Approved mitigation banks in the Puget Sound basin include Skagit; Skykomish; Nookachamps; Snohomish; Paine Field/Snohomish County Airport; WSDOT Springbrook Creek.	Corps/Ecology co-leads, local gov't, tribes, other fed agencies as necessary for individual banks	Ongoing; each bank has its own schedule which depends on negotiations	Negotiations with involved parties->creation of ILF programs and mitigation banks ->protects existing habitat	Sufficiently functioning Mitigation Banks; ILF acres protected; completion of ILF and MB	Ongoing	Issue is that mitigation banks don't always replicate lost functions
Corps	CWA §404	Pending: several Banks/ILF in Puget Sound for compensatory mitigation purposes (Lummi Bank; King County ILF; Hood Canal Coordinating Council ILF; Quil Ceda Village ILF; Puget Sound Partnership/Pierce County ILF). <ul style="list-style-type: none"><li>• Exploring other opportunities with the Services to develop Banks/ILF projects for both agencies mitigation needs</li><li>• Continue to increase tribal coordination during permitting process, have drastically increased this over last several years.</li><li>• Work with NMFS/USFWS to identify and develop/expand programmatic opportunities to encourage more environmentally friendly projects.</li></ul>	Corps/Ecology co-leads, local gov't, tribes, other fed agencies as necessary for individual banks	Negotiations ongoing	Negotiations with involved parties->creation of ILF programs and mitigation banks ->protects existing habitat	Sufficiently functioning Mitigation Banks; ILF acres protected	New	
Navy	ESA Section 7 consultation - habitat loss	Navy looking to use a new mitigation hierarchy, i.e., approved mitigation banks, approved in-lieu fee (ILF), permittee (i.e., Navy) responsible mitigation. Working with the Hood Canal Coordinating Council (HCCC) regarding the	Corps primary to approve ILF. HCCC is ILF sponsor. Interagency Review Team (reviews the	Program approval would be in June '12 at the earliest	ILF program established => Navy enters program => payment made into program =>restoration, creation, enhancement or preservation activity conducted		New program for HCCC and for Navy participation	Allows a concentration of effort on project sites and allows for better coordination to restore the health of the Hood

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		proposed ILF program in Hood Canal.	instrument and advises the Corps and Ecology in selection of projects) includes USFWS, NOAA/ NMFS, EPA, and several state and local agencies, and tribes. Navy: option to use program as a "permittee" once established.					Canal watershed.
<b>Stormwater Permits</b>								
EPA	CWA §402	EPA developed a draft municipal storm water permit for Joint Base Lewis-McChord (JBLM) that incorporates advanced hydrologic flow control requirements for new development, including green infrastructure, and storm water improvements in areas that are already developed. This permit supports Ecology stormwater permits and also serves as a model in subsequent federal permits at federal facilities and within Indian Country.	EPA and Joint Base Lewis McChord	Draft permit completed 1/31/12, final permit 10/1/12	EPA model stormwater permit - >stronger state and federal stormwater permits (consistent with model)->lower PS concentrations of pollutants from stormwater -> improved salmon, other finfish, and shellfish health	Permit in place	New	
NOAA	ESA	<p><u>Habitat Protection</u></p> <ul style="list-style-type: none"> <li>NMFS will work with EPA on model Federal discharge permits, e.g., the Joint Lewis McCord efforts, to establish appropriate WQ standards and BMPs</li> <li>NMFS will work with EPA and Ecology on the state industrial general stormwater discharge permit, which is up for renewal, to include appropriate conservation measures for fish habitat.</li> <li>NMFS will work with EPA and Ecology to implement the existing municipal general stormwater discharge permit to improve compliance and water quality results.</li> </ul> <p><u>Enforcement</u></p> <ul style="list-style-type: none"> <li>NMFS will work with the enforcement team to seek strategic permit compliance/enforcement opportunities.</li> </ul>	Lead: NMFS, Partner agencies: WA Governor's Office, Department of Ecology, EPA Region 10	Work to implement existing general permits is ongoing, but will receive additional effort from NMFS in response to this initiative. Consultations on Federal discharge permits will be new and engaged as requests from EPA are received.	Until WA state water quality standards are up for review, we will engage in existing implementation opportunities, including existing general permits and new consultations on Federal reservations for which EPA retains direct jurisdiction	Biological opinions on Federal actions will have RPAs and or RPMs to provide binding conservation measures to protect and restore water quality in Puget Sound receiving waters	New and ongoing	EPA will develop a model stormwater permit for a federal facility in Puget Sound (see row 11 on EPA worksheet).
<b>Coordinated Permitting</b>								
EPA	CWA §404	Increase participation in regional general permit development, multi-agency Permit teams (MAP Teams), and Nationwide Permit agency review and coordination. An example is the Shellfish	Corps issues permits; EPA will review and comment as	Ongoing	# of §404 applications-> # permits-> Δ in acres of Puget Sound wetlands or other aquatic resources	# of permits reviewed and comments provided by EPA that improve environmental outcome	Ongoing	

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EPA	CWA §404	Interagency MAP Team below. Washington Shellfish Initiative - Shellfish Interagency Review Team will identify ways to appropriately streamline shellfish aquaculture permits, while ensuring compliance with State WQS, Section 404 permitting requirements, and protection of critical shellfish, salmon, and other habitats.	appropriate NOAA, Ecology, WDNR, WDFW, WDOH, Corps, EPA, Tribes	Monthly meetings	Balancing streamlined permits with environmental protection -> ensuring compliance with WQS -> improved WQ -> improved habitat -> improved shellfish health	Participation in review team meetings that result in increased compliance with WQS	New	
NOAA	Endangered Species Act (ESA), Magnuson-Stevens Act (MSA)	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>Work with the Corps to develop new programmatic consultation(s) using regional general permits, standard local operating procedures for endangered species (SLOPES), etc. to streamline the permit review process and establish fish-friendly, bioengineering alternatives to bank armoring.</li> <li>Work with the Corps to modify nationwide permits or develop regional conditions (e.g., NWP #13, 31) to avoid cumulative effects and incremental habitat losses.</li> <li>Where applicants choose individual permit consultations in lieu of programmatic approaches, NMFS will require compensatory mitigation for incremental habitat loss; use reasonable and prudent alternatives where necessary to avoid adverse modification of critical habitat to achieve adequate conservation of estuarine and nearshore habitats.</li> </ul>	Co-Leads: NOAA and Corps, State Department of Ecology and WDFW possible partners	Initial NOAA meetings completed December 2011; NOAA regulatory guidance to be completed by April 2012	Complete programmatic consultation for overwater structures in nearshore marine habitat-> Implement streamlined permit process ->	Revised permitting approach should lead to expanded use of bioengineered alternatives to bank hardening -> improved habitat for salmonids	New initiative between NOAA and Corps; Completion of an ongoing activity by NOAA-Guidance document on installing overwater structures in marine nearshore areas	The joint agency habitat enforcement initiative aims to prevent additional incremental habitat loss
NOAA	ESA, MSA	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>Work with the Corps to develop new programmatic consultation(s) in the Snohomish Basin using regional general permits, standard local operating procedures for endangered species (SLOPES), etc., to streamline the permit review process, establish fish-friendly tide gate design criteria, and require compensatory mitigation for estuarine habitat loss from tidegate operation (similar to Skagit tide gate approach).</li> <li>NMFS will work with proponents to develop and implement new habitat conservation banks to compensate for incremental habitat loss.</li> </ul>	Co-Leads: NOAA and Corps State Department of Ecology and WDFW possible partners		Revised permit process-> improved tidegate design criteria-> implement fish-friendly tidegates	Revised design criteria and compensatory mitigation requirements -> reductions in incremental estuarine habitat loss	New initiative between NOAA and Corps	
Corps	CWA §404 and Rivers and Harbors Act	Tribal Notification Procedures: The Seattle District has established notification procedures with 14 Tribes to solicit review and comment on	Corps and Tribes	Ongoing	Basin or watershed based determination depending on service area developed for each bank	Coordination with Tribes -> more rigorous reviews -> better protection of	notification process with additional tribes	Ongoing

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		proposed projects subject to its Regulatory program jurisdiction in areas where they possess Usual and Accustomed hunting and fishing Tribal Treaty rights. Notifications to Tribes increased by 80% (570 total) in Fiscal Year 2011 and Seattle District is working with additional Tribes to develop similar procedures.				existing habitat and improved mitigation measures		
<b>Puget Sound Cumulative Impacts Study (PSCIS)</b>								
EPA	CWA §404	EPA will provide financial and technical support through an Interagency agreement to the Corps for the Puget Sound Cumulative Impacts Study (PSCIS). This study is being conducted to document the cumulative impacts of many small shoreline development projects on Puget Sound and will be used to prevent incremental loss of habitat.	Corps manages the PSCIS; EPA provides financial and technical support	PCIS Phase I will be completed in April 2012. Phase II will be completed by approximately April 2013.	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase II (Intended to result in more protective federal permitting under CWA section 10/404 in shoreline areas of PS.)	Ongoing	Phase I included the highly developed eastern shoreline of PS between Marysville and Brown's Point north of Tacoma - including the tidally influenced portions of the Duwamish and Snohomish Rivers. The area for Phase II of the study is still to be determined.
Corps	Other Programs	IIS Program (EPA funded) Puget Sound Cumulative Impacts Study (PSCIS) - The scope is a section of Puget Sound from Brown's Point to Tulalip Point, that is expected to show significant resource decline (process, function, habitat) in support of federal regulatory decision making and potentially for state and local land use decisions.	Corps	Ongoing, completion expected end of 2012	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase II	Ongoing	
Corps	Other Programs	Further development of the information regarding cumulative effects in Puget Sound to inform federal agencies in decision making (USFW, NOAA, EPA, Corps)	Corps	2013	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase III	New	
<b>National Flood Insurance Program</b>								
FEMA	NFIP (42 U.S.C. 4001 et seq)	The primary purpose of the NFIP is to encourage preventive and protective measures by state and local government to reduce the risk of flooding and share the cost of flood losses with those whose property is at risk of flooding. There are no provisions in either the enacting legislation or the NFIP regulations in the Code of Federal Regulations (CFR) providing for the protection or restoration of salmon habitat.	FEMA with support from State and local governments	Major changes have occurred in the manner in which the NFIP is being administered locally to comply with the BiOP and RPA by NMFS as of September 22, 2011	FEMA developed and issued technical guidance>communities have selected an option as of September 2011>all floodplain development is now being done in compliance with the RPA	Local gov't implements federal gov't (FEMA) along with state gov't (Dept. of Ecology) monitors on an annual basis	New as of Sept. 2011	44 CFR60.3(a)(2) requires that communities comply with ESA
FEMA	NFIP (42 U.S.C. 4001 et seq)	FEMA programmatically monitors state and local government's implementation of the NFIP by	FEMA with support from State	Increased focus on Puget Sound beginning in FY12 but continuing	Closer monitoring of community administration of FPZ ordinances is	CAC (Community Assistance Contact) or CAV	New	

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		conducting Community Assistance Contacts (CAC) and Community Assistance Visits (CAV). During a CAV a cursory review of a communities permit files is completed to evaluate effectiveness of their permitting processes Beginning in October 2011 CAVs in the 122 Puget Sound communities impacted by NMFS Biological Opinion will begin to examine on how well communities are implementing new guidance designed to help them comply with the ESA.		into the future indefinitely	expected to improve compliance	(Community Assistance Visit) with all Tier 1 & 2 communities in FY12 that have selected 'Door 3' FEMA reports annually to NMFS		
FEMA	NFIP (42 U.S.C. 4001 et seq)	FEMA R10 has participated in multiple workshops with NMFS to explain to community officials how to develop, adopt and enforce procedures based on their land-use authorities to avoid adverse affects to salmon habitat	FEMA and NMFS with support from Ecology	Workshops have been held beginning in 2009 and have been held each year since.	Technical assistance to local government will improve compliance with ESA	FEMA reports to NMF	New	
NOAA	ESA	Work with FEMA leadership, NFIP litigation plaintiffs, and key local jurisdictions to identify additional actions to supplement FEMA NFIP biop implementation efforts	Co-leads: NMFS and FEMA Regional Administrators, Collaborators: NWF and Selected local jurisdictions		NMFS is working with FEMA to provide technical assistance to local jurisdictions as they develop their approaches to comply with the FEMA biop RPA.	NMFS and FEMA are using a triage approach to overlay important salmon populations and the local jurisdictions that are least likely to offer a responsive program enabling a targeted compliance effort.	Ongoing	
Corps	Civil Works - Flood Reduction	<ul style="list-style-type: none"> <li>Work with other federal/non federal partners on developing comprehensive plans that address flooding as well as incorporate environmental considerations.</li> <li>Continue to increase partnership with Tribes on flood reduction projects</li> </ul>	Corps, FEMA other partners	Ongoing	Comprehensive watershed plan on flooding->plan includes environmental considerations - > improved floodplain connectivity - >improved habitat	Plans that achieve balance between flood and habitat protection	New	
<b>Levee Vegetation</b>								
NOAA	ESA	<ul style="list-style-type: none"> <li>NMFS will work with the Corps Seattle District to develop model local variances and system wide improvements under the new Policy Guidance Letter and System Wide Improvement Framework to retain and establish riparian trees on levees and accommodate other fish-friendly levee design measures.</li> <li>NMFS will work with the Corps through the PGL variance and SWIF processes to establish ESA section 7 consultation approaches for fish-friendly levee construction and maintenance. NMFS and the Corps will jointly develop levee repair and design criteria that can be applied through Puget Sound and the region.</li> <li>Where opportunities become available to</li> </ul>	Seattle District Corps, WA Dept. of Ecology, King County, Puget Sound Partnership, WDFW and the Muckleshoot Tribe in the Green River process. The Milton Freewater process includes locals, DEQ, ODFW, EPA, Umatilla Tribes, USFWS and NMFS.	Several initial scoping meetings have been held. Awaiting final PGL guidance from Corps HQ.	NMFS and other partners have had some, but limited, success influencing Corps national levee policies. Current approach is to work with motivated partners to develop model vegetation variances that can then be applied throughout Puget Sound under the new procedures.	The Corps chairs a working group with both technical and policy subgroups, which also includes other PSP players, to develop a levee vegetation management approach for the Green River and Cedar River. Solutions will be immediately shared more broadly with other local jurisdictions.	Ongoing	The places identified for the SWIF/variance processes are in the Green River watershed with the Seattle District Corps, and the Walla Walla River near Milton-Freewater with the Walla Walla Corps District. (While the Walla Walla River is obviously not in Puget Sound, it represents the initial opportunity to apply the new SWIF process and lessons

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		<p>condition levee repair or construction through Section 7 consultation, NMFS will require re-vegetation, installation of large wood, or other compensatory mitigation for incremental habitat loss. Adverse modification of critical floodplain habitat will be avoided by the appropriate prescription of reasonable and prudent alternatives. Where opportunities become available through Section 7 Consultation on levee repair or construction, USFWS Will work to have fish friendly designs incorporated to avoid unnecessary habitat loss.</p> <ul style="list-style-type: none"> <li>Develop NMFS NWR guidance on the development, approval and use of conservation banks. Use selected project consultations to encourage the use of new and existing conservation banks.</li> </ul>						learned there will inform similar efforts in Puget Sound).
Corps	PL 84-99, Flood Control and coastal Emergencies (FCCE)	<p>1) PL 84-99 Flood Control and Coastal Emergencies Programs: The Corps Seattle District continues to work collaboratively with levee owners, Tribes, the Federal Services (USFWS and NOAA Fisheries), and stakeholders to develop flood risk management solutions for the Public Law (P.L.) 84-99 Flood Control and Coastal Emergencies (FCCE) programs. These programs support levee integrity, ESA compliance, and fulfillment of Tribal Trust responsibilities. The Corps anticipates the ESA Section 7 consultation inherent in these efforts will yield endangered species/fish-friendly criteria for levee design, construction, maintenance, and repair and best practices guidance for Puget Sound and the region. The District will try to complete P.L. 84-99 consultations with the federal Services prior to doing the actual repairs where circumstances allow, taking into consideration issues such as funding, emergency circumstances and work windows.</p> <p>a) Levee Vegetation System Wide Improvement Framework (SWIF): The Seattle District will serve as the local federal lead for interagency efforts when the Corps' new SWIF approach is used by levee sponsors. The SWIF helps identify solutions that use resources efficiently, prioritize improvements and corrective actions based on risk, and better align programs and</p>	<p>a)Corps b) Corps with NOAA, USFWS, EPA, and FEMA</p>	Ongoing	<p>a) Finalize Policy Guidance Memorandum-&gt; develop new typical levee repair designs with Services and Tribes; share data and serve as technical resource for variance applicants -&gt; implement team-generated decision process when emergency is declared -&gt; project completion-&gt;no further loss of habitat along armored bank b) Implement regional guidance on levee setback and vegetation-&gt; setback levees; maintain allowable vegetation where setback is not possible; share data and serve as technical resource for variance applicants -&gt;avoidance of new impact on salmon habitat and water temp</p>	<p>a) Project completion b)Issuance of regional guidance on levees that is protective of the environment 1)completion of SWIF 2)Completion of PGL 3)pilot Products 4)emergency declaration process defined</p>	<p>a) Ongoing b)New</p>	

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		<p>requirements.</p> <p>b) Levee Vegetation Variance Policy Guidance Letter (PGL): The Seattle District will serve as the local federal lead for interagency coordination efforts on variances from mandatory Corps vegetation-management standards. The District will work with levee sponsors (for non-federal levees) and seek their concurrence (for qualifying federal-constructed non-federal sponsor-maintained levees) to request variances under the new DRAFT Vegetation Variance policy. These variances will preserve, protect, and/or enhance natural resources and protect Tribal treaty rights, while ensuring levee function.</p> <p>c) Emergency Flood Response Activities: The Seattle District will seek to improve its method for determining whether local jurisdiction flood assistance requests (Advance Measures and Emergency Operations) will protect against significant threats to life, health, welfare, property, and infrastructure. Where emergency action is warranted, the Seattle District will coordinate as early possible with the Federal Services, EPA, and Tribes so that the action's scope and implementation avoid or minimize adverse habitat impacts, with appropriate after-the-fact mitigation when impacts do occur.</p> <p>d) Levee Rehabilitation: The Seattle District will continue to coordinate its post-damage levee repairs with interested federal, state, local, and Tribal entities. Where possible, based on federal and non-federal resources and other case-specific conditions, the Corps will consider implementing levee setbacks rather than levee rehabilitation in-place.</p> <p>This approach was recently utilized for the Yakima, WA Sportsman Park levee rehabilitation. The Seattle District has been successful at applying best practices such as the Habitat Capacity Mitigation tool developed with the Federal Services, Skagit Diking District sponsors, and Tribal Skagit River System Cooperative to calculate appropriate mitigation. This tool quantified benefits of re-vegetation, willow lift planting benches, and installation of large woody debris, for a series of levee rehabilitations performed in the Skagit Basin during 2011. Application of this tool is limited to the Skagit</p>						

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		River but could be adapted for application to other rivers.						
<b>Restoration Funding</b>								
NRCS	Farm Bill/WRP	Wetlands Reserve Program (WRP) - WRP is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The NRCS goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection. Some of the activities that can be done under EQIP to protect and restore habitat include Property acquisition and conservation, topography restoration.	Corps, NOAA, cities, counties collaborate on restoration	Ongoing	Help develop a plan to buy easements to protect existing wetlands or restoration of wetlands -> environmental benefits	Acres of wetland restored or protected	Ongoing	
NOAA	ESA, CREP	Work with NRCS to identify opportunities to use Farm Bill incentives to cost share with the NOAA Restoration Center on floodplain restoration projects in targeted watersheds to support local recovery plan projects.	Co-leads: NMFS, NOAA Restoration Center NRCS, EPA Region 10				New	
NOAA	ESA	Work with NRCS, FSA and soil and water conservation districts to increase CREP enrollment for riparian buffers.	Co-leads: NMFS and NRCS, Partners: FSA and EPA Region 10				Ongoing	
Corps	Estuary Restoration Act Grants and Funding Opportunities	We will work to integrate grant funding, associated with ERA program with NRCS, USFWS, EPA, NOAA Restoration Center and others as appropriate, to maximize benefits to salmon resources and ecosystem function	Grant lead assigned to Corps	Ongoing	Maximize effectiveness of federal habitat restoration programs; benefit to salmonids	Number of acres of habitat restoration	New	Corps a member of the Estuary Habitat Restoration Council. Corps can award funds grant funds to approved projects to support local estuary restoration projects.
NOAA	ESA	Work with NRCS to identify opportunities to target selected Farm Bill programs to address agricultural water quality issues identified as factors limiting salmon and steelhead recovery in local watershed recovery plans.	Co-Leads: NMFS, NOAA Restoration Center and NRCS				New	
NRCS	Farm Bill/EQIP	Puget Sound Initiative - Water quality treatments related to excessive suspended sediment and turbidity in surface water on non-industrial forestland, primarily related to forest roads and fish passage. Use of both the EQIP and the Healthy Forest Reserve Program (HFRP) to	Due to recent healthy forest campaigns launched by Washington NRCS and other outreach that has	On going and new HFRP for 2012	EQIP and HFRP programs -> reduced runoff from forest roads -> improved water quality -> improved habitat -> improved salmon, other finfish, and shellfish health	# of forestry clients enrolled	HFRP would be new for WA	By focusing first on the same watersheds as the US Forest Service or State Department of Natural Resources are working in, there is an

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		apply conservation practices and establish easements with forest ownership for perpetual protection from development. The highest priority watersheds within the basin would be identified using the US Forest Service's criteria for watershed priority or similar state assessment data, which would be incorporated into NRCS application rating and ranking tools	occurred, in addition to the availability of the new Forestry Conservation Activity Plans, there is a ready pool of forestry clients who are eligible for either EQIP and/or HFRP and are willing to work with NRCS to address the concerns affecting the water resources					opportunity to leverage activities on both private and public forestland to have the greatest impact
USFWS	Various Grants and Technical Assistance Program Funding Opportunities	We will work to integrate funding, associated with grants and technical assistance programs, with NRCS, EPA, NOAA, and others as appropriate, to maximize benefits to fisheries resources.	USFWS	Ongoing	Maximize effectiveness of federal habitat restoration programs; benefit to salmonids	Number of acres of habitat restoration	New	
<b>Research-Driven Recovery Actions</b>								
Corps	Civil Works - Ecosystem Restoration	Skokomish Watershed (in addition to and potentially a result of the GI study): Working with PSFC and Tribes to implement ecosystem restoration projects thru maximizing all agencies programs (Corps, USFW, others) <ul style="list-style-type: none"> <li>• CAP and PSAW: dependent on funding there are multiple projects sponsors have approached Corps to sponsor</li> <li>• Puget Sound Nearshore: Study has identified opportunities for restoration (working with USFWS and a non-federal sponsor) and will deliver recommended plan to congress in 2015</li> </ul>	Corps, other fed, state, local agencies, tribes as appropriate	Ongoing	Ecosystem restoration work->project completion->improved habitat	Project construction completion	New	contingent on sponsor and Congressional funding (cost share program)
USFWS	Fish and Wildlife Coordination Act	We will provide recommendations, focused on conservation of fisheries resources, to the U.S. Army Corps of Engineers regarding the Skokomish General Investigation as well as the Puget Sound Nearshore project and any other large, water resources planning projects. Additionally, the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) has identified 13 restoration sites that are likely ready to proceed through the Corps of Engineers process for construction authorization. The PSNERP has developed conceptual design, cost-estimates and other site-specific information for these 13 "ready" sites, as well as 14 other	USFWS	Ongoing	Continue to facilitate selection of the best habitat restoration opportunities in Puget Sound; maximize benefits of habitat restoration from limited restoration resources	Number of habitat restoration projects ready to be implemented	Ongoing	Accomplishments rest primarily with the U.S. Army Corps of Engineers

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		ecosystem restoration projects not yet ready for Corps authorization. These projects represent important opportunities to advance process-based restoration of nearshore ecosystems with important benefits to salmonids and other fishery resources. The U.S. Fish and Wildlife Service will work with the Corps and other agency partners to advance priority projects identified by PSNERP, by providing technical assistance, seeking grant program funding, and assisting with environmental compliance.						
Corps	Civil Works - Flood Reduction	Multiple Programs to utilize for Puget Sound Recovery: 1. General Investigations (GI): Puyallup and Skagit River 2. Operations: Levee Rehab, Levee Vegetation Initiative, LWSC, Mud Mountain Dam and Howard Hanson Dam 3. FPMS: numerous small scale studies/projects in PS 4.CAP 205 constructed projects Lower Dungeness River, Horseshoe Bend in Kent and Tukwila	Corps, other fed, state, local agencies, tribes as appropriate	Ongoing	Ecosystem restoration work->project completion->improved habitat	Project construction completion	Ongoing	
USGS	NA	USGS conducts restoration project-specific monitoring and assessments to establish pre-project baselines, habitat (and other) responses to restoration, and other studies relevant to supporting restoration planning and adaptive management. The USGS also develops protocols for others to use for scientifically-defensible monitoring related to habitat protection and restoration, particularly relating to Department of the Interior trust resources.	USGS Science Centers lead projects and protocol development.	Project dependent. Not applicable to protocols.	NA	NA	Ongoing	
<b>Sustainability Partnership</b>								
FHWA	N/A	Sustainability Partnership. Partnership between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. Funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have infrastructure and offer transportation choices.	HUD, EPA, FHWA and FTA staff.	Ongoing	Identifying ways to improve sustainability by integrating our programs and removing barriers to sustainable projects.	Pilot projects and information-sharing.	New	
FTA		Sustainability Partnership- Partnership between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. The Sustainable Partnership funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have	DOT, HUD, & EPA	Funding in PS basin dependent on competitive process.	Coordination of funding and expertise between HUD, EPA & DOT -> reduced development in undeveloped areas-> protection of upland areas, wetlands, and other sensitive areas.	Continued coordination with EPA and HUD through the partnership	Ongoing	

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EPA	N/A	infrastructure and offer transportation choices. Sustainability Partnership. Partnership between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. Funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have infrastructure and offer transportation choices.	HUD, EPA, FHWA and FTA staff.	Ongoing	Identifying ways to improve sustainability by integrating our programs and removing barriers to sustainable projects.	Continued coordination with other partners	New	
<b>General and Specific Project Coordination</b>								
NOAA	ESA	<ul style="list-style-type: none"> <li>NMFS will use the best science from the NWFSC and other consultations on WQS, pesticides, etc. to identify adverse effects to listed salmon and steelhead in project specific consultations on discharge permits, transportation actions, dredging projects, etc.</li> <li>NMFS will require best management practices, biological thresholds, low impact development techniques, bio-assays, monitoring, etc. as needed to avoid, reduce or mitigate adverse effects to listed salmon and steelhead in specific project consultations that generate toxic contaminants in stormwater runoff, point and non-point source discharges, dredging discharges, etc.</li> </ul>	Lead: NMFS, Partner agencies: EPA, Corps, FHWA, DOD,	Ongoing as consultation requests are received	In the absence of NMFS consultation on EPA approval of water quality standards, NMFS will address individual standards that are relevant to listed fish conservation in consultations on various Federal actions that involve pollutant discharges.	Biological opinions on Federal actions will have RPAs and or RPMs to provide binding conservation measures to protect and restore water quality in Puget Sound receiving waters	New and Ongoing	EPA will focus additional attention on oversight and enforcement of State stormwater permits, including MS-4 permits under the National Enforcement Initiative for Municipal Infrastructure, to improve Puget Sound water quality (see row 13 on EPA worksheet).
FEMA	Presidential Preparedness Directive 8	Increase participation by resource agency under the National Response Framework and National Disaster Recovery Framework. Partnerships with other federal agencies and State Emergency Management Division for combining grant opportunities to maximize multiple objects under the various authorities, like FEMA acquisition projects combining with USFWS Restoration activities.	FEMA, DOI, NMFS, USFWS, Corps (Primary); State EMD and Resource Agencies (Supporting)	Disaster dependent or Annually	Increase collaboration of funding => concentrated effort on recovery efforts => improvement to habitat	# of pooled projects funded	New	NDRF is being introduced Mar 1.
Corps	Presidential Preparedness Directive 8	Development of policies and associated metrics for ensuring success which require collaboration of "whole community" participation (which include natural resource and environmental departments) in the development of plans. This includes statewide planning efforts.	FEMA, State Planning Agencies (primary); State and Fed Resource Agencies (supporting)	N/A	Coordinated planning => increased effort for avoidance/minimization => reduction in rate of harm to habitat/species	see Whole Community metrics	New	
USFWS	ESA	We will consult with the Corps and other federal action agencies, pursuant to Section 7 of the ESA, on actions that affect habitat (marine, estuarine, and freshwater habitats) in Puget Sound including shoreline armoring, floodplain development, U.S. Navy and U.S. Army	USFWS	Ongoing	Continue to minimize impacts to federally listed species; reduced impact to habitat	Number of consultations completed	Ongoing	

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		construction and operational activities, and wastewater treatment plant expansions and construction. Also, we will revise designated critical habitat for the Northern Spotted Owl. The proposed rule will be published by February 28, 2012, and the final rule will be completed by November 2012.						
USFWS	CERCLA	We will continue to work with Washington Department of Ecology as well as Tribes and NOAA to pursue settlements on non-federal-lead sites in Puget Sound.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing/New	
FS	NFMA	All USFS projects are designed to protect and restore habitat, and effects of projects are consistent with forest plans and applicable federal and state laws and regulations. Other projects (e.g., mining, energy developments) are mitigated as allowed by law and regulations.	USDA Forest Service implements and ensures consistency with the Northwest Forest Plan on all National Forest lands. The Forest Service works closely with regulatory agencies to complete necessary ESA consultation and acquire appropriate permits. Regulatory agencies include the NMFS, USFWS, US Army Corps of Engineers, Washington Dept. of Fish and Wildlife, and Washington Dept. of Ecology.	The Northwest Forest Plan has been in effect since 1994. The Forest Service has agreements in place with NMFS, USFWS, US Army corps of Engineers, and WDFW to meet consultation and permitting requirements for most projects. Other projects are consulted on a case-by-case basis	The Northwest Forest Plan contains land management objectives with specific requirements for aquatic protection and restoration. Consultation with all of the appropriate regulatory agencies insure actions meet all Federal and State laws and regulations	The Regional Forester and Forest Supervisors monitor implementation of the Northwest Forest Plan. Forest personnel and regulatory agencies monitor compliance of individual projects with consultation and permitting agreements and laws and regulations.	Ongoing	The Northwest Forest Plan applies to all National Forest System Lands within western Washington. Consultation/permitting agreements apply to all Forest Service lands and projects within the State of Washington.
FS	ESA, CWA, Fish NEPA, and Wildlife Coordination Act	Streamlining project approval process (e.g., categorical exclusions, ESA consultation) could accelerate aquatic restoration projects. USDA Forest Service restoration projects are streamlined through the Aquatic Restoration Biological Opinion (ARBO), the Hydraulics MOU with the State of Washington, ESA Consultation Streamlining (where needed), and through the NEPA process (where possible). The ARBO streamlines certain restoration actions through USFS, NOAA Fisheries, and USFWS consultation procedures for consistency with ESA. The Hydraulic MOU is an agreement between WDFW and USFS that supports the improvement of	The Forest Service works closely with regulatory agencies to streamline the permit process. Regulatory agencies include the NMFS, USFWS, US Army Corps of Engineers, Washington Dept. of Fish and Wildlife, and Washington Dept. of Ecology. Activities occur	The Forest Service has agreements in place with NMFS, USFWS, US Army corps of Engineers, and WDFW to streamline permitting/consultation for aquatic restoration projects. The Washington Office is pursuing a new Categorical Exclusion category for road decommissioning. The timeline is uncertain at this time.	Aquatic Restoration Biological Opinion (ARBO) streamlines ESA consultation for aquatic restoration projects. The agreement has been in place for 5 years and is in the process of being renegotiated. The US Army Corps of Engineers recently issued a Regional General Permit (RGP-8) for Forest Service Restoration projects in the State of Washington. WDFW recently signed a new MOU with the Forest Service that addresses Forest Service hydraulic projects within the State of Washington	Forest Service Regional Office personnel collaborate with regulatory agencies to prepare agreements and complete annual reporting. Forest personnel collaborate with local agency contacts to implement projects	Ongoing	Streamlining agreements cover Forest Service lands and projects within the State of Washington

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		road/stream crossings. Where needed (not previously covered by ARBO), restoration projects are reviewed through a streamlining process with ESA regulatory agencies. Some projects can be categorically excluded from the preparation of EAs or EISs through the use of Decision Memos (a more abbreviated NEPA analysis) in the NEPA process. Effectiveness and BMP Monitoring occur.	primarily at the Regional and Forest levels. The Washington Office is pursuing a new Categorical Exclusion category for road decommissioning to streamline the NEPA process for those projects.					
FS	NFMA	Project-specific, Forest-wide, and Region-wide monitoring data are collected and shared with other agencies. Some data, such as temperature, are being incorporated into Regional-scale analyses (e.g., climate-stream temperature sensitivity). The effectiveness of the NW Forest Plan is being monitored through the AREMP program. Forest Plan and specific project level monitoring are also occurring. Best Management Practices continue to be monitored for implementation and effectiveness.	Data-sharing occurs between the following entities: USDA Forest Service, US National Park Service, USGS, WA Department of Ecology, WA Dept. of Fish and Wildlife, Tribes, County and City Governments, Universities.	Data sharing has been on-going and increases constantly since the advent of the internet. The Forest Service has implemented several National databases, and the processes to share these data with other agencies are either underway or still under development.	Share data with interested parties -> improve knowledge and understanding of resource conditions and effects -> reduce costs to execute effective Natural Resource Programs -> improve habitat conditions more cost-effectively	Data-sharing is encouraged at all levels of the agency. (It would cost more to track all data-sharing that is occurring, thus tracking this measure would be oppose the associated logic model to find more cost-effective ways of managing Natural Resource Programs and improving habitat conditions.)	Ongoing	
Navy	Sikes Act and DoD Regulations for Military lands. Naval Air Station Whidbey Island's (NASWI) Integrated Natural Resource Management Plan (INRMP).	Under the INRMP, WA Dept. of Fish & Wildlife (WDFW) performs annual forage fish spawning surveys at NASWI. b. Whidbey staff, WDFW, and NOAA(NMFS) will conduct a survey in both 2013 and 2016 for Puget Sound chinook salmon presence to compare change over time to assist in assessing the effectiveness of the plan	Navy - Primary. WDFW & NOAA-NMFS support.	Annual for forage fish. 2013 & 2016 for salmon survey.	Completed surveys=> provide to agencies=>improve INRMPS as needed.	Naval Air Station Whidbey Island will measure/report to WDFW or NOAA-NMFS as appropriate	Ongoing	
JBLM	Sikes Act and Army Regulation 200-1	If possible and funding allows, restoration activities and habitat protection efforts are built into project development plans.	JBLM and Corps	Continuous	Initial Planning and Programming Documents include Natural Resource Components (including RFP's)	Annual review of the INRPM to compare accomplishments versus commitments	Ongoing	
FTA	NEPA	Some FTA funded projects benefit habitat through mitigation related activities such as removing creosote-treated pilings, land banking, mitigation banking, wetland preservation, and improved water quality.	Mitigation determined through FTA and project proponent consultation with NOAA/NMFS, USFWS, and Department of Ecology	Mitigation measures are project specific and are determined during and after the NEPA process	FTA funded project implements water quality or habitat related mitigation -> Potential improvement in water quality or habitat (dependent on project)	Continued enforcement of environmental commitments.	Ongoing	

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EPA	Water Quality	Clean Water Act (CWA) §303	Water Quality Standards (WQS) for most of the Puget Sound basin are developed by the Washington Dept. of Ecology (Ecology) and approved by EPA. The State program undergoes a triennial review (currently underway) to ensure the standards provide for fishable and swimmable waters. EPA has recently worked with the State to improve its temperature and dissolved oxygen standards, and is currently in discussions with the State regarding updating the criteria for toxic pollutants.	Ecology develops WQS, EPA provides advice and approval	Ecology will adopt revised sediment management standards (including a new fish consumption rate) by fall/winter 2012, revised WQS implementation tools (e.g., variance provision and compliance schedule provision) will be adopted by fall/winter 2012, and WQS will include a new fish consumption rate to derive human health criteria by 2014. EPA action will occur 90 days after adoption.	EPA review and approval of toxics WQS -> implementation through permits and TMDLs -> improved WQ -> improved human health protection, especially for high end consumption of fish and shellfish	Approval of WQS protective of human health, especially high end consumption of fish and shellfish.	New review round for ongoing activity		
EPA	TMDLs	CWA §303(d)	EPA and State working together to make Total Maximum Daily Loads (TMDLs) more readily implemented in order to improve water quality. For example, the Clarks Creek TMDL effort involves close coordination with the jurisdictions impacting the water body, in order to address problems with sediment, excess plant growth, stormwater flows, and low dissolved oxygen. This includes specifying stormwater best management practices (BMPs), monitoring, and setting numeric targets in the TMDL that can be put into NPDES stormwater general permits, thereby improving water quality for salmon. The Puyallup Tribe is heavily involved in this TMDL development effort.  The EPA supports the inclusion of land-use specific BMPs in TMDL implementation plans; and supports the consideration of such BMPs during TMDL development. The EPA is currently working closely with Ecology to determine the best ways to integrate such BMPs into TMDLs throughout the state.	Ecology develops TMDLs, EPA provides technical assistance and approval	Varies by TMDL. See "TMDL" tab at end of workbook for list of water bodies scheduled for adoption in the next 3 years. EPA action will occur 30 - 60 days after adoption.	EPA review and approval of TMDLs -> implementation through permits and Best Management Practices (BMPs) -> improved WQ -> improved salmon, other finfish, and shellfish health	Approval of TMDLs that are readily implemented and improve water quality for fish and shellfish.	Some new TMDLs being developed and some ongoing	Working with 18 water bodies in the Puget Sound basin. See "TMDL" tab for list of water bodies.	

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EPA	TMDLs	CWA §303(d)	Region 10 is supporting Ecology's effort to develop a TMDL for forests on the west side of the Cascades (including all USFS lands in the Puget Sound watershed - Olympic National Forest, Mt. Baker-Snoqualmie National Forest, Gifford Pinchot National Forest), targeting the protection of riparian areas which are vital to salmon habitat. This large scale TMDL will be focused on federal lands and incorporate Northwest Forest Plan riparian protections. While this TMDL would focus on pollutants, its successful implementation would necessarily focus on habitat protection and restoration.	Ecology develops TMDLs, EPA provides technical assistance and approval, USFS implements TMDL	Draft TMDL developed by 4/1; final TMDL approved by 8/1/12	EPA review and approval of TMDLs -> implementation through permits and BMPs -> improved WQ -> improved salmon, other finfish, and shellfish health	Adoption of a west side forest TMDL that incorporates riparian protections.	New	EPA is committed to working with USFS to implement this TMDL.	
EPA	TMDLs	CWA §303(d)	EPA will work with the Ecology to target 20% of their TMDLs toward addressing impaired waters that support Tribal resources. These TMDLs could involve dissolved oxygen (DO), sediment, toxics, temperature (affecting salmon) and pathogens (affecting shellfish). The EPA routinely offers to consult with Tribal Governments before taking action to approve or disapprove TMDLs that may affect Tribal interest, consistent with EPA Policy (EPA Policy on Consultation and Coordination with Indian Tribes, May 4, 2011). The EPA will also commit to notifying potentially affected Tribal governments at the early stages of TMDL development for those TMDLs in which EPA is involved.	Ecology develops TMDLs, EPA provides technical assistance and approval	Varies by TMDL. See attached sheet for list of water bodies scheduled for adoption in the next 3 years. EPA action will occur 30 - 60 days after adoption.	Effective TMDL -> change in discharges or inputs to water body -> WQ change -> improved salmon and shellfish health	Adoption of commitment in the WA/EPA PPA to target 20% of Ecology TMDLs toward waters that support Tribal resources.	New		
EPA	TMDLs	CWA §303(d)	EPA is currently using contractor resources to develop pilot TMDLs which more effectively address the water quality and aquatic habitat degradation caused by stormwater runoff in Squilicum and Soos Creek. These pilot projects are for watersheds in north and central Puget Sound and their development includes active participation by the local Tribes, State, and municipal governments. EPA is also funding bioassessment for these	Ecology develops TMDLs, EPA provides advice and approval	Draft TMDLs for these two watersheds are scheduled for public review before the end of 2012.	Effective TMDL -> change in discharges or inputs to water body -> WQ change -> improved salmon health	Adoption of TMDLs that address stormwater impacts on water quality and aquatic (salmon) habitat. These pilot TMDLs are expected to provide examples for addressing this widespread problem.	New		

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			projects to ascertain current stream habitat conditions and to set restoration targets that will fully support designated beneficial uses, including all salmon life stages.							
EPA	Low D.O. problems in the nearshore	CWA §303(d)	EPA Region 10 continues to support Ecology's development of a water quality model to evaluate dissolved oxygen in South Puget Sound. It is anticipated this model will determine if additional nutrients from human activities are contributing to dissolved oxygen problems in these waters. The model will also provide a tool for developing a TMDL which can be used to set loading targets for the many sources of nutrients in Central and South Puget Sound which cause and contribute to dissolved oxygen problems.	EPA, Ecology	Model and technical report currently scheduled for public review in late 2012.	Water quality model will provide the tool necessary for determining the reduction in nutrient loading necessary to restore dissolved oxygen levels and reduce algae blooms in South Puget Sound.	Adoption of a plan to reduce nitrogen loading	Ongoing		
EPA	Water Quality	CWA §402	EPA will provide technical, financial and policy support to Ecology to improve State stormwater permits.	EPA, Ecology	Ongoing support through 2013	New stormwater permits -> improved WQ -> improved salmon, other finfish, and shellfish health	New Western Washington municipal stormwater permit issued by Ecology by July 2012. EPA will provide comments on draft permits. Comments provided regarding 2012 Washington legislative proposals.	New		
EPA	Water Quality	CWA §402	EPA will review selected Department of Ecology's National Pollutant Discharge Elimination System (NPDES) permits issued in the Puget Sound basin.	EPA, Ecology	Permits to be reviewed in 2012	EPA's permit reviews -> strengthened permit conditions -> improved WQ -> improved salmon, other finfish, and shellfish health	Washington Concentrated Animal Feeding Operations (CAFO) permit to be reviewed in 2012, other permits to be determined.	New		
EPA	Water Quality	CWA §402	EPA developed a draft municipal storm water permit for Joint Base Lewis-McChord (JBLM) that incorporates advanced hydrologic flow control requirements for new development, including green infrastructure, and storm water improvements in areas that are already developed. This permit supports Ecology stormwater permits and also serves as a model in subsequent federal permits at federal facilities and within Indian Country.	EPA and Joint Base Lewis McChord	Draft permit completed 1/31/12, final permit 10/1/12	EPA model stormwater permit -> stronger state and federal stormwater permits (consistent with model)-> lower PS concentrations of pollutants from stormwater -> improved salmon, other finfish, and shellfish health	Permit in place	New		

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EPA	Water Quality	CWA §402	EPA will enhance its oversight of State enforcement in the Puget Sound basin, including an overall evaluation of Ecology's NPDES enforcement program using the State Review Framework, a national tool for evaluating state enforcement programs. EPA will also be using the recent published findings (Jan 2011) of the NPDES permit quality review for Washington, as well as activities listed above under line 9 (permit review) to improve permits.	EPA, Ecology	2012	EPA's evaluation of Ecology's enforcement program -> increased enforcement of NPDES permits -> improved WQ -> improved salmon and shellfish health	State Review Framework evaluation completed	New		
EPA	Water Quality	CWA §402	EPA will be assessing all Phase 1 municipal separate storm sewer systems (MS4) permits in Washington under EPA's National Enforcement Initiative (NEI) for Municipal Infrastructure. Under this NEI, EPA must assess and address compliance issues for MS4 discharging to impaired waters serving urban populations greater than 100,000 by September 30, 2016. In Fiscal Year (FY)12, EPA will assess 4-5 permits, including City of Tacoma, Pierce County, Snohomish County, and Washington Department of Transportation. If problems are found with permit compliance, a range of "addressing" actions may occur by EPA and/or the State, including enforcement responses.	EPA, Ecology	2012-2013	MS4 permit assessment -> identification of compliance issues -> actions to address issues -> improved permit compliance -> improved WQ -> improved salmon and shellfish health.	Assessment of 4-5 MS4 permits	New		
EPA	EPA	CWA §402	EPA is launching a new initiative, in partnership with Ecology, to target and inspect auto salvage and wrecking yards in Washington, with a focus on those that discharges can impact Puget Sound. These facilities, both permitted and unpermitted, can discharge metals, oils and other toxics. EPA will take follow-up actions as appropriate (direct enforcement, referrals to Ecology, etc.)	EPA, Ecology	2012 2013	Inspections, enforcement	Number of follow-up actions taken	New		
EPA	Water Quality, Compliance and Enforcement	CWA §402	Ongoing Puget Sound enforcement initiatives involve concentrated animal feeding operations (CAFOs). In a focused enforcement effort in the Nooksak River basin, 15-17 CAFO/AFO	EPA	2012-2013	Enforcement of NPDES permits -> increased compliance with CWA -> improved WQ -> improved salmon and	Number of enforcement actions	Ongoing		

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			facilities have been inspected in each of the last two years.			shellfish health				
EPA	Water Quality, Compliance and Enforcement	CWA §402	As part of Region 10's enforcement strategy, EPA will focus enforcement and compliance efforts on the Samish Watershed. This will include ongoing discussions with Ecology and the Department of Agriculture and joint inspections with Agriculture.	EPA, WA Dept. of Agriculture, Ecology	Ongoing	Enforcement of NPDES permits -> increased compliance with CWA -> improved WQ -> improved salmon and shellfish health	Number of enforcement actions	Ongoing		
EPA	Water Quality, Compliance and Enforcement	CWA §402	As part of Region 10's enforcement strategy, EPA will focus enforcement and compliance efforts on industrial stormwater discharges to the Lower Duwamish waterway. This will include source tracing activities, collaborative discussions with relevant agencies, and fine-tuning the Duwamish target list. EPA will conduct inspections and ensure appropriate follow-up enforcement.	EPA, Ecology, City of Tukwila, King County, City of Seattle, Seattle Public Utilities	2012-2013	Enforcement strategy-> enforcement actions-> increase in compliance rates -> improved Lower Duwamish environmental conditions -> improved salmon and shellfish health	Number of inspections and followup actions	New		
EPA	Water Quality	CWA §402	Active participation in the Ecology/EPA Pollution Control Action Team, including inspections, overflights and assistance to local, State, and tribal agencies to ensure compliance with federal and state water quality rules (e.g., NPDES). Activities include CAFO inspections and followup enforcement as appropriate (note this is an enhancement of an existing activity for EPA to conduct CAFO inspections in Whatcom county as part of a national priority.	EPA, Ecology, DOH, etc.	2012-2013	Enforcement strategy-> enforcement actions-> increase in compliance rates -> improved water quality in Whatcom County -> improved salmon and shellfish health	# of identified targets (sources), # of inspections	New		
EPA	Shoreline Armoring	CWA §404	EPA will provide financial and technical support through an Interagency agreement to the Corps for the Puget Sound Cumulative Impacts Study (PSCIS). This study is being conducted to document the cumulative impacts of many small shoreline development projects on Puget Sound and will be used to prevent incremental loss of habitat.	Corps manages the PSCIS; EPA provides financial and technical support	PCIS Phase I will be completed in April 2012. Phase II will be completed by approximately April 2013.	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase II (Intended to result in more protective federal permitting under CWA section 10/404 in shoreline areas of PS.)	Ongoing	Phase I included the highly developed eastern shoreline of PS between Marysville and Brown's Point north of Tacoma - including the tidally influenced portions of the Duwamish and Snohomish Rivers. The area for Phase II of the study is still to be determined.	
EPA	Shoreline Armoring	CWA §404	EPA is currently working with the Corps to explore 'softer' options for	EPA	Ongoing	Adopt bioengineering approaches -> reduce	Shoreline protection system at Manchester Laboratory is repaired	New		

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			preventing erosion of the shoreline (an example is in front of EPA's Manchester Laboratory).			shoreline armoring -> minimize impacts to marine and nearshore environment -> maintained levels of salmon, other finfish, and shellfish health	in a manner that reduces impacts to the nearshore			
EPA	Shoreline Armoring	CWA §404	EPA has requested that the Corps Seattle District adopt stronger regional conditions protective of Puget Sound habitat and shoreline in its new Nationwide Permits (NWPs), and has encouraged other federal agencies, the State and Tribes to comment to the Corps on this same issue.	EPA	Corps reissues NWPs March 2012. Seattle District adopts Regional Conditions by June 2012	More protective Nationwide Permits -> fewer actions negatively impacting salmon habitat -> maintained levels of salmon health	Nationwide Permits issued reflect strong regional conditions protective of Puget Sound habitat	New		
EPA	Mitigation Adequacy	CWA §404	EPA will serve on the Interagency Review Team (IRT) for In-Lieu Fee (ILF) and Mitigation Bank (MB) programs in the Puget Sound Basin, with priorities given to all ILF and all Tribal MB development. EPA will continue to participate as an IRT member on the Policy Level Meetings with the Corps and Ecology for both ILF and MBs.	EPA, Corps, Ecology	Ongoing - multiple projects & multiple monthly meetings	Participation on IRT-> ability to positively influence ILF programs -> more effective mitigation -> improved habitat conditions -> improved salmon, other finfish, and shellfish health	Participation on IRT and adoption of policies that increase mitigation effectiveness	New		
EPA	Water Quality, Compliance and Enforcement	CWA §404	EPA will convene a meeting with the Corps and Ecology to assess the best ways of improving CWA 404 compliance and enforcement in Puget Sound. EPA will hire a senior environmental employee (SEE) to support compliance/enforcement actions.	EPA, Corps, Ecology	Initial meeting held 1/24. Timing of additional work will depend on filling 2 vacant positions and selecting SEE.	Meeting to assess 404 compliance -> recommendations to improve compliance -> implementation of recommendations -> improved compliance -> improved habitat conditions -> improved salmon, other finfish, and shellfish health	Staff and SEE support redirected toward 404 compliance work OR implementation of other effective enforcement action measures.	New	EPA currently has 2 vacancies: Enforcement Coordinator and Puget Sound enforcement support, that will be key to implementing any new enforcement strategies.	
EPA	Water Quality, Compliance and Enforcement	CWA §404	A field level agreement between all four Corps Districts and EPA was recently revised. EPA and the Corps meet quarterly to discuss enforcement actions and issues. In the past 5 years, EPA has issued §404 enforcement orders or has ongoing case work involving violations on the Blair/Hylebos Peninsula, in Bothell, on the Skykomish River, in Arlington, and in Lynden. Two of these cases involve farming	EPA, Corps	Last quarterly meeting held 1/24. Will continue meeting quarterly. Timing of additional enforcement/compliance work will depend on filling 2 vacant positions.	Improved enforcement of regulations -> improved habitat conditions -> improved salmon, other finfish, and shellfish health	# of enforcement and compliance assistance actions taken	Ongoing	EPA currently has 2 vacancies: Enforcement Coordinator and Puget Sound enforcement support, that will be key to implementing any new enforcement strategies.	

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			operations.							
EPA	Water Quality, Habitat Alteration	CWA §404	Increase participation in regional general permit development, multi-agency Permit teams (MAP Teams), and Nationwide Permit agency review and coordination. An example is the Shellfish Interagency MAP Team below.	Corps issues permits; EPA will review and comment as appropriate	Ongoing	# of §404 applications-> # permits-> Δ in acres of Puget Sound wetlands or other aquatic resources	# of permits reviewed and comments provided by EPA that improve environmental outcome	Ongoing		
EPA	Water Quality	CWA §404	Washington Shellfish Initiative - Shellfish Interagency Review Team will identify ways to appropriately streamline shellfish aquaculture permits, while ensuring compliance with State WQS, Section 404 permitting requirements, and protection of critical shellfish, salmon, and other habitats.	NOAA, Ecology, WDNR, WDFW, WDOH, Corps, EPA, Tribes	Monthly meetings	Balancing streamlined permits with environmental protection -> ensuring compliance with WQS -> improved WQ -> improved habitat -> improved shellfish health	Participation in review team meetings that result in increased compliance with WQS	New		
EPA	Water Quality	CWA §106	EPA provides §106 grants to the Department of Ecology for State water quality programs. Work plans are negotiated through the Performance Partnership Agreement (PPA) process. Puget Sound is already a priority for the State.	EPA (grantor), Ecology (grantee)	Ecology grant begins 7/1/12	PPA Work plan implementation -> maintenance of ongoing WQ work -> improved WQ -> improved levels of salmon, other finfish, and shellfish health	Grant issued in year appropriated. See individual PPA for additional performance measures.	Ongoing	Washington's PPA is updated every year	
EPA	Water Quality	CWA §106	EPA also provides §106 grants to a number of Puget Sound Tribes to support corresponding tribal programs.	EPA (grantor), Tribes (grantees)	Tribal grants have varying start dates	PPA Work plan implementation -> maintenance of ongoing WQ work -> improved WQ -> improved levels of salmon, other finfish, and shellfish health	Grant issued in year appropriated. See individual PPAs for additional performance measures.	Ongoing	Updated every 1-2 years	
EPA	Water Quality	Clean Water State Revolving Fund (SRF)	The Clean Water SRF has been used to benefit the Puget Sound basin through funding WWTP improvements and nonpoint source projects. In FY11, EPA awarded a capitalization grant of approximately \$26 million to Ecology. When combined with the State match and revolving fund loan repayments, the FY11 total funds available are expected to be about \$115 million. Washington State intends to issue loans for almost \$100 million to eligible WWTPs projects and about \$17 million for twenty-two nonpoint source	EPA, Ecology	Ongoing grant program that funds new projects annually. Ecology's next grant will begin 7/1/12	SRF grants to WWTPs and for NPS projects -> reduced pollution inputs -> improved WQ -> improved salmon, other finfish, and shellfish health.	Grant issued in year appropriated.	Ongoing		

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			projects. According to Ecology's latest report to EPA, over 50% of Washington's Clean Water SRF went to projects that protect Puget Sound.							
EPA	Water Quality	CWA §312	EPA has provided the Washington Department of Ecology with Puget Sound grant funding to initiate work on a no discharge zone petition and has established a point of contact within the Agency for Ecology to work with on the petition. This could restrict sewage discharge from boats in designated areas where adequate and reasonably available pump-out facilities exist.	EPA, Ecology	Ecology will have conducted an evaluation and drafted a petition to EPA by Fall 2013	Completed petition -> approval of no discharge zone -> reduced nutrient and pathogen inputs -> improved WQ -> improved salmon, other finfish, and shellfish health	Evaluation conducted, petition drafted.	New		
EPA	Water Quality	CWA §319 Nonpoint Source Program (NPS)	EPA will work with the Department of Ecology to investigate redirecting 319 funds toward nonpoint sources impacting Tribal resources (e.g., to increase NPS field presence).	EPA, Ecology	Spring 2012	319 funding -> increased field presence -> identification and resolution of nonpoint pollution issues -> improved water quality -> improved salmon and shellfish health	Re-direction of funds in 319 grant	New		
EPA	Water Quality	CWA §319 Nonpoint Source Program (NPS)	EPA will support and participate in the State's three-agency discussions on agriculture roles, responsibilities, expectations and activities. This is expected to result in better approaches to addressing agricultural pollution.	EPA, Regional Administrator???	On-going	Three-agency discussions -> improved approaches to addressing agricultural pollution -> reduced agricultural pollution -> improved WQ -> improved salmon and shellfish health	Agreed upon approach to addressing agricultural pollution	New		
EPA	Funding	CWA 319 Grants and Construction Grants	Grants are dependent on the quality of proposals submitted and funding available. The existing Washington NPS Management Plan was published in 2005; EPA must approve revisions to the Management Plan.  Statewide, about half of the total number of projects and dollar amounts for the most recent Washington CWA §319 grant focus on the Puget Sound region (5 out of 10 projects and \$985,970 out of \$1,836,435 in CWA §319 funding). Nine Puget Sound construction projects are proposed for	EPA, Ecology	319 grant awarded in July 2012; State grant solicitation in Fall 2012	§319 grants -> reduced NPS pollution -> improved WQ -> improved salmon and shellfish health	Grant issued in year appropriated	Ongoing		

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			stormwater retrofit and low impact development grants, totaling \$3,440,000. EPA also provides CWA §319 funding to 15 Puget Sound Tribes for watershed protection and restoration projects, watershed-based planning, and education and outreach efforts.							
EPA	Funding	CWA §320 National Estuary Program (NEP)	<p>Congress has appropriated substantial funds (nearly \$160M in FY07 thru FY12) for the Puget Sound National Estuary Program (NEP). Much of the Puget Sound NEP funding has gone toward habitat protection and restoration. For example:</p> <ul style="list-style-type: none"> <li>• Puget Sound Tribal Capacity Building funding has allowed Tribes to engage in local implementation organizations, the Puget Sound Salmon Recovery Implementation Technical Team and in watershed and shoreline planning, as well as to conduct environmental monitoring and management of habitat restoration projects and to develop restoration project proposals.</li> <li>• Puget Sound Tribal Lead Organization (LO), watershed and Tribal project funding has led to a number of habitat, shellfish and salmon-related subawards, including projects related to engineered-log jams, culvert replacement, floodplain, saltmarsh and wetland restoration, watershed protection, removal of non-native species, and research on factors influencing salmon.</li> <li>• The Nearshore/Marine and Watershed Lead Organizations, which have substantial habitat components, have been funded at nearly \$12m each.</li> <li>• EPA will allocate FY12 NEP funding based in part on a renewed commitment in response to the "Treaty Rights at Risk" paper. The</li> </ul>	EPA, PSP, Lead Organizations, other grant recipients	Ongoing, with FY12 funds committed by end of September, 2012.	Puget Sound NEP Funding -> supports a variety of projects focusing on habitat protection and restoration -> improved habitat -> improved salmon, other finfish, and shellfish health	Cooperative agreement workplans for FY12 and 6-year Lead Organization implementation strategies reflect focus on habitat protection and restoration.	Ongoing		

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			FY12 Puget Sound funding allocation reflects EPA's desire to work with its partners in the Management Conference to reverse the trend in habitat loss at the local level and improve salmon and shellfish recovery. EPA will work with lead organizations to ensure that workplans address impediments identified in each salmon recovery plan. EPA will also work with lead organizations to ensure that LOs solicit feedback from tribes when refining workplans for selected projects.							
EPA	Funding	CWA §320 National Estuary Program (NEP)	EPA has provided NEP funding to the Washington Department of Health (DOH) and Ecology to serve as the Puget Sound LOs for Pathogens and Toxics and Nutrients, respectively. These State agencies are using the NEP funds to make subawards to other entities to reduce these pollutants. DOH made subawards available to Puget Sound Counties, local health jurisdictions, and tribes to develop sustainable pollution identification and correction (PIC) programs. The objective of the PIC program is to identify and address pathogen and nutrient pollution from a variety of nonpoint sources, including on-site sewage systems, farm animals, pets, sewage from boats, and stormwater runoff. Contracts are being awarded in 2012 to San Juan, Skagit, Pierce, Thurston, Mason, and Kitsap Counties, and the Hood Canal Coordinating Council (possible funding to Whatcom County). Puget Sound Tribal input to these PIC subawards improved performance expectations and led to the development of the federal/State Pollution Control Action Team (PCAT). The PCAT will provide an enforcement backstop where the local entity either does not have the necessary ordinances or fails to require	EPA, DOH, Ecology	Ongoing	Puget Sound NEP Funding -> reduced pollutant inputs to streams -> improved water quality -> improved shellfish health	PIC grants awarded and programs launched	New		

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			<p>compliance.</p> <p>DOH and Ecology are also using some of the NEP funding to build on these PIC programs by providing subawards to specifically address agricultural sources of nutrients and pathogens. Subawards will be made for livestock Best Management Practice (BMP) implementation and effectiveness monitoring (baseline monitoring and follow-up monitoring over 3 years) to assess whether these BMPs meet water quality standards and result in watershed health. This work will focus on small farms that cannot apply for Natural Resources Conservation Service Environmental Quality Incentive Program (NRCS EQIP) funds, but all landowners are eligible. The BMPs will include Livestock exclusion fencing (NRCS FOTG standard); off-stream watering (NRCS FOTG for watering facility, pumping plant, heavy use area protection, and pipeline); and livestock feeding (NRCS FOTG for water storage, rain runoff, underground outlet, wind breaks).</p>							
EPA	Funding	CWA §320 National Estuary Program (NEP)	The Puget Sound NEP has existed since 1987. The Puget Sound Partnership (PSP) became the designated lead for the NEP in 2007. The “Action Agenda for 2020” is the approved Comprehensive Conservation and Management Plan (CCMP) and is currently undergoing revision. The PSP is currently updating the Action Agenda to restore and protect Puget Sound. The EPA Puget Sound Team will work with the PSP to ensure that the revised Action Agenda includes effective near and long term actions to protect and restore habitat and recover salmon and shellfish populations and that these actions include clear roles and accountability measures. While these are not the only resources we are trying to protect, the actions taken to protect	EPA, Tribes, PSP	Current schedule has the Action Agenda finalized in April 2012.	Updated Action Agenda with robust measures addressing habitat, salmon and shellfish protection and restoration -> effective implementation and accountability -> improved habitat -> improved salmon, other finfish, and shellfish health	Updated Action Agenda that has the support of Tribes	New		

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			and restore habitat, shellfish and salmon will also directly and indirectly impact other Puget Sound stressors and resource targets. The Team will also work with PSP to ensure that Tribal comments on the draft Action Agenda are addressed in the final document.							
EPA	Water Quality	Coastal Zone Act Reauthorization Amendment §6217	EPA and NOAA have been working with Washington State to resolve remaining management measures with respect to 1) roads, highways, and bridges, 2) onsite sewage disposal systems, 3) new development, and 4) additional management measures for forestry. Based on recent information the state has provided, NOAA and EPA believe the state has sufficiently addressed the remaining conditions on its Coastal Nonpoint Program. NOAA and EPA are drafting a final decision memo proposing to approve Washington's Coastal Nonpoint Program. We plan to notify all of the Washington Tribes within the Coastal Nonpoint Program management area when the draft document is available for review to provide each Tribe an opportunity to comment. In addition, we will also announce our intent to approve Washington's Coastal Nonpoint Program in the Federal Register for a 30 day public comment period. NOAA and EPA will carefully consider all Tribal and public comments received and make a final decision whether or not to fully approve Washington's Coastal Nonpoint Program.	NOAA, EPA, Ecology	Documentation for remaining management measures (completed), 30-day public notice for proposed approval (est winter 2012), final decision document (est Spring 2012)	Approved plan -> reduced NPS pollution -> improved WQ -> improved salmon and shellfish health	Final approval of Washington's coastal nonpoint source plan	Ongoing		
EPA	Water Quality	Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)	EPA's cleanups at freshwater and marine sites will improve water and sediment quality, bringing direct habitat benefits to aquatic resources. Where mitigation work is required as an outgrowth of cleanup work, the program will ensure that specific habitat objectives are incorporated into the mitigation plans and that long term monitoring requirements to meet those	EPA in partnership with the Natural Resource Trustees	Individual early action projects in the Lower Duwamish waterway are targeted for completion as follows: Slip 4, 2012; Terminal 117, 2014, Boeing Plant 2, 2015	Cleanup efforts -> improved water quality and habitat conditions -> improved salmon, other finfish, and shellfish health	Project Completion Reports will be prepared per Superfund requirements	Ongoing		

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			objectives are implemented as well.							
EPA	Water Quality	CERCLA	EPA will work with Potentially Responsible Parties and Natural Resource Trustees to link habitat restoration to the Natural Resource Damage (NRD) Assessment at sites, and will continue to integrate NRD processes with the cleanup process.	EPA in partnership with the Natural Resource Trustees	Depends on timeline for individual sites	Cleanup efforts -> improved water quality and habitat conditions -> improved salmon, other finfish, and shellfish health	Work at NRD Assessment sites encompasses habitat restoration elements.	Ongoing		
EPA	Water Quality	CERCLA	EPA's Superfund and Water Quality programs will work with the State to reduce the potential for recontamination of sediments after cleanup. This will be done through source control programs incorporating approaches such as more tailored stormwater permits to prevent site recontamination. A key example of this work is the Lower Duwamish Early Action Sediment Cleanup. These projects include cleanup, habitat benefits, and long term monitoring. Source control will be key component of Lower Duwamish remedy.	EPA in partnership with Ecology	Proposed Plan for Lower Duwamish waterway, including a source control section, is targeted for completion in 2012 and the Record of Decision for 2013.	Cleanup efforts -> improved water quality and habitat conditions -> improved salmon, other finfish, and shellfish health	Issuance of proposed plan and record of decision.	Ongoing		
EPA	Various	National Environmental Policy Act (NEPA)	EPA involvement and comments have resulted in improved projects, particularly when EPA serves as a 'cooperating agency' in EIS development. EPA has commented on State Environmental Policy Act (SEPA) documents when requested by the Department of Ecology and when the project is a high priority (i.e., may result in significant impacts, especially those that may affect EPA's decisions), or the action is related to a project undergoing analysis under NEPA (e.g., where the SEPA analysis is for the entire operation and the NEPA analysis is limited to some aspect of the project on federal land). The NEPA Review program will target projects in Puget Sound that have the greatest impact on habitat for more rigorous review and early involvement. Our review will be intended to raise	EPA	As projects arise for our review	Targeted NEPA Reviews -> increased attention to actions affecting habitat -> habitat impacts eliminated or minimized -> maintained habitat quality -> maintained salmon and shellfish health	# of NEPA documents that had specific, focused comments regarding habitat.	Ongoing	Example: We submitted scoping comments in the Fall of 2011 on 2 Corps of Engineers proposed General Investigations (Skagit and Puyallup Rivers) for which the Corps is planning to develop EIS documents. From our scoping comment letters: "we note our strong support for actions that restore natural processes and specifically recommend that you consider an EIS alternative which maximizes opportunities to restore natural hydrologic, geomorphic, and, biological processes. Natural process restoration and	

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			habitat loss and degradation issues early in the NEPA process and work with project proponents to eliminate or minimize those impacts.						protection objectives with potential for both flood management and ecosystem benefits include, for example, improved: floodplain connectivity; surface water- groundwater interactions; and, riparian vegetation and wetland development.”	
EPA	Various	Various	EPA’s Criminal Investigation Division investigates the most significant and egregious violations of environmental laws that pose a significant threat to human health and the environment. EPA has recently worked to prosecute several cases involving knowing discharge of pollutants to salmon-bearing waters and is involved in several others in progress.	EPA	Ongoing Enforcement Actions	Criminal prosecution of CWA and ESA violations -> fines and jail time for violators -> reduced future violations -> reduced instances of impacts to salmon and shellfish habitat.	Criminal enforcement actions taken.	Ongoing		
EPA	Various	N/A	Sustainability Partnership. Partnership between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. Funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have infrastructure and offer transportation choices.	HUD, EPA, FHWA and FTA staff.	Ongoing	Identifying ways to improve sustainability by integrating our programs and removing barriers to sustainable projects.	Pilot projects and information-sharing.	New		
NOAA	Barrier: Shoreline Modification, Riparian and Floodplain Management Limiting Factor: Estuarine and Nearshore Habitat	Endangered Species Act (ESA), Magnuson-Stevens Act (MSA)	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>• Work with the Corps to develop new programmatic consultation(s) using regional general permits, standard local operating procedures for endangered species (SLOPES), etc. to streamline the permit review process and establish fish-friendly, bioengineering alternatives to bank armoring.</li> <li>• Work with the Corps to modify nationwide permits or develop regional conditions (e.g., NWP #13, 31) to avoid cumulative effects and</li> </ul>	Co-Leads: NOAA and Corps State Department of Ecology and WDFW possible partners	Initial NOAA meetings completed December 2011; NOAA regulatory guidance to be completed by April 2012	Complete programmatic consultation for overwater structures in nearshore marine habitat-> Implement streamlined permit process ->	Revised permitting approach should lead to expanded use of bioengineered alternatives to bank hardening -> improved habitat for salmonids	New initiative between NOAA and Corps; Completion of an ongoing activity by NOAA-Guidance document on installing overwater	The joint agency habitat enforcement initiative aims to prevent additional incremental habitat loss	

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			<p>incremental habitat losses.</p> <ul style="list-style-type: none"> <li>Where applicants choose individual permit consultations in lieu of programmatic approaches, NMFS will require compensatory mitigation for incremental habitat loss; use reasonable and prudent alternatives where necessary to avoid adverse modification of critical habitat to achieve adequate conservation of estuarine and nearshore habitats. </li></ul> <p><u>Enforcement</u></p> <ul style="list-style-type: none"> <li>NOAA OLE will initiate an enforcement initiative in conjunction with the Corps and EPA to reduce the number and effect of unpermitted bank armoring projects.</li> </ul>					structures in marine nearshore areas		
NOAA	Barrier: Shoreline Modification, Riparian and Floodplain Management Limiting Factor: Estuarine and Nearshore Habitat	ESA, MSA	<p><u>Habitat Protection</u></p> <ul style="list-style-type: none"> <li>Work with the Corps to develop new programmatic consultation(s) in the Snohomish Basin using regional general permits, standard local operating procedures for endangered species (SLOPES), etc., to streamline the permit review process, establish fish-friendly tide gate design criteria, and require compensatory mitigation for estuarine habitat loss from tidegate operation (similar to Skagit tide gate approach).</li> <li>NMFS will work with proponents to develop and implement new habitat conservation banks to compensate for incremental habitat loss.</li> </ul>	Co-Leads: NOAA and Corps State Department of Ecology and WDFW possible partners		Revised permit process-> improved tidegate design criteria-> implement fish-friendly tidegates	Revised design criteria and compensatory mitigation requirements -> reductions in incremental estuarine habitat loss	New initiative between NOAA and Corps		
NOAA	Barrier: Riparian Management Limiting Factor: Estuarine and Nearshore Habitat	ESA	<p><u>Habitat Protection and Restoration</u></p> <ul style="list-style-type: none"> <li>Work with NRCS, FSA and soil and water conservation districts to increase CREP enrollment for riparian buffers.</li> </ul>	Co-leads: NMFS and NRCS Partners: FSA and EPA Region 10				Ongoing		
NOAA	Barrier: Floodplain Management Limiting Factor: Floodplain Connectivity and Function	ESA	<p><u>Habitat Protection</u></p> <ul style="list-style-type: none"> <li>Work with FEMA leadership, NFIP litigation plaintiffs, and key local jurisdictions to identify additional actions to supplement FEMA NFIP BiOp implementation efforts</li> </ul>	Co-leads: NMFS and FEMA Regional Administrators Collaborators: NWF and Selected local jurisdictions		NMFS is working with FEMA to provide technical assistance to local jurisdictions as they develop their approaches to comply with the FEMA biop	NMFS and FEMA are using a triage approach to overlay important salmon populations and the local jurisdictions that are least likely to offer a responsive program enabling a targeted compliance effort.	Ongoing		

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NOAA	Barrier: Floodplain Management Limiting Factor: Floodplain Connectivity and Function	ESA	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>NMFS will work with the Corps Seattle District to develop model local variances and system wide improvements under the new Policy Guidance Letter and System Wide Improvement Framework to retain and establish riparian trees on levees and accommodate other fish-friendly levee design measures.</li> <li>NMFS will work with the Corps through the PGL variance and SWIF processes to establish ESA section 7 consultation approaches for fish-friendly levee construction and maintenance. NMFS and the Corps will jointly develop levee repair and design criteria that can be applied through Puget Sound and the region.</li> <li>Where opportunities become available to condition levee repair or construction through Section 7 consultation, NMFS will require re-vegetation, installation of large wood, or other compensatory mitigation for incremental habitat loss. Adverse modification of critical floodplain habitat will be avoided by the appropriate prescription of reasonable and prudent alternatives.</li> <li>Develop NMFS NWR guidance on the development, approval and use of conservation banks. Use selected project consultations to encourage the use of new and existing conservation banks.</li> </ul>	Corps Seattle District Corps WA Dept. of Ecology, King County, Puget Sound Partnership, WDFW and the Muckleshoot Tribe in the Green River process. The Milton Freewater process includes locals, DEQ, ODFW, EPA, Umatilla Tribes, USFWS and NMFS.	Several initial scoping meetings have been held. Awaiting final PGL guidance from Corps HQ.	RPA. NMFS and other partners have had some, but limited, success influencing Corps national levee policies. Current approach is to work with motivated partners to develop model vegetation variances that can then be applied throughout Puget Sound under the new procedures.	The Corps chairs a working group with both technical and policy subgroups, which also includes other PSP players, to develop a levee vegetation management approach for the Green River and Cedar River. Solutions will be immediately shared more broadly with other local jurisdictions.	Ongoing	The places identified for the SWIF/variance processes are in the Green River watershed with the Seattle District Corps, and the Walla Walla River near Milton-Freewater with the Walla Walla Corps District. (While the Walla Walla River is obviously not in Puget Sound, it represents the initial opportunity to apply the new SWIF process and lessons learned there will inform similar efforts in Puget Sound).	
NOAA	Barrier: Floodplain Management Limiting Factor: Floodplain Connectivity and Function	ESA, CREP	<u>Habitat Restoration</u> <ul style="list-style-type: none"> <li>Work with NRCS to identify opportunities to use Farm Bill incentives to cost share with the NOAA Restoration Center on floodplain restoration projects in targeted watersheds to support local recovery plan projects.</li> </ul>	Co-leads: NMFS, NOAA Restoration Center NRCS EPA Region 10				New		

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NOAA	Barrier: Pollutant Loading Limiting Factor: Water Quality	ESA	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>NMFS will work with EPA on model Federal discharge permits, e.g., the Joint Lewis McCord efforts, to establish appropriate WQ standards and BMPs</li> <li>NMFS will work with EPA and Ecology on the state industrial general stormwater discharge permit, which is up for renewal, to include appropriate conservation measures for fish habitat.</li> <li>NMFS will work with EPA and Ecology to implement the existing municipal general stormwater discharge permit to improve compliance and water quality results.</li> </ul> <u>Enforcement</u> <ul style="list-style-type: none"> <li>NMFS will work with the enforcement team to seek strategic permit compliance/enforcement opportunities.</li> </ul>	Lead: NMFS Partner agencies: WA Governor's Office, Department of Ecology, EPA Region 10	Work to implement existing general permits is ongoing, but will receive additional effort from NMFS in response to this initiative. Consultations on Federal discharge permits will be new and engaged as requests from EPA are received.	Until WA state water quality standards are up for review, we will engage in existing implementation opportunities, including existing general permits and new consultations on Federal reservations for which EPA retains direct jurisdiction	Biological opinions on Federal actions will have RPAs and or RPMs to provide binding conservation measures to protect and restore water quality in Puget Sound receiving waters	New and ongoing	■ EPA will develop a model stormwater permit for a federal facility in Puget Sound (see row 11 on EPA worksheet).	
NOAA	Barrier: Pollutant Loading Limiting Factor: Water Quality	ESA	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>NMFS will use the best science from the NWFSC and other consultations on WQS, pesticides, etc. to identify adverse effects to listed salmon and steelhead in project specific consultations on discharge permits, transportation actions, dredging projects, etc.</li> <li>NMFS will require best management practices, biological thresholds, low impact development techniques, bio-assays, monitoring, etc. as needed to avoid, reduce or mitigate adverse effects to listed salmon and steelhead in specific project consultations that generate toxic contaminants in stormwater runoff, point and non-point source discharges, dredging discharges, etc.</li> </ul>	Lead: NMFS Partner agencies: EPA, Corps, FHWA, DOD	Ongoing as consultation requests are received	In the absence of NMFS consultation on EPA approval of water quality standards, NMFS will address individual standards that are relevant to listed fish conservation in consultations on various Federal actions that involve pollutant discharges.	Biological opinions on Federal actions will have RPAs and or RPMs to provide binding conservation measures to protect and restore water quality in Puget Sound receiving waters	New and Ongoing	■ EPA will focus additional attention on oversight and enforcement of State stormwater permits, including MS-4 permits under the National Enforcement Initiative for Municipal Infrastructure, to improve Puget Sound water quality (see row 13 on EPA worksheet).	
NOAA	Barrier: Pollutant Loading Limiting Factor: Water Quality	ESA	<u>Habitat Protection</u> <ul style="list-style-type: none"> <li>Work with NRCS to identify opportunities to target selected Farm Bill programs to address agricultural</li> </ul>	Co-Leads: NMFS, NOAA Restoration Center and NRCS				New		

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			water quality issues identified as factors limiting salmon and steelhead recovery in local watershed recovery plans.							
NOAA	Barrier: Pollutant Loading Limiting Factor: Water Quality	ESA	Conduct water quality project-specific assessments, monitoring and modeling to assess salmon exposure to and effects related to toxic contaminants. These studies support restoration planning and adaptive management to reduce contaminant threats to salmon (e.g., contaminant inputs from stormwater, agricultural activities, wastewater discharges, contaminated sediments, oil spills) and ESA consultations.	NWFSC	Ongoing	Science support for decision making >improved water quality>improved salmon health		Ongoing		
NOAA	Barrier: Shoreline Modification, Riparian and Floodplain Management Limiting Factor: Estuarine and Nearshore Habitat	ESA	Conduct research to 1) assess impacts of barriers to listed salmon populations, 2) monitor biological effects of barrier removal and other types of restoration, 3) establish pre-project baselines, and 4) support restoration planning and adaptive management. Develop protocols for others to use for scientifically-defensible monitoring related to habitat protection and restoration.	NWFSC	Ongoing	Science support for decision making >improved water quality>improved salmon health		Ongoing		
NOAA	Barrier: Floodplain Management Limiting Factor: Floodplain Connectivity and Function	ESA	Conduct research to 1) assess impacts of barriers to listed salmon populations, 2) monitor biological effects of barrier removal and other types of restoration, 3) establish pre-project baselines, and 4) support restoration planning and adaptive management. Develop protocols for others to use for scientifically-defensible monitoring related to habitat protection and restoration.	NWFSC	Ongoing	Science support for decision making >improved water quality>improved salmon health		Ongoing		
NOAA	Barrier: Shoreline Modification, Riparian and Floodplain Management Limiting Factor: Estuarine and Nearshore Habitat	Coastal Zone Management Act (CZMA)	NOAA/OCRM will work with the WA state coastal program to identify "enforceable policies" contained within each state-approved Shoreline Master Programs (SMPs) that the state would like to use for its review under the CZMA's Federal consistency provision. OCRM will help the state prioritize its	NOAA/NOS/OCRM	Ongoing support for identifying policies and submitting for NOAA approval. By July 2012 work with state on establishing priorities for submission.	Approved "enforceable policies" under CZMA -> enhanced authority for the state to review and condition federal activities affecting coastal resources -> increased habitat	Establishing priority list for submission and finalizing structure and content of submissions suitable for NOAA approval	Ongoing under CZMA, new for updated SMPs	Incorporating the updated existing state and local policies into Washington's federally-approved coastal management program would enhance the state's ability to review	

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			submission of SMPs to OCRM for jurisdictions where there would be greatest benefit to having federally approved "enforceable policies" in place to help protect habitat.			protection			and potentially condition federal actions that may have impacts to critical habitat in Washington. If these SMP plans are not reviewed and approved by OCRM, the state will have a significant gap in federally-approved "enforceable policies" to use for their review of federal actions.	
Natural Resources Conservation Service (USDA)		N/A	NRCS is willing to meet with tribes and pinpoint specific geographic areas where barriers exist, identify land owners and determine available programs to address (land ownership establishes eligible programs).	NRCS coordinates with Tribes, the Washington Tribal Conservation Advisory Council, State agencies and Conservation districts	Ongoing	Meetings with tribes -> identification of barriers to recovery -> determination of available remedies to barriers -> remedies taken -> improved habitat -> improved salmon, other finfish, and shellfish health	Meetings held, barriers identified, remedies identified, remedies put in place	New		
Natural Resources Conservation Service (USDA)		Farm Bill/Wildlife Habitat Incentives Program (WHIP)	Puget Sound Initiative - Water quality treatments on non-commercial livestock farms, primarily small acreage pastureland operations, Wildlife Habitat Incentives Program(WHIP). The highest priority areas within Puget Sound would be identified through the WHIP application rating and ranking process which would be targeted to pastures adjacent to surface water that impair habitat for listed threatened and endangered species and shellfish beds, especially those that experience closures due to contamination	NRCS and Conservation District partners already have in roads with these clients and have been working with landowners on these resource concerns in the past.	On going	WHIP program -> reduced contamination from agriculture operations -> improved water quality -> improved habitat -> improved salmon, other finfish, and shellfish health	# of clients enrolled		No funding in WHIP is anticipated in FY 2012	
Natural Resources Conservation Service (USDA)		Farm Bill/Environmental Quality Incentives Program (EQIP)	Puget Sound Initiative - Water quality treatments related to existing at-risk waste storage structures, primarily on dairies. Use of (EQIP) through closure and decommissioning of structures, replacement of structures, and installation of composted bedded pack barns. The highest priority group is structures that still contain waste and have exceeded their design lifespan or	The agency has partnered with and received support from the Washington State Dairy Federation, which has been conducting outreach to dairy operators who		EQIP program -> reduced contamination from waste storage structures -> improved water quality -> improved habitat -> improved salmon, other finfish, and shellfish health	# of structures addressed		Puget Sound initiative is as of yet unapproved and unfunded. Other actions are under development, such as an aquaculture program. NRCS has been deploying funds allocated to the state to focus on the Puget Sound issues.	

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			no longer meet NRCS standards that are in close proximity to surface water	would be the potential participants in the program						
Natural Resources Conservation Service (USDA)		Farm Bill/EQIP	Puget Sound Initiative - Water quality treatments related to excessive suspended sediment and turbidity in surface water on non-industrial forestland, primarily related to forest roads and fish passage. Use of both the EQIP and the Healthy Forest Reserve Program (HFRP) to apply conservation practices and establish easements with forest ownership for perpetual protection from development. The highest priority watersheds within the basin would be identified using the US Forest Service's criteria for watershed priority or similar state assessment data, which would be incorporated into NRCS application rating and ranking tools	Due to recent healthy forest campaigns launched by Washington NRCS and other outreach that has occurred, in addition to the availability of the new Forestry Conservation Activity Plans, there is a ready pool of forestry clients who are eligible for either EQIP and/or HFRP and are willing to work with NRCS to address the concerns affecting the water resources	On going and new HFRP for 2012	EQIP and HFRP programs -> reduced runoff from forest roads -> improved water quality -> improved habitat -> improved salmon, other finfish, and shellfish health	# of forestry clients enrolled	HFRP would be new for WA	By focusing first on the same watersheds as the US Forest Service or State Department of Natural Resources are working in, there is an opportunity to leverage activities on both private and public forestland to have the greatest impact.	
Natural Resources Conservation Service (USDA)		Farm Bill/EQIP	Puget Sound Initiative - Improvements in air quality by replacing aging diesel engines for irrigation with electric or high-efficiency motors, using manure injection practices, and developing comprehensive nutrient management plans. Uses EQIP funding to replace static diesel pumps with more efficient pumps that produce less emissions.	The Washington State Dairy Federation has helped identify dairy operators and has conducted outreach and marketing to promote participation in the program	Ongoing	EQIP air quality programs -> emissions reductions -> improved air quality -> improved environmental quality	# of clients enrolled			
Natural Resources Conservation Service (USDA)		Farm Bill/EQIP	National Water Quality Initiative - During Fiscal Year 2012, each state will be asked to accelerate efforts to improve water quality. States will select at least one, but not more than three, 12-digit watershed(s) with streams on	NRCS coordinates with Tribes, the Washington Tribal Conservation Advisory Council, State agencies	Ongoing	EQIP FA funding - >accelerated efforts to address issues in 303d impaired waters - >improved water quality	Increased program participants in the 303d watershed	Ongoing Program, new focus	Contingent on participation of land owners in program	

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			the Environmental Protection Agency's (EPA's) 303d list of impaired waters. State Conservationists are instructed to hold a minimum of 5% of their EQIP FA Funding to address a new National Water Quality Initiative, but may exercise their discretion to hold more FA for this purpose.	and Conservation districts						
Natural Resources Conservation Service (USDA)		Farm Bill/EQIP	In FY 2012, the Conservation Innovation Grants program (CIG) is offering \$10 million in grants to stimulate the development, adoption, and evaluation of innovative approaches and technologies related to water quality credit trading systems. Water quality credit trading markets are an emerging means to meet existing or potential Federal and State level water quality requirements. The overall goal of these grants is to support State agencies and/or other cooperating entities seeking to design and launch water quality credit trading markets between point and non-point sources.	NRCS coordinates with Tribes, the Washington Tribal Conservation Advisory Council, State agencies and Conservation districts	Ongoing	EQIP CIG funding - >accelerated efforts to address issues in 303d impaired waters - >improved water quality	Grants result in tools whose use can be expanded	Ongoing		
Natural Resources Conservation Service (USDA)		Farm Bill/WHIP	Wildlife Habitat Incentives Program (WHIP) – WHIP is a voluntary program for conservation-minded landowners who want to develop and improve wildlife habitat on agricultural land, nonindustrial private forest land, and Tribal land. The Food, Conservation, and Energy Act of 2008 reauthorized WHIP as a voluntary approach to improving wildlife habitat in our Nation. The Natural Resources Conservation Service administers WHIP to provide both technical assistance and financial assistance to establish and improve fish and wildlife habitat. WHIP cost-share agreements between NRCS and the participant generally last from one year after the last conservation practice is implemented but not more than 10 years from the date the agreement is signed. In order to provide direction to the State and local levels for implementing WHIP to achieve its	NRCS coordinates with Tribes, the Washington Tribal Conservation Advisory Council, State agencies and Conservation districts	Ongoing	Cost share agreements- >improved wildlife habitat and potentially improvements to water quality.	Acres of habitat restored or treated	Ongoing	All WHIP money being held by HQ this year.	

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			objective.							
Natural Resources Conservation Service (USDA)		Farm Bill/CSP	Farm and Ranch Land Protection Program (FRPP) – FRPP provides matching funds to help purchase development rights to keep productive farm and rangeland in agricultural uses. Working through existing programs, USDA partners with State, tribal, or local gov't	NRCS coordinates with Tribes, the Washington Tribal Conservation Advisory Council, State agencies and Conservation districts	Ongoing	CSP funding -> continued and enhanced conservation work -> environmental benefits	Acres enrolled	Ongoing		
Natural Resources Conservation Service (USDA)		Farm Bill/WRP	Wetlands Reserve Program (WRP) - WRP is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The NRCS goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection. Some of the activities that can be done under EQIP to protect and restore habitat include Property acquisition and conservation, topography restoration.	Corps, NOAA, cities, counties collaborate on restoration	Ongoing	Help develop a plan to buy easements to protect existing wetlands or restoration of wetlands -> environmental benefits	Acres of wetland restored or protected	Ongoing		
Natural Resources Conservation Service (USDA)		Farm Bill/GRP	Grassland Reserve Program (GRP) – GRP is an easement program for landowners or operators to protect grazing uses and related conservation values by conserving grassland, including rangeland, pastureland, shrubland, and other certain lands. Enrollment permits grazing on the land in a manner consistent with maintaining the viability of natural grasses, shrubs, and forbs.	NRCS coordinates with Tribes, the Washington Technical Tribal Advisory Committee, State agencies and Conservation districts	Ongoing	Help develop a plan to buy easements to protect existing wetlands or restoration of wetlands -> environmental benefits	Acres of grassland restored or protected	Ongoing	May consider compatible use; use easement to protect property from other uses	
Natural Resources Conservation Service (USDA)		Farm Bill/FRPP	Farm and Ranch Land Protection Program (FRPP) – FRPP provides matching funds to help purchase development rights to keep productive farm and rangeland in agricultural uses. Working through existing programs, USDA partners with State, tribal, or local governments and non-	NRCS coordinates with Tribes, the Washington Technical Tribal Advisory Committee, State agencies and Conservation	Ongoing	Prevents ag working lands from being converted thru deed restrictions (buying development); (no other environmental requirements under this program but	Acres of farm or ranch land restored or protected	Ongoing		

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			governmental organizations to acquire conservation easements or other interests in land from landowners. USDA provides up to 50 percent of the fair market easement value of the conservation easement. To qualify, farmland must: be part of a pending offer from a State, tribe, or local farmland protection program; be privately owned; have a conservation plan for highly erodible land; be large enough to sustain agricultural production; be accessible to markets for what the land produces; have adequate infrastructure and agricultural support services; and have surrounding parcels of land that can support long-term agricultural production.	districts		applicant may take advantage at same time of other NRCS programs)				
Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain Management; Land use development, permitting and zoning.	NFIP (42 U.S.C. 4001 et seq)	The primary purpose of the NFIP is to encourage preventive and protective measures by state and local government to reduce the risk of flooding and share the cost of flood losses with those whose property is at risk of flooding. There are no provisions in either the enacting legislation or the NFIP regulations in the Code of Federal Regulations (CFR) providing for the protection or restoration of salmon habitat.	FEMA with support from State and local governments	Major changes have occurred in the manner in which the NFIP is being administered locally to comply with the BiOP and RPA by NMFS as of September 22, 2011	FEMA developed and issued technical guidance>communities have selected an option as of September 2011>all floodplain development is now being done in compliance with the RPA	Local gov't implements federal gov't (FEMA) along with state gov't (Dept. of Ecology) monitors on an annual basis	New as of Sept. 2011	44 CFR60.3(a)(2) requires that communities comply with ESA	
Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain Management, Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA programmatically monitors state and local government's implementation of the NFIP by conducting Community Assistance Contacts (CAC) and Community Assistance Visits (CAV). During a CAV a cursory review of a communities permit files is completed to evaluate effectiveness of their permitting processes  Beginning in October 2011 CAVs in the 122 Puget Sound communities impacted by NMFS Biological Opinion will begin to examine on how well communities are implementing new guidance designed to help them comply with the ESA.	FEMA with support from State	Increased focus on Puget Sound beginning in FY12 but continuing into the future indefinitely	Closer monitoring of community administration of FPZ ordinances is expected to improve compliance	CAC (Community Assistance Contact) or CAV (Community Assistance Visit) with all Tier 1 & 2 communities in FY12 that have selected 'Door 3' FEMA reports annually to NMFS	New		

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Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain management; Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA R10 has participated in multiple workshops with NMFS to explain to community officials how to develop, adopt and enforce procedures based on their land-use authorities to avoid adverse affects to salmon habitat	FEMA and NMFS with support from Ecology	Workshops have been held beginning in 2009 and have been held each year since.	Technical assistance to local government will improve compliance with ESA	FEMA reports to NMF	New		
Federal Emergency Management Agency (National Flood Insurance Program)	Land use development permitting and zoning; Lack of enforcement	NFIP (42 U.S.C. 4001 et seq)	A significant effort has been made to encourage local governments that participate in the NFIP to adopt and enforce land-use regulations based on their broad police powers to protect life, health and property to protect salmon habitat under 44 CFR60.3(a)(2). FEMA offers discounts in insurance premiums within communities that have implemented higher floodplain management standards that provide increased protection to habitat through it's Community Rating System (CRS). The CRS manual that is used to 'credit' activities will be republished in summer of 2012 to recognize activates identified in the NMFS RPA of Sep. 2008.	FEMA with support from local governments	Summer 2012	CRS activities that lead to improved salmon habitat will be given higher credits beginning in 2012>participating communities will be rewarded with reduce insurance costs for implementing higher regulatory standards that lead to habitat restoration	FEMA evaluates communities implementation of measures	New		
Federal Emergency Management Agency (National Flood Insurance Program)	Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA provides technical assistance to communities that participate in the NFIP to rectify procedural or permitting issues identified during CACs or CAVs. Region 10 will increase technical assistance prior to initiating enforcement action where potential ESA compliance issues are identified. State Dept. of Ecology, under a grant from FEMA, will support CAC and CAV	FEMA with support from Ecology	Commencing in FY12 > continuing	CAC/CAV > Improved floodplain management at local level > better habitat protection	Local gov't report to FEMA > FEMA report to NMFS	New		
Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain management; Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA provides funding through the CAP-SSSE grant program to the Washington Dept. of Ecology to provide technical assistance to communities to implement their floodplain management ordinances. Part of their focus, beginning in FY12, will be assisting the communities to implement higher regulatory standards to protect salmon habitat	FEMA with support from Ecology	Beginning in FY12	Increased monitoring requires additional resources > Ecology has staff that can support FEMA > FEMA has a grant program to support Ecology staff	FEMA will monitor Ecology progress and reports	New		

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Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain management; Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA will continue to discuss ESA implementation plan with all tribes to improve coordination and implementation of the RPA.	FEMA	Ongoing			Ongoing		
Federal Emergency Management Agency (National Flood Insurance Program)	Floodplain management; Land use development permitting and zoning	NFIP (42 U.S.C. 4001 et seq)	FEMA is developing recommendations for reforming the NFIP which will include a higher emphasis on natural and beneficial values of floodplains to encourage stronger protection of natural area;	FEMA	2-3 years	NFIP Reform will lead to improved protection of natural and beneficial values of floodplains	FEMA will report progress to EPA annually through the Puget Sound Federal Caucus	New		
Federal Emergency Management Agency (National Flood Insurance Program)	Mitigation adequacy	NFIP (42 U.S.C. 4001 et seq)	FEMA is collaborating with non-profit organizations to restore habitat in conjunction with the acquisition of homes and other structures through FEMA HMA grant programs	FEMA with support from State and local governments	Beginning in FY12	Collaboration will marry HMA grants with funding from non-profits to restore habitat	FEMA will report progress annually to NMFS	New		
Federal Emergency Management Agency (National Flood Insurance Program)	Impediments to restoration projects	NFIP (42 U.S.C. 4001 et seq)	FEMA issued Regional guidance in 1997 that allows participating communities to permit fish enhancement structures based on the 'judgment' of a qualified professional without requiring extensive and expensive hydraulic analysis if, in the opinion of the qualified professional, the structure is designed to cause flood levels to rise as close to zero as possible.	Local governments with support from FEMA and State	N/A		Local will report to FEMA annually	Ongoing	Policy has been in place since late 1997	
Federal Emergency Management Agency (Stafford Act)	Lack of grant funding	Stafford Act	Some projects have ancillary beneficial effects, such as acquisition of properties for open space use, relocation of facilities out of harm's way. All protection activities are associated with ESA consultations under Section 7.	Public Entities (SubGrantees) State EMD (Grantee), FEMA (Grantor)	Disaster dependent - ongoing	approval of grants for relocation/acquisition => federal review of habitat improvement => improved habitat or opportunity to improve	# of acquisitions; # of relocations out of floodplain	Ongoing	Dependent upon Presidential Disaster declaration	
Federal Emergency Management Agency (Stafford Act)	Lack of enforcement	Stafford Act	Potential ramification of non-compliance is total loss of funding for the action, however, the impact will have already occurred.	FEMA (Grantor), State EMD (Grantee)	Disaster dependent - ongoing	Improved enforcement of regulations -> improved awareness of habitat considerations -> less destruction of habitat	# of non compliant projects resulting in loss of funding	Ongoing		

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Federal Emergency Management Agency (Stafford Act)	Loss/degradation of floodplain functions/values	Stafford Act	FEMA works with the State Emergency Management Division to educate and raise awareness of federal environmental requirements associated with response and recovery actions. Included is streamlining efforts utilized to minimize harm, such as Programmatic Biological Assessments for common activities. Additionally, piggybacking with existing efforts by other federal agency's like the Corps' programmatic Biological Opinions when the action fits and both agencies have a nexus.	FEMA, NMFS, USFWS, Corps (Primary); Other Federal Resource agencies and state resource agencies (Supporting)	Disaster dependent - ongoing	awareness of programmatic => measures taken by action entities to meet CMs => reduced impact/harm to species and habitat	# of projects that meet Programmatic	Ongoing		
Federal Emergency Management Agency (Stafford Act)	Lack of grant funding	Presidential Preparedness Directive 8	Increase participation by resource agency under the National Response Framework and National Disaster Recovery Framework. Partnerships with other federal agencies and State Emergency Management Division for combining grant opportunities to maximize multiple objects under the various authorities, like FEMA acquisition projects combining with USFWS Restoration activities.	FEMA, DOI, NMFS, USFWS, Corps (Primary); State EMD and Resource Agencies (Supporting)	Disaster dependent or Annually	increase collaboration of funding => concentrated effort on recovery efforts => improvement to habitat	# of pooled projects funded	New	NDRF is being introduced Mar 1. Email Lois.lopez@fema.dhs.gov for invite	
Federal Emergency Management Agency (Stafford Act)	Unsupported political decision making; lack of coordination	Presidential Preparedness Directive 8	Development of policies and associated metrics for ensuring success which require collaboration of "whole community" participation (which include natural resource and environmental departments) in the development of plans. This includes statewide planning efforts.	FEMA, State Planning Agencies (primary); State and Fed Resource Agencies (supporting)	N/A	Coordinated planning => increased effort for avoidance/minimization => reduction in rate of harm to habitat/species	see Whole Community metrics	New		
Federal Emergency Management Agency (Stafford Act)	Lack of coordination	NA	FEMA provides technical assistance to the Northwest Tribal Emergency Management Council. FEMA can encourage Tribes to take actions for collaborating between departments for incorporating habitat restoration into disaster response and recovery.	FEMA, Tribes (primary); Governor's Office of Indian Affairs (supporting)	Immediately	increase collaboration of funding => concentrated effort on recovery efforts => improvement to habitat	% of Puget Sound Tribes participating	New	See: www.NWTEMC.org	
U.S. Fish and Wildlife Service	NA	ESA	We will consult with the Corps and other federal action agencies, pursuant to Section 7 of the ESA, on actions that affect habitat (marine, estuarine, and freshwater habitats) in Puget Sound and other waters of western Washington	USFWS	Ongoing	Continue to minimize impacts to federally listed species; reduced impact to habitat	Number of consultations completed	Ongoing		

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			including shoreline armoring, floodplain development, U.S. Navy and U.S. Army construction and operational activities, and wastewater treatment plant expansions and construction. Also, we will revise designated critical habitat for the Northern Spotted Owl. A proposed rule was published on February 28, 2012, and the final rule will be completed by November 2012.							
U.S. Fish and Wildlife Service	Habitat Restoration	Fish and Wildlife Coordination Act	We will provide recommendations, focused on conservation of fisheries resources, to the U.S. Army Corps of Engineers regarding the Skokomish General Investigation as well as the Puget Sound Nearshore project and any other large, water resources planning projects. Additionally, the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) has identified 15 restoration sites that are likely ready to proceed through the Corps of Engineers process for construction authorization. The PSNERP has developed conceptual design, cost-estimates and other site-specific information for these 15 “ready” sites, as well as 14 other ecosystem restoration projects not yet ready for Corps authorization. These projects represent important opportunities to advance process-based restoration of nearshore ecosystems with important benefits to salmonids and other fishery resources. The U.S. Fish and Wildlife Service will work with the Corps and other agency partners to advance priority projects identified by PSNERP, by providing technical assistance, seeking grant program funding, and assisting with environmental compliance.	USFWS	Ongoing	Continue to facilitate selection of the best habitat restoration opportunities in Puget Sound; maximize benefits of habitat restoration from limited restoration resources	Number of habitat restoration projects ready to be implemented	Ongoing	Accomplishments rest primarily with the U.S. Army Corps of Engineers	
U.S. Fish and Wildlife Service	Habitat Restoration	CERCLA	We will continue to work with Washington Department of Ecology as well as Tribes and NOAA to pursue settlements on non-federal-lead sites in Puget Sound.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing/ New		

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U.S. Fish and Wildlife Service	Habitat Restoration	Oil Pollution Act	We will continue to actively pursue the recovery (from responsible parties) of money to offset damages to fisheries resources resulting from discharge of oils to our marine and fresh waters of Washington.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing/ New		
U.S. Fish and Wildlife Service	Efficiency of on-the-ground Habitat Restoration	Various Grants and Technical Assistance Program Funding Opportunities	We will work to integrate funding, associated with grants and technical assistance programs, with NRCS, EPA, NOAA, and others as appropriate, to maximize benefits to fisheries resources.	USFWS	Ongoing	Maximize effectiveness of federal habitat restoration programs; benefit to salmonids	Number of acres of habitat restoration	New		
U.S. Fish and Wildlife Service	Funding for Acquisition is Limited	National Coastal Wetlands Conservation Grants.	We will continue to support this highly successful program by working with others to develop project proposals that focus on the acquisition and restoration of aquatic habitats in western Washington.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing		
U.S. Fish and Wildlife Service	Habitat Restoration	Endangered Species Recovery Funding	As budgets allow, we intend to continue funding recovery actions that benefit a wide range of species, including bull trout.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing		
U.S. Fish and Wildlife Service	Habitat Restoration	Partners for Fish and Wildlife Program	As budgets allow, we intend to continue funding projects that benefit a wide range of species, including salmonids.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing		
U.S. Fish and Wildlife Service	Habitat Restoration	Puget Sound Coastal Program	As budgets allow, we intend to continue funding a projects that benefit a wide range of species, but especially salmonids.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing		
U.S. Fish and Wildlife Service	Habitat Restoration	National Fish Passage Program	We will continue to assist in the development and funding of projects that facilitate fish passage in western Washington.	USFWS	Ongoing	Contribute to habitat restoration; benefit to salmonids	Number of acres of habitat restoration	Ongoing		
U.S. Fish and Wildlife Service		NA	Develop a web-based system to allow citizens to monitor bank hardening or other in-water work. System should allow people to check if observed work has a permit and to identify unauthorized work to the U.S. Army Corps of Engineers.	U.S. Army Corps of Engineers		Identify more illegal work while it is ongoing; reduce impacts to functions and values of habitat; improve salmon populations	Number of illegal structures/fills identified	New		
U.S. Fish and Wildlife Service	NA	Various	We can commit more staff time toward group efforts to highlight to the public, or any target group, issues of needed emphasis or accomplishments.	USFWS	Ongoing	Increase public awareness and support; more political will; improved habitat	Public Support for Puget Sound Recovery	New		

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USDA Forest Service	Prioritization of recreational river uses over restoration projects, Disconnection of aquatic and terrestrial ecosystems, Pollutant loading and temperature impairments due to lack of buffers, Lack of LWD recruitment, Lack of ecological functions in the riparian zone, Armoring of river banks, Loss of riparian forest cover, Sediment transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Road failures are identified but not fully addressed, Channel scour affecting habitat, No monitoring and tracking of impacts, Stream buffers	Clean Water Act (CWA), National Forest Management Act (NFMA), National Environmental Policy Act (NEPA)	The Northwest Forest Plan provides direction for the protection and restoration of watersheds, aquatic and riparian ecosystems, and salmon habitat on National Forest System (NFS) lands. It directs the protection and restoration through implementation of its Aquatic Conservation Strategy (ACS), which includes four components: 1) Riparian Reserves, 2) Key Watersheds, 3) Watershed Analysis, and 4) Watershed Restoration. It also includes Standards and Guidelines to guide project design and implementation. The primary focus of the ACS is to facilitate natural recovery of riparian and aquatic habitat and the watershed processes that influence them. The strategy includes the use of both broad-scale protection and avoidance measures across all NFS lands, as well as strategically-focused active restoration projects to accelerate recovery in specific priority areas. Adaptive management is informed through monitoring. Monitoring includes implementation monitoring, Aquatic and Riparian Effectiveness Monitoring Program, and physical stream surveys. The primary focus of the ACS is the implementation of actions in a manner that facilitates natural recovery of riparian and aquatic habitat. In addition, where necessary, active restoration projects are implemented to accelerate recovery. The restoration program is focused on implementing whole watershed restoration in priority watersheds, guided by watershed analysis and restoration plans. Projects are designed and implemented in partnership with state and federal agencies, Tribes, and NGOs. Over the last several years, through the Legacy Roads and Trails Program, there has been an emphasis on reducing the effects of forest roads on aquatic	All USFS projects are designed to protect and restore habitat. Effects of projects are consistent with forest plans and applicable federal and state laws and regulations. Other projects (e.g., mining, energy developments) are mitigated as allowed by law and regulations.	The Northwest Forest Plan was initiated in 1994. The specific Key Watersheds were designated in the plan and provide stricter land management objectives geared toward salmonids than in other watersheds. Riparian Reserves were established around water bodies and wetlands to establish management areas with the emphasis on benefiting aquatic and riparian dependent species. Watershed Analyses were initially completed in the 5-10 years following 1994 to identify current conditions and restoration needs. Watershed Restoration projects, an already important practice for the Forest Service, were further supported by the NW Forest Plan.	Create Land Management Objectives with specific requirements for aquatic protection and restoration -> Increased scrutiny of projects and land management activities, as well as more restoration-focused projects being implemented -> Improvements to fish and aquatic habitats through both passive and active restoration techniques	The effects of the Northwest Forest Plan on aquatic and watershed parameters are monitored by the Forest Service's Aquatic Restoration Effectiveness Monitoring Program (AREMP). Active restoration activities are recorded and tracked annually by the Regional Office through the Aquatic Restoration Biological Opinion (ARBO).	Ongoing	The Northwest Forest Plan guidance applies to all National Forest System Lands and any Bureau of Land Management Lands within the Puget Sound and along the ocean coast of the Olympic Peninsula.	

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			ecosystems. Specific project plans and mitigations protect against the barriers described. Best Management Practices Monitoring determines effectiveness of protections and provides adaptive management opportunities.							
USDA Forest Service	Disconnection of aquatic and terrestrial ecosystems, Pollutant loading and temperature impairments due to lack of buffers, Lack of LWD recruitment, Lack of ecological functions in the riparian zone, Armoring of river banks, Loss of riparian forest cover, Sediment transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Stream buffers	NFMA	Riparian Reserves are a key component of the Northwest Forest Plan's Aquatic Conservation Strategy that have been designated around all streams, water bodies, and unstable soil or geologic areas within NFS Lands. These Riparian Reserves encompass not only stream-adjacent areas, but also broader upland areas to ensure sufficient protection of contributing areas to the aquatic ecosystem. The width of Riparian Reserves along all fish-bearing streams is a minimum of 300 feet on each side of the channel, measured from the edge of the channel migration zone. Riparian Reserves are also designated at a minimum of 150 feet on both sides of perennial, nonfish-bearing streams and at least 100 feet on both sides of intermittent and ephemeral channels. As such, Riparian Reserves include a mosaic of riparian, wetland, and upland vegetation and provide a transition between aquatic and terrestrial landscapes. These areas are specifically managed to maintain and restore aquatic and riparian-dependent species of plants, invertebrates and vertebrates. The focus of management activities is for maintenance and restoration of natural patterns of shade, sediment inputs, large woody debris recruitment, and channel-floodplain interaction, and other key processes, as well as maintaining connectivity with upland areas. Riparian Reserves provide protection for vast reaches of salmonid habitat in the Puget Sound and Pacific Northwest. Within the Puget Sound, Riparian Reserves protect approximately 2900	Forest Service	The Northwest Forest Plan established the Riparian Reserves when it was enacted in 1994.	Riparian reserves -> improved riparian and stream habitat -> improved salmon health	Ongoing management of riparian reserves	Ongoing		

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			miles of fish habitat, including 900 miles accessible to salmon. The Forest Service currently manages over 26 percent of the entire Puget Sound basin land base, and over one-third of all NFS Lands are protected within these Riparian Reserves. Therefore, at least 10 percent of the land within the Puget Sound is managed as Riparian Reserves by the Forest Service, which is in addition and complimentary to similar land designations on state and private lands.							
USDA Forest Service	Removal, upgrade and repair of culverts is lagging	NFMA	The Forest Service directly manages approximately 2900 miles of fish habitat, including 900 miles accessible to salmon within the Puget Sound and Ocean Shores area of Western Washington. Since 1989, the Forest Service has removed migration passage barriers at 108 sites to provide passage for all life-stages of anadromous fish and most other aquatic-dependent species. This work has re-opened over 46 additional miles of habitat to anadromous fish. Furthermore, an additional 3 barriers are already in contract or agreement to be removed in 2012, which will provide approximately 2.2 miles of additional salmon habitat. Once completed, over 80 percent of all known salmon migration barriers on National Forest System (NFS) lands will have been removed in this area. An additional 27 barriers remain, which are blocking over 13 miles of anadromous fish habitat. The removal of these remaining barriers is estimated to cost over 4 million dollars, which will take several more years to acquire and accomplish through a wide-variety of sources, including but not limited to Federal Highway Funding, Legacy Roads and Trails funding, and Washington State Salmon Recovery Board funding. Prioritization of this work is based on the amount of habitat located upstream and the associated costs to provide	Forest Service	Ongoing program	Removal of fish passage barriers -> increased access to habitat essential for salmon spawning	Number of barriers removed	Ongoing		

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			access.							
USDA Forest Service	Disconnection of aquatic and terrestrial ecosystems, Pollutant loading and temperature impairments due to lack of buffers, Lack of LWD recruitment, Sediment transport and riparian erosion, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Removal, upgrade and repair of culverts is lagging, Channel scour affecting habitat, Lack of funding for natural resource programs	NFMA	Development and implementation of watershed restoration plans. The frequency of implementing these activities is commensurate with level of funding. Restoration locations are prioritized by the Regional Aquatic Restoration Strategy the National Watershed Condition Framework.	The Forest Service has supported watershed restoration planning since the early 1990s, first through the Regional Aquatic Restoration Strategy, and now through the new national Watershed Condition Framework process. Forest personnel collaborate with local groups, agencies, and tribes to prioritize watersheds, develop restoration plans, and generate funds to implement projects. The Washington Office and Regional Office provide funding allocations.	Under the Watershed Condition Framework process, The Olympic and Mt. Baker-Snoqualmie National Forests have identified six 6th field Focus Watersheds as emphasis areas for restoration. Watershed Restoration plans for each focus Watershed will be completed by the end of FY 2012. Implementation of restoration projects will occur as funds are available. As restoration projects in one watershed are completed, additional Focus Watersheds will be identified with subsequent planning and project implementation.	Assess watershed conditions across the landscape, Identify priority watersheds for restoration, Develop collaborative restoration plans to identify essential restoration needs. Focus available resources to implement necessary restoration projects.	Forest level personnel collaborate with local groups, agencies, and tribes to develop watershed restoration action plans and implement projects.	Ongoing	The Watershed Condition Framework is a National Initiative. The Olympic and Mt. Baker-Snoqualmie National Forests have identified six 6th field Focus Watersheds as emphasis areas for restoration at this time. Additional Focus Watersheds will be identified in the future as restoration needs are completed in the current Focus Watersheds.	
USDA Forest Service	Prioritization of recreational river uses over restoration projects, Disconnection of aquatic and terrestrial ecosystems, Pollutant loading and temperature impairments due to lack of buffers, Lack of LWD recruitment, Lack of ecological functions in the riparian zone, Armoring of river banks, Loss of riparian forest cover, Sediment	NFMA	All USFS projects are designed to protect and restore habitat, and effects of projects are consistent with forest plans and applicable federal and state laws and regulations. Other projects (e.g., mining, energy developments) are mitigated as allowed by law and regulations.	USDA Forest Service implements and ensures consistency with the Northwest Forest Plan on all National Forest lands. The Forest Service works closely with regulatory agencies to	The Northwest Forest Plan has been in effect since 1994. The Forest Service has agreements in place with NMFS, USFWS, US Army corps of Engineers, and WDFW to meet consultation and permitting requirements for most projects. Other projects are consulted on a case-by-case basis	The Northwest Forest Plan contains land management objectives with specific requirements for aquatic protection and restoration. Consultation with all of the appropriate regulatory agencies insure actions meet all Federal and State laws and regulations	The Regional Forester and Forest Supervisors monitor implementation of the Northwest Forest Plan. Forest personnel and regulatory agencies monitor compliance of individual projects with consultation and permitting agreements and laws and regulations.	Ongoing	The Northwest Forest Plan applies to all National Forest System Lands within western Washington. Consultation/permitting agreements apply to all Forest Service lands and projects within the State of Washington.	

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	transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Road failures are identified but not fully addressed, Channel scour affecting habitat, Stream buffers			complete necessary ESA consultation and acquire appropriate permits. Regulatory agencies include the NMFS, USFWS, US Army Corps of Engineers, Washington Dept. of Fish and Wildlife, and Washington Dept. of Ecology.						
USDA Forest Service	HPA permit streamlining degradation actions but not restoration, Problems resulting from streamlined permits, No monitoring and tracking of impacts	ESA, CWA, Fish NEPA, and Wildlife Coordination Act	Streamlining project approval process (e.g., categorical exclusions, ESA consultation) could accelerate aquatic restoration projects. USDA Forest Service restoration projects are streamlined through the Aquatic Restoration Biological Opinion (ARBO), the Hydraulics MOU with the State of Washington, ESA Consultation Streamlining (where needed), and through the NEPA process (where possible). The ARBO streamlines certain restoration actions through USFS, NOAA Fisheries, and USFWS consultation procedures for consistency with ESA. The Hydraulic MOU is an agreement between WDFW and USFS that supports the improvement of road/stream crossings. Where needed (not previously covered by ARBO), restoration projects are reviewed through a streamlining process with ESA regulatory agencies. Some projects can be categorically excluded from the preparation of EAs or EISs through the use of Decision Memos (a more abbreviated NEPA analysis) in the NEPA process. Effectiveness and BMP Monitoring occur.	The Forest Service works closely with regulatory agencies to streamline the permit process. Regulatory agencies include the NMFS, USFWS, US Army Corps of Engineers, Washington Dept. of Fish and Wildlife, and Washington Dept. of Ecology. Activities occur primarily at the Regional and Forest levels. The Washington Office is pursuing a new Categorical Exclusion category for road decommissioning to streamline the NEPA process for those projects.	The Forest Service has agreements in place with NMFS, USFWS, US Army Corps of Engineers, and WDFW to streamline permitting/ consultation for aquatic restoration projects. The Washington Office is pursuing a new Categorical Exclusion category for road decommissioning. The timeline is uncertain at this time.	Aquatic Restoration Biological Opinion (ARBO) streamlines ESA consultation for aquatic restoration projects. The agreement has been in place for 5 years and is in the process of being renegotiated. The US Army Corps of Engineers recently issued a Regional General Permit (RGP-8) for Forest Service Restoration projects in the State of Washington. WDFW recently signed a new MOU with the Forest Service that addresses Forest Service hydraulic projects within the State of Washington	Forest Service Regional Office personnel collaborate with regulatory agencies to prepare agreements and complete annual reporting. Forest personnel collaborate with local agency contacts to implement projects	Ongoing	Streamlining agreements cover Forest Service lands and projects within the State of Washington	

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USDA Forest Service	Decisions based on politics not science, No monitoring and tracking of impacts, Climate change exacerbates existing flow issues, Water quality standards, TMDLs, Lack of funding for natural resource programs	NFMA	Project-specific, Forest-wide, and Region-wide monitoring data are collected and shared with other agencies. Some data, such as temperature, are being incorporated into Regional-scale analyses (e.g., climate-stream temperature sensitivity). The effectiveness of the NW Forest Plan is being monitored through the AREMP program. Forest Plan and specific project level monitoring are also occurring. Best Management Practices continue to be monitored for implementation and effectiveness.	Data-sharing occurs between the following entities: USDA Forest Service, US National Park Service, USGS, WA Department of Ecology, WA Dept. of Fish and Wildlife, Tribes, County and City Governments, Universities.	Data sharing has been on-going and increases constantly since the advent of the internet. The Forest Service has implemented several National databases, and the processes to share these data with other agencies are either underway or still under development.	Share data with interested parties -> improve knowledge and understanding of resource conditions and effects -> reduce costs to execute effective Natural Resource Programs -> improve habitat conditions more cost-effectively	Data-sharing is encouraged at all levels of the agency. (It would cost more to track all data-sharing that is occurring, thus tracking this measure would be oppose the associated logic model to find more cost-effective ways of managing Natural Resource Programs and improving habitat conditions.)	Ongoing		
USDA Forest Service	Decisions based on politics not science, No monitoring and tracking of impacts, Water quality standards, TMDLs, Lack of funding for natural resource programs	NFMA	There are opportunities to increase interagency collaboration in data collection, storage, analysis, and use.	Collaborations currently exist between the USGS, USDA Forest Service, US National Park Service, Puget Sound LiDAR Consortium, WA DOE, WDFW, WA DNR, tribes, etc.	Federal agencies have begun to develop more collaborative processes for data collection, storage, analysis, and use. Many of these collaborations have historically happened at the local level between individual units, but some national and regional efforts are in development. Yet more collaboration efforts would contribute to cost-effective resource management and restoration.	Collaborate more on data collection, storage, analysis, and usage -> reduced cost on all aspects -> increased access to data, more accurate data, increased joint knowledge of data -> reduce costs to execute effective Natural Resource Programs -> improve habitat conditions more cost-effectively	New and existing data collaboration efforts established between PSFC agencies are often highlighted during their regular meetings. Closer monitoring of and increasing communication on the status of these collaborations would improve the likelihood of improving habitat conditions more cost-effectively.	New	The scope of many collaborative efforts are currently project-specific and watershed-specific within the Puget Sound and Ocean Coast area, such as the acquisition of LiDAR or the survey of fish habitat. Yet several regional and national efforts are currently underway, such as making updates to the National Hydrography Dataset maintained by the USGS. New efforts could be focused at any of these scales.	
USDA Forest Service	Lack of LWD recruitment, Armoring of river banks, Loss of riparian forest cover, Sediment transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Removal, upgrade and repair of culverts is lagging, Channel scour affecting habitat,	Wyden Amendment	The USDA Forest Service works outside of National Forest System (NFS) Lands where projects benefit resources within watersheds on NFS lands. An example of Wyden Amendment implementation is the correction of fish barriers at private road stream crossings downstream of NFS Lands to facilitate migratory fish access to streams on the Forests.	The USDA Forest Service uses the Wyden Amendment to contribute funding and resources to restoration activities off of National Forest System Land that have a discernable benefit to National Forest land resources,	The Wyden Amendment was permanently enacted within the past few years and will continue to be used to perform restoration activities into the future to the extent that funds are available.	Species habitats extend beyond National Forest System Land -> Impediments to restoration activities may exist off National Forest System Land -> Several of these impediments will enable effective habitat or species restoration work on National Forest System Land	Active restoration activities are recorded and tracked annually by the Regional Office through the Aquatic Restoration Biological Opinion (ARBO).	Ongoing		

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	Water quality standards, TMDLs, Lack of funding for natural resource programs			such as fish habitat. Partner agencies and groups work collaboratively with the Forest Service to accomplish restoration goals. Such partners include WA DOT, Local Watershed Councils, Tribes, County and City Governments, and private land owners.						
USDA Forest Service	Funding for acquisition is limited, and is not eligible under many state and federal grant programs, Pollutant loading and temperature impairments due to lack of buffers, Lack of ecological functions in the riparian zone, Conversion of agricultural and forest land to development,	ESA, CWA, Fish NEPA, and Wildlife Coordination Act	S&PF grants Urban Forestry funds to Cascade Land Conservancy to purchase and conserve lands, protect natural landscapes, and remove invasive plants. The PNW Region of the Forest Service has an active land acquisition program that competes nationally for land acquisition funding. The PNW Streams Program specifically focuses in on land acquisition along priority rare aquatic species habitat.	USDA Forest Service provides grants that are used as match by partners, such as CLC, to purchase land. Local watershed councils also provide match funding to obtain grants from other sources. Partners in this arena include The Nature Conservancy, Trust for Public Lands, and the Western Rivers Conservancy.	These acquisitions were more prevalent in the past, but funding for acquisition for rare private parcels of land at risk of development with TES species through our national competitive Forest Legacy Program has diminished.	Land that is acquired by the Forest Service falls under the requirements of the Northwest Forest Plan and are therefore subject to the requirements of the Aquatic Conservation Strategy.	Land acquisitions take several years to develop and reprioritized every year once appropriations become available.	Ongoing		
USDA Forest Service	Conversion of agricultural and forest land to development, Pollutant loading and temperature impairments due to lack of buffers, Disconnection of aquatic and terrestrial ecosystems, Loss of riparian forest cover, Changes to	NFMA	The potential exists in Urban Areas and around cities to improve and manage local forests, and protect newly purchased forested lands from development. Opportunities for restoration may also exist under a new initiative the Community Forest and Open Space Program, which currently lacks funding.	The USDA Forest Service provides assistance to cities and other land owners to improve and manage their forest lands.	Ongoing program	The USDA Forest Service has tremendous knowledge and experience in managing forested lands -> provide other land owners with assistance on how to attain forest-related goals ->	Successful project completion with another land owner	Ongoing		

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	hydrology and runoff timing,					reduced cost to land owner to achieve their goals				
USDA Forest Service	Lack of LWD recruitment, Armoring of river banks, Loss of riparian forest cover, Sediment transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Road failures are identified but not fully addressed, Removal, upgrade and repair of culverts is lagging, Channel scour affecting habitat, Water quality standards, TMDLs, Lack of funding for natural resource programs	NFMA	The Forests of the Puget Sound area have strong partnerships with Tribes that result in successful aquatic and riparian restoration.	The USDA Forest Service collaborates with tribes by providing funding, equipment, and staff resources to accomplish restoration work on and off National Forest System Lands.	These partnerships and collaboration activities are on-going.	Collaborating with tribes -> increased communication -> increased knowledge about resource values - > increased opportunities to obtain grant funding and increased restoration capacity -> habitat restoration is achieved more quickly	Active restoration activities are recorded and tracked annually by the Regional Office through the Aquatic Restoration Biological Opinion (ARBO).	Ongoing	Partnerships with tribes have been highly successful in the Sauk, Suiattle, SF Skokomish River watersheds, and others. Such partnerships exist basin-wide.	
USDA Forest Service	Prioritization of recreational river uses over restoration projects, Disconnection of aquatic and terrestrial ecosystems, Pollutant loading and temperature impairments due to lack of buffers, Lack of LWD recruitment, Lack of ecological functions in the riparian zone, Armoring of river banks, Loss of riparian forest cover, Sediment transport and riparian erosion, Changes to hydrology and runoff timing, Sediment aggregation altering hydrology and hydrography, Forest roads discharging sediment, and inducing erosion, Channel scour affecting habitat,	NFMA	For decades, PNW Research has been actively studying aquatic, riparian, and terrestrial ecosystems across the Pacific Northwest. They communicate research results to managers and the public. This research helps support local salmon recovery efforts.	The Land and Watershed Management Program is the PNW Research group associated with salmon habitat and watershed issues. The program manager is John Laurence.	Research in various topics is ongoing			Ongoing	Research is conducted and results are applicable throughout the Pacific Northwest.	

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	Stream buffers									
US Navy - Navy Region NW	*Note: Could not directly attribute this issue to a barrier.	Sikes Act and DoD Regulations for Military lands. Naval Air Station Whidbey Island's (NASWI) Integrated Natural Resource Management Plan (INRMP).	Crescent Harbor Salt Marsh Restoration Project (Oak Harbor, WA). Fish access and tidal flow at the Crescent Harbor Salt Marsh has been restored. Issues with erosion at the confluence of the bridge occurring.	Navy	Ongoing	Monitoring berm breach erosion => take action to slow bank erosion =>preserve berm opening into inner channels	Naval Facilities Command NW will monitor/report on erosion condition.	Ongoing	This project is complete. Only maintenance costs involved regarding bank erosion.	
US Navy - Navy Region NW	No monitoring and tracking of impacts	Sikes Act and DoD Regulations for Military lands. Naval Air Station Whidbey Island's (NASWI) Integrated Natural Resource Management Plan (INRMP).	Under the INRMP, WA Dept. of Fish & Wildlife (WDFW) performs annual forage fish spawning surveys at NASWI. b. Whidbey staff, WDFW, and NOAA(NMFS) will conduct a survey in both 2013 and 2016 for Puget Sound chinook salmon presence to compare change over time to assist in assessing the effectiveness of the plan	Navy - Primary. WDF&W & NOAA-NMFS support.	Annual for forage fish. 2013 & 2016 for salmon survey.	Completed surveys=> provide to agencies=>improve INRMPs as needed.	Naval Air Station Whidbey Island will measure/report to WDFW or NOAA-NMFS as appropriate	Ongoing		
US Navy - Navy Region NW	Mitigation Adequacy	ESA Section 7 consultation - habitat loss	Navy looking to use a new mitigation hierarchy, i.e., approved mitigation banks, approved in-lieu fee (ILF), permittee (i.e., Navy) responsible mitigation. Working with the Hood Canal Coordinating Council (HCCC) regarding the proposed ILF program in Hood Canal.	Corps primary to approve ILF. HCCC is ILF sponsor. Interagency Review Team (reviews the instrument and advises the Corps and Ecology in selection of projects) includes USFWS, NOAA/NMFS, EPA, and several state and local agencies, and tribes. Navy: option to use program as a "permittee" once established.	Program approval would be in June '12 at the earliest	ILF program established => Navy enters program => payment made into program =>restoration, creation, enhancement or preservation activity conducted		New program for HCCC and for Navy participation	Allows a concentration of effort on project sites and allows for better coordination to restore the health of the Hood Canal watershed.	
US Navy - Navy Region NW	Removal, upgrade and repair of culverts is lagging	Sikes Act	Complete Railroad Culvert Analysis for Navy-owned rail lines from Bremerton to Bangor.	Navy Primary. WA Dept. of Fish and Wildlife support.	Currently unfunded. Two year timeframe to complete when funding is obtained.	Locate/describe known and potential fish-passage culverts => assess fish passage	Navy Region NW will prepare report on findings and any recommended culvert corrections. Socialize report with WDFW and	New	This study is under CNO review for implementation in FY14. Currently not funded.	

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						ability => prepare report of findings w/recommendation of corrections including priority index scores	USFWS.			
US Navy - Navy Region NW	Bank hardening and over water structures associated with railroads	Sikes Act	The habitat conditions where Bangor-Bremerton-Shelton railroad intersects Chico Creek are generally poor due to the armored banks and creosote piles within the stream bed. Navy project would remove angular rock from the stream bed and improve access to upstream habitat.	Navy Primary	CY12 projected project start (during in-water construction window) to remove portion of foreign angular rock. Additional work to remove additional angular rock is dependent on future funding.	Implement project to improve Chico Creek => improve access to upstream habitat for Puget Sound steelhead and PS Chinook salmon.	Navy will report to Corps that project is completed and compliant to 404 permit.	New	Project has partial funding to start removal of angular rock. Additional portion of project to remove additional angular rock is under CNO review for implantation in FY14; currently not funded.	
US Navy - Navy Region NW	Removal, upgrade and repair of culverts is lagging	Sikes Act	Realign the tributary of Devils Hole Creek (Naval Base Kitsap). The project will restore access to approximately 5,500 linear feet of stream habitat to salmonid species.	Navy Primary.	Design is scheduled to be complete in CY12. Construction work not scheduled to commence until additional funding is in-place.	replace culverts => restore access to ~5,500 linear feet of stream habitat to salmonid species	Navy will report to Corps that project is completed and compliant to 404 permit.	New	Project design is scheduled to be funded and completed in CY12. Funding for construction to replace culverts is under CNO review for implantation in FY14; currently not funded.	
Joint Base Lewis-McChord	Development Rules; Variances Granted for Development	NEPA	All proposed project activities go through an Environmental Review process to ensure protection of the environment and adherence to federal laws, regulations, and mandates.	JBLM Public Works Environmental Division	Continuous	All proposals on JBLM receive environmental impact analysis		New and ongoing activities	DPW Environmental Division reviews over 400 project proposals each year. All forma reviews are archived.	
Joint Base Lewis-McChord	Lack of Funding for Natural Resource Programs	Sikes Act and Army Regulation 200-1	If possible and funding allows, restoration activities and habitat protection efforts are built into project development plans.	JBLM and Corps	Continuous	Initial Planning and Programming Documents include Natural Resource Components (including RFP's)	Annual review of the INRPM to compare accomplishments versus commitments	Ongoing		
Joint Base Lewis-McChord	Lack of Ecological Functions in the Riparian Zone; Lack of Riparian Forest Cover; Sediment Transport and Riparian Erosion; Removal, Upgrade and Repair of Culverts is Lagging; Stream Buffers	Clean Water Act, Army Regulation 200-1, JBLM Integrated Natural Resources Management Plan (INRMP) and JBLM Regulation 200-1	1. Approximately 170,000 plugs of native prairie plants planted each year to restore wild prairie vegetation. 2. JBLM has a 50 meter buffer along streams and around wetlands within which no ground disturbance is allowed. 3. JBLM annually plants approximately 500 riparian plants along streams. 4. Crossing of streams are only allowed at designated locations all of which are hardened to reduce sedimentation of	JBLM	Continuous	Natural Resource restoration projects programmed, funded and implemented. Deliverable is completed project.	Annual review of the INRPM to compare accomplishments versus commitments	Ongoing		

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			streams. 5. All round culverts in Muck Creek have been converted to three sided box culverts to improve fish passage. 6. Approximately 240 acres are treated annually to control non-native plant species within and adjacent to streams and wetlands. 7. In stream habitat enhancement work on the installation has included addition of coarse woody debris and spawning gravel.							
Joint Base Lewis-McChord	No Monitoring and Tracking of Impacts	NEPA and INRMP	Protection of habitat is inserted during project planning efforts in order to preserve previous efforts and to set the stage for additional protection and restoration activities.	JBLM	Continuous	Initial Planning and Programming Documents include Natural Resource Components (Including RFP's)	Deconfliction meetings, NEPA review and annual review of INRMP	New		
Joint Base Lewis-McChord	Lack of Funding for Natural Resource Programs; Conversion of Agricultural and Forest Land to Development	Sikes Act and DoD Regulations	1. Since 2003, JBLM is the only designated public land certified as a Well-Managed Forest in accordance with Forest Stewardship Council criteria. JBLM plants over 75,000 trees annually. 2. The JBLM ACUB program was approved in 2006 to promote recovery of the four candidate species on off-post lands. To date, the program has received \$2.79 million in DoD REPI/Army ACUB funding and more than \$6 million in partner matching, protecting 1,025 acres of land not formerly in conservation status and initiating conservation actions on 4,247 acres. At the end of FY2011, the Army provided an additional one-time funding for acquisition of \$2.5M. Conservation actions include habitat restoration, candidate species reintroductions, and planning, monitoring, and research to support the first two actions. Our ACUB partners are The Nature Conservancy, the Washington State Departments of Fish & Wildlife and Natural Resources, and Wolf Haven International.	JBLM	Continuous	Natural Resource restoration projects programmed, funded and implemented. Deliverable is completed project.	Annual budget requests compared to actual funding levels	Ongoing		

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			<p>3. Species recovery activities include:</p> <p>a. Translocation of JBLM Western bluebirds to San Juan Island. This effort has been ongoing for the last five years and has resulted in 88 young in addition to the translocated birds.</p> <p>b. Reintroduction of Taylor's checkerspot butterfly, Oregon spotted frog, and Western grey squirrel. Over 3500 Oregon spotted frogs have been released to date on JBLM in partnerships between JBLM, the Evergreen State College, Department of Corrections, the Nature Conservancy and local zoos, and evidence of their reproducing has been observed.</p> <p>c. Replantings use native prairie plants grown in the JBLM greenhouse. Over 230,000 plugs of native prairie species are planted each year. 70,000 of these were grown in the ITAM greenhouse from seeds collected on JBLM.</p> <p>d. JBLM and The Nature Conservancy work together to conduct ecological burns on about 1800 acres annually. These ecosystems provide habitat to threatened species. Reducing flammable fuel limits wildfire intensity, makes wildfire easier to suppress and protect people, resources, and structures.</p>							
Joint Base Lewis-McChord	Water Quality Standards; Low DO Problems in the Nearshore;	Clean Water Act/NPDES	<p>1. The existing JBLM Waste Water Treatment Plant (WWTP) that discharges into Puget Sound at Solo Point uses 1950–70's technology, relying primarily on trickling filters for wastewater treatment utilizing bacterial breakdown of biological organisms.</p> <p>2. They army has programmed in the FY2013 for the construction of a new, multimillion dollar WWTP to replace the once currently in operation at JBLM. The new plant will treat the wastewater to Class "A" reusable standards.</p> <p>3. Once it is operational in 2015, the water it produces will be available for</p>	JBLM	Continuous	Original 1391 Planning Document included restoration components, ensuring they will be continued through project design and construction		New		

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			beneficial reuse, with the ultimate goal of eliminating any discharge from the plant into the Puget Sound.							
Joint Base Lewis-McChord	Lack of Political Will to Protect Salmon;	National Historic Preservation Act; American Indian Religious Freedom Act; Archaeological Resource Protection Act; Executive Orders and Federal Regulations; Army Regulation 200-1	<p>1. Salmon. The Nisqually Tribe has operated the Clear Creek Hatchery on lands leased from JBLM since 1991. It is one of the largest in the state of Washington and supports a successful tribal and recreational Chinook salmon fishery. JBLM has also agreed to grant the Tribe a license to seasonally operate a fish weir across the Nisqually River on JBLM lands to separate wild from hatchery chinook. This successful partnership is one of the primary foundations for the positive and cooperative relations between the Tribe and JBLM. JBLM and the Tribe have worked cooperatively for almost 30 years to restore salmon habitat along Muck Creek on JBLM. Both parties benefit by pooling money, labor and expertise: these efforts ensure that JBLM Soldiers have high-quality, realistic training lands now and in the future, while at the same time benefiting the salmon that have sustained the Nisqually Tribe for thousands of years. The Garrison Commander participates alongside the Nisqually Tribal Chairman in a ceremony each January to welcome the annual return of the salmon (“Roy Salmon Homecoming”).</p> <p>2. Access and Govt. to Gov’t Relations. Continued access to JBLM is important to the Nisqually Tribe. Tribal members continue to visit their sacred sites, cemeteries and traditional places, as well as exercise their treaty rights to fish, hunt, and gather on lands now occupied by JBLM. Typical items gathered include cedar bark, roots of prairie plants, and other traditional and ceremonial items. Five large cedar trees were harvested for use during the Canoe Journey celebration in 2011.</p>	JBLM	Continuous	Natural Resource restoration projects programmed, funded and implemented. Deliverable is completed project.	Percent of projects annually funded by higher headquarters to conduct habitat enhancement for salmon	Ongoing		

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			Forestry Branch issues permits to gather firewood. Firewood permits are free for tribal elders and those with handicaps.							
Joint Base Lewis-McChord	Lack of Funding for Natural Resource Programs; Conversion of Agricultural and Forest Land to Development; Stream Buffers; Disconnect of Aquatic and Terrestrial Ecosystems	National Historic Preservation Act; American Indian Religious Freedom Act; Archaeological Resource Protection Act; Executive Orders and Federal Regulations;	Continuation and expansion of existing salmon habitat improvement projects along the Niqually and its tributaries. Both independently and in partnership with the Nisqually Tribe.	JBLM	Continuous	Natural Resource restoration projects programmed, funded and implemented. Deliverable is completed project.	Annual budget requests compared to actual funding levels; Annual review of INRMP to compare accomplishments versus commitments	New		
U.S. Geological Survey		NA	USGS conducts restoration project-specific monitoring and assessments to establish pre-project baselines, habitat (and other) responses to restoration, and other studies relevant to supporting restoration planning and adaptive management. The USGS also develops protocols for others to use for scientifically-defensible monitoring related to habitat protection and restoration, particularly relating to Department of the Interior trust resources.	USGS Science Centers lead projects and protocol development.	Project dependent. Not applicable to protocols.	NA	NA	Ongoing		
U.S. Geological Survey		NA	The USGS can commit to organizing a science planning meeting with tribal representatives, the USGS Northwest Area Puget Sound Leader Team (PSLT), and the USGS Coastal Habitats in Puget Sound (CHIPS) project leads. The purpose of the science planning workshop would be to: 1) for USGS to gain a better understanding of tribal concerns and needs relating to habitat and salmon recovery; 2) to promote mutual awareness and communication between tribes and USGS science leaders about science supporting salmon recovery and other important issues; 3) discuss USGS science capabilities for addressing these issues; 4) discuss and refine emerging science	The USGS Puget Sound Leader Team will organize.	The science planning meeting would occur based on the timing of new research funding for Puget Sound expected in FY13.	NA	NA	New		

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			plans for new USGS science projects contingent on potential new USGS appropriations; and 5) discuss how to involve and communicate with tribes in implementing these new projects.							
U.S. Geological Survey		NA	The USGS can also commit to building on current efforts to confer with tribes in the leadership of the new Northwest Climate Science Center. The Climate Science Center is tackling the many issues related to climate change impacts in the Northwest, including protection of species of interest, protection of tribal cultural resources, better understanding and predicting fish and wildlife responses to climate change, and anticipating changes in patterns of fish and wildlife disease. Establishing an on-going relationship with tribes in this capacity is of great interest to the USGS and we are happy to commit to this.	USGS and the NW CSC will organize.	This schedule would be negotiated between the CSC and interested tribes.	NA	NA	New		
Federal Highway Administration Washington Division Office		NEPA, CWA, CAA, NHPA, ESA, etc.	Project mitigation activities as required to complete the NEPA process or obtain permits from Federal, state and local regulatory agencies.	WSDOT or Local Agencies select projects. FHWA retains responsibility under NEPA and other laws as the Federal lead agency.	Projects are ongoing.	Transportation need identified -> alternative selected -> project evaluated for environmental impacts ->permits and approvals obtained including identification of mitigation ->environment protected or improved by mitigation	WSDOT/Local Agency chooses projects. FHWA approves alternative selection and environmental studies/Regulatory agencies determine permit requirements/FHWA/WSDOT/Local Agencies ensure that mitigation is carried out.	Ongoing		
Federal Highway Administration Washington Division Office			Research has been conducted on the effectiveness of stormwater treatment Best Management Practices, on design of culverts to improve fish passage, on reduction of impacts to endangered species, and on a variety of similar issues. Most of this was done through FHWA HQ. The Division Office does not control grant funds - all Federal-aid projects are selected by WSDOT in compliance with Federal planning requirements.	Research proposals selected by WSDOT, apply for FHWA funding from HQ.	Ongoing	Research question identified - research proposals selected - research funding requested - research conducted - findings implemented - environment improved by implementation of better techniques/ products.	Research projects selected by group evaluation. FHWA oversight of funds provided.	Ongoing		

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Federal Highway Administration Washington Division Office		NEPA, CWA, CAA, NHPA, ESA, etc.	Monitoring is sometimes required as part of our permits and in those cases is eligible for Federal-aid funding. The monitoring would be carried out by WSDOT or the local agency in accordance with the permit requirement.	WSDOT or Local Agencies select projects. FHWA retains responsibility under NEPA and other laws as the Federal lead agency.	Projects are ongoing.	Transportation need identified -> alternative selected -> project evaluated for environmental impacts ->permits and approvals obtained including identification of monitoring requirements->environment protected or improved by mitigation	WSDOT/Local Agency chooses projects. FHWA approves alternative selection and environmental studies/Regulatory agencies determine permit requirements/FHWA/WSDOT/Local Agencies ensure that mitigation is carried out.	Ongoing		
Federal Highway Administration Washington Division Office		N/A	Sustainability Partnership. Partnership between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. Funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have infrastructure and offer transportation choices.	HUD, EPA, FHWA and FTA staff.	Ongoing	Identifying ways to improve sustainability by integrating our programs and removing barriers to sustainable projects.	Pilot projects and information-sharing.	New		
Federal Transit Administration	Water quality	SAFETEA-LU	FTA-funded projects indirectly protect and restore Puget Sound habitat through reduction in air pollution.	FTA, transit agencies receiving funding in the PS area	Ongoing	FTA funded projects support alternative modes of transportation -> reduction in individual vehicle use -> reduction in emissions/air pollution -> improved water quality from reduced atmospheric deposition	Continue to support transit services through grants	Ongoing		
Federal Transit Administration		NEPA	Some FTA funded projects benefit habitat through mitigation related activities such as removing creosote-treated pilings, land banking, mitigation banking, wetland preservation, and improved water quality.	Mitigation determined through FTA and project proponent consultation with NOAA/NMFS, USFWS, and Department of Ecology	Mitigation measures are project specific and are determined during and after the NEPA process	FTA funded project implements water quality or habitat related mitigation -> Potential improvement in water quality or habitat (dependent on project)	Continued enforcement of environmental commitments.	Ongoing		
Federal Transit	Conversion of agricultural		Sustainable Partnership- Partnership	DOT, HUD, & EPA	Funding in PS basin	Coordination of funding	Continued coordination with EPA	Ongoing		

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Administration	and forest land to development		between EPA, HUD, and DOT which encourages smart growth and land use choices such as compact growth within urban growth boundaries. The Sustainable Partnership funds projects which preserve environmentally sensitive lands and safeguard rural landscapes by targeting development to locations that already have infrastructure and offer transportation choices.		dependent on competitive process.	and expertise between HUD, EPA & DOT -> reduced development in undeveloped areas-> protection of upland areas, wetlands, and other sensitive areas.	and HUD through the partnership			
Federal Transit Administration	Climate change		Climate Change Adaptations Research - FTA is funding research and educating grantees on how to prepare for climate change. This includes providing guidance/information to grantees which could help them better plan facilities.	FTA and local transit agencies	2012-2013	FTA provides climate change information to grantees -> grantees use information to better plan capital projects -> less facilities built in flood prone areas and retrofitting of existing facilities within flood areas reducing release of harmful materials; also more sustainable approaches when building in shoreline/riparian areas is unavoidable (e.g., less reliance on rip-rap).	FTA is currently funding a pilot program with Sound Transit, WSDOT and the UW Climate Impacts Group	Ongoing		
U.S. Coast Guard		Various	USCG does not do habitat restoration for salmon habitat but does have roles that support habitat protection such as coordination of vessel traffic to avoid sensitive areas (e.g., National Sanctuary) and carries regulatory and enforcement powers to enforce fishing vessel safety standards. Under CWA and CERCLA authorities, USCG has the ability to clean up contaminated sites in the coastal zone that present imminent threats to navigable waterways (or their tributaries).	USCG	Ongoing	Enforcing existing federal fishing vessel safety and vessel traffic management regulations -> safe waterway, less likely to introduce hazardous material into the water column -> maintained ecosystem health	Ongoing enforcement of existing regulations	Ongoing		
U.S. Coast Guard		Various	In the NW, the Coast Guard enforces protection of the U.S. Exclusive Economic Zone (EEZ) preventing foreign fishing vessels from fishing in the U.S. EEZ and ensuring an equitable playing	USCG	Ongoing	Fulfilling LMR Protection and MPS missions -> equitable playing field for species management bodies	Ongoing fulfillment of LMR and MPS missions	Ongoing		

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			field for US fisheries. The Coast Guard also has a Living Marine Resources (LMR) protection mission. The Coast Guard's primary LMR mission is to ensure compliance with Federal fishing regulations. Most fishing regulations are enacted by management bodies such as the International Pacific Halibut Commission or the Pacific Fishery Management Council with input and advice from industry, enforcement, scientists and environmental groups. A subset of the LMR mission, is the Marine Protected Species (MPS) mission. MPS includes enforcement of the Endangered Species Act, Marine Mammal Protection Act, and other laws. Many of the animals protected in the Pacific Northwest are iconic species such as Orca Whales and Chinook Salmon.			and user groups -> sustainable fisheries and protected marine species -> maintained ecosystem health				
US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water structures associated with railroads	CWA §404 and Rivers and Harbors Act	Existing Mitigation Banks and In Lieu Fee programs to serve compensatory mitigation requirements (not purely restoration). Approved mitigation banks in the Puget Sound basin include Skagit; Skykomish; Nookachamps; Snohomish; Paine Field/Snohomish County Airport; WSDOT Springbrook Creek.  Mitigation Banking and In-Lieu-Fee (ILF) Programs: The Seattle District will continue to encourage the use of mitigation banks and ILF programs that provide high quality compensatory mitigation for unavoidable impacts associated with permitted projects. Presently, mitigation banks totaling over 1,600 acres exist in Washington, with the majority of acreage in the Puget Sound basin, with another 1,500 acres and four proposed ILF programs in the basin. Among these are the first Tribal mitigation banks and ILF program, and the first marine ILF program. Further, the Seattle District continues to explore opportunities for joint mitigation-conservation banks and ILF	Corps/Ecology co-leads, local gov't, tribes, other fed agencies as necessary for individual banks	Ongoing; each bank has its own schedule which depends on negotiations	Negotiations with involved parties->creation of ILF programs and mitigation banks ->protects existing habitat	Sufficiently functioning Mitigation Banks; ILF acres protected; completion of ILF and MB	Ongoing	Issue is that mitigation banks don't always replicate lost functions	Basin or watershed based determination depending on service area developed for each bank

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			programs with the Federal Services.							
US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water structures associated with railroads	CWA §404 and Rivers and Harbors Act	<p>Pending: several Banks/ILF in Puget Sound for compensatory mitigation purposes (Lummi Bank; King County ILF; Hood Canal Coordinating Council ILF; Quil Ceda Village ILF; Puget Sound Partnership/Pierce County ILF).</p> <ul style="list-style-type: none"> <li>• Exploring other opportunities with the Services to develop Banks/ILF projects for both agencies mitigation needs</li> <li>• Continue to increase tribal coordination during permitting process, have drastically increased this over last several years.</li> <li>• Work with NMFS/USFWS to identify and develop/expand programmatic opportunities to encourage more environmentally friendly projects</li> </ul> <p>Mitigation Banking and In-Lieu-Fee (ILF) Programs: The Seattle District will continue to encourage the use of mitigation banks and ILF programs that provide high quality compensatory mitigation for unavoidable impacts associated with permitted projects. Presently, mitigation banks totaling over 1,600 acres exist in Washington, with the majority of acreage in the Puget Sound basin, with another 1,500 acres and four proposed ILF programs in the basin. Among these are the first Tribal mitigation banks and ILF program, and the first marine ILF program. Further, the Seattle District continues to explore opportunities for joint mitigation-conservation banks and ILF programs with the Federal Services.</p>	Corps/Ecology co-leads, local gov't, tribes, other fed agencies as necessary for individual banks	Negotiations ongoing	Negotiations with involved parties->creation of ILF programs and mitigation banks ->protects existing habitat	Sufficiently functioning Mitigation Banks; ILF acres protected	New		Basin or watershed based determination depending on service area developed for each bank
US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water	CWA §404 and Rivers and Harbors Act	Dependent on funding increase efforts on enforcement. Will need assistance from NOAA Fisheries to complete after the fact consultation in order to complete actions. Work with EPA on potential to lower the threshold for their involvement to increase effort. Regulatory Compliance and	Corps with assistance from NOAA, EPA	Ongoing; annual reporting on enforcement	Enforcement of permits and noncompliance with permit requirements->increased compliance with CWA 404 ->better protection of existing habitat and improved	Enforcement statistics	Ongoing		Area of jurisdiction and district boundaries

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	structures associated with railroads		Enforcement: The Seattle District will continue to maintain an appropriate balance among permit, compliance, and enforcement actions. Among the Corps Regulatory Program balanced scorecard metrics in Fiscal Year 2011, Seattle District exceeded its compliance inspection targets two-fold and meets enforcement targets. It seeks to continue to be responsive to reports of violations from Tribes, agencies, and the public.			mitigation measures				
US Army Corps of Engineers, Seattle District	Shoreline modifications, riparian management, mitigation adequacy, and lack of enforcement	CWA §404 and Rivers and Harbors Act	2012 Nationwide Permits (NWP), Regional General Conditions (RGC), and Regional Conditions (RC): The Seattle District developed RGCs and RCs for the NWPs published on February 21, 2012 which became effective March 19, 2012. Input from Tribes, state agencies, the public, and coordination with the regional NMFS office resulted in strengthened environmental protections, and increased rigor of analysis for projects with the potential to impact resources of concern in Puget Sound and statewide, relative to the 2007 versions. Initiatives championed by Tribes, while not fully enacted, formed the basis for specific actions related to: use of Standard Individual Permits rather than NWPs for new bank stabilization projects in certain areas of Puget Sound with high levels of cumulative impacts, impacts of a certain magnitude to intermittent or ephemeral streams, and moorage in Puget Sound under certain conditions; additional information requirements allowing a more rigorous review for all bank stabilization projects; culvert design methodology to consider maximized passage of flow and aquatic organisms including fish; and aquaculture. The Seattle District will wait for further guidance and direction from Corps Headquarters on the subject of implementing the February 15, 2012	Corps	Mar-12	use of IPs -> more rigorous reviews -> better protection of existing habitat and improved mitigation measures	publication of the NWP 2012	Ongoing		Area of jurisdiction and district boundaries

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			NMFS Biological Opinion (BiOp) regarding the NWP program.							
US Army Corps of Engineers, Seattle District	impediments to restoration projects, shoreline modification, riparian management, mitigation adequacy, and lack of enforcement	CWA §404 and Rivers and Harbors Act	Tribal Notification Procedures: The Seattle District has established notification procedures with 14 Tribes to solicit review and comment on proposed projects subject to its Regulatory program jurisdiction in areas where they possess Usual and Accustomed hunting and fishing Tribal Treaty rights. Notifications to Tribes increased by 80% (570 total) in Fiscal Year 2011 and Seattle District is working with additional Tribes to develop similar procedures.	Corps and Tribes	Ongoing	Coordination with Tribes -> more rigorous reviews -> better protection of existing habitat and improved mitigation measures	notification process with additional tribes	Ongoing		Basin or watershed based determination depending on service area developed for each bank
US Army Corps of Engineers, Seattle District	Shoreline modifications, riparian management, mitigation adequacy, and lack of enforcement	CWA §404 and Rivers and Harbors Act	NOAA and the Corps are promoting alternative materials and installation methods to reduce habitat impacts from bank armoring. NOAA will prepare a Biological Assessment for the Corps describing armoring designs that reduce impacts on fish habitat. The Corps will provide this information to permit Applicants for use in preparing permit applications and mitigation plans will. Two examples illustrate this. First, since soft armoring using alternative materials and installation methods is the preferred approach to reduce habitat impacts when bank stabilization in Puget Sound cannot be avoided, NMFS will provide the Corps typical fish friendly soft armoring designs for dissemination to permit applicants. Second, NMFS is completing ESA Section 7 consultation to reauthorize a Corps Regional General Permit (RGP) for residential piers, ramps, and floats in marine waters. NMFS will provide the Corps guidance for analyzing project impacts and calculating mitigation requirements that will both help applicants and potentially serve as a component of the crediting tool for mitigation banks and ILF programs that offset project impacts.	Corps with assistance from NMFS	Ongoing	implementation of best practices -> more rigorous reviews and improved process for determining mitigation requirements -> better use of ILF and MB	design completion and RGP reauthorization	Ongoing		Area of jurisdiction and district boundaries

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US Army Corps of Engineers, Seattle District	Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems	Civil Works - Ecosystem Restoration	These authorities include: the Puget Sound and Adjacent Waters Restoration Authority (PSAW Section 544) including Seahurst Park and Qwuloolt; Continuing Authorities Program (CAP) authorities such as Restoration at Existing Corps Projects (Section 1135) and Small Restoration Projects (Section 206) including Union Slough, Lincoln Park, Goldsborough Dam Removal; General Investigation (GI) studies such as the Puget Sound Nearshore Restoration (PSNR) and Skokomish Basin Ecosystem Restoration studies; individual projects under the Green-Duwamish Ecosystem Restoration authority; and ESA compliance projects from Construction General (CG) and/or Operations and Maintenance (O&M) accounts at the Howard Hanson Dam, Mud Mountain Dam, and Lake Washington Ship Canal operating projects, and Levee Vegetation Initiative; Dredge material management and beneficial reuse activities; Planning Assistance to States (PAS)	Corps	Ongoing depending on funding and approvals	Ecosystem restoration work->project completion->improved habitat	Project construction completion	Ongoing	Puget Sound and Adjacent Waters program is not currently budgetable	Puget Sound-wide
US Army Corps of Engineers, Seattle District	Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems	Civil Works - Ecosystem Restoration	<ul style="list-style-type: none"> <li>• Skokomish Watershed (in addition to and potentially a result of the GI study): Working with PSFC and Tribes to implement ecosystem restoration projects thru maximizing all agencies programs (Corps, USFW, others)</li> <li>• CAP and PSAW: dependent on funding there are multiple projects sponsors have approached Corps to sponsor</li> <li>• Puget Sound Nearshore: Study has identified opportunities for restoration (working with USFW and non-federal sponsor) and will deliver a feasibility report to Congress in 2015.</li> </ul>	Corps, other fed, state, local agencies, tribes as appropriate	Ongoing	Ecosystem restoration work->project completion->improved habitat	Project construction completion	New	contingent on sponsor and Congressional funding (cost share program)	Skokomish watershed or other specific watershed
US Army Corps of Engineers, Seattle District	Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic	Civil Works - Flood Reduction	Multiple Programs to utilize for Puget Sound Recovery: 1. General Investigations (GI): Puyallup and Skagit River 2. Operations: Levee Rehab, Levee	Corps, other fed, state, local agencies, tribes as appropriate	Ongoing	Ecosystem restoration work->project completion->improved habitat	Project construction completion	Ongoing		Puget Sound-wide

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	and terrestrial ecosystems		Vegetation Initiative, LWSC, Mud Mountain Dam and Howard Hanson Dam 3. FPMS: numerous small scale studies/projects in PS 4. CAP 205 constructed projects Lower Dungeness River, Horseshoe Bend in Kent and Tukwila							
US Army Corps of Engineers, Seattle District	Loss of riparian forest cover, Corps use of emergency declarations	Civil Works - Flood Reduction	<ul style="list-style-type: none"> <li>Work with other federal/non federal partners on developing comprehensive plans that address flooding as well as incorporate environmental considerations.</li> <li>Continue to increase partnership with Tribes on flood reduction projects</li> </ul>	Corps, FEMA other partners including	Ongoing	Comprehensive watershed plan on flooding->plan includes environmental considerations - > improved floodplain connectivity - >improved habitat	Plans that achieve balance between flood and habitat protection	New		Puget Sound-wide
US Army Corps of Engineers, Seattle District	Corps use of emergency declarations, floodplain management, a)Armoring of river banks, b)Lack of ecological functions in the riparian zone	PL 84-99, Flood Control and coastal Emergencies (FCCE)	<p>1) PL 84-99 Flood Control and Coastal Emergencies Programs: The Corps Seattle District continues to work collaboratively with levee owners, Tribes, the Federal Services (USFWS and NOAA Fisheries), and stakeholders to develop flood risk management solutions for the Public Law (P.L.) 84-99 Flood Control and Coastal Emergencies (FCCE) programs. These programs support levee integrity, ESA compliance, and fulfillment of Tribal Trust responsibilities. The Corps anticipates the ESA Section 7 consultation inherent in these efforts will yield endangered species/fish-friendly criteria for levee design, construction, maintenance, and repair and best practices guidance for Puget Sound and the region. The District will try to complete P.L. 84-99 consultations with the federal Services prior to doing the actual repairs where circumstances allow, taking into consideration issues such as funding, emergency circumstances and work windows.</p> <p>a) Levee Vegetation System Wide Improvement Framework (SWIF): The Seattle District will serve as the local federal lead for interagency efforts when the Corps' new SWIF approach is used by levee sponsors. The SWIF helps</p>	a)Corps b) Corps with NOAA, USFWS, EPA, and FEMA	Ongoing	a) Finalize Policy Guidance Memorandum-> develop new typical levee repair designs with Services and Tribes; share data and serve as technical resource for variance applicants -> implement team-generated decision process when emergency is declared - > project completion->no further loss of habitat along armored bank b) Implement regional guidance on levee setback and vegetation-> setback levees; maintain allowable vegetation where setback is not possible; share data and serve as technical resource for variance applicants ->avoidance of new impact on salmon habitat and water temp	a) Project completion b)Issuance of regional guidance on levees that is protective of the environment 1)completion of SWIF 2)Completion of PGL 3)pilot Products 4)emergency declaration process defined	Ongoing		Puget Sound-wide

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			<p>identify solutions that use resources efficiently, prioritize improvements and corrective actions based on risk, and better align programs and requirements.</p> <p>b) Levee Vegetation Variance Policy Guidance Letter (PGL): The Seattle District will serve as the local federal lead for interagency coordination efforts on variances from mandatory Corps vegetation-management standards. The District will work with levee sponsors (for non-federal levees) and seek their concurrence (for qualifying federal-constructed non-federal sponsor-maintained levees) to request variances under the new DRAFT Vegetation Variance policy. These variances will preserve, protect, and/or enhance natural resources and protect Tribal treaty rights, while ensuring levee function.</p> <p>c) Emergency Flood Response Activities: The Seattle District will seek to improve its method for determining whether local jurisdiction flood assistance requests (Advance Measures and Emergency Operations) will protect against significant threats to life, health, welfare, property, and infrastructure. Where emergency action is warranted, the Seattle District will coordinate as early possible with the Federal Services, EPA, and Tribes so that the action's scope and implementation avoid or minimize adverse habitat impacts, with appropriate after-the-fact mitigation when impacts do occur.</p> <p>d) Levee Rehabilitation: The Seattle District will continue to coordinate its post-damage levee repairs with interested federal, state, local, and Tribal entities. Where possible, based on federal and non-federal resources and other case-specific conditions, the Corps will consider implementing levee setbacks rather than levee</p>							

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			rehabilitation in-place. This approach was recently utilized for the Yakima, WA Sportsman Park levee rehabilitation. The Seattle District has been successful at applying best practices such as the Habitat Capacity Mitigation tool developed with the Federal Services, Skagit Diking District sponsors, and Tribal Skagit River System Cooperative to calculate appropriate mitigation. This tool quantified benefits of re-vegetation, willow lift planting benches, and installation of large woody debris, for a series of levee rehabilitations performed in the Skagit Basin during 2011. Application of this tool is limited to the Skagit River but could be adapted for application to other rivers.							
US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water structures associated with railroads, Problems resulting from streamlined permits, Corps approved rip-rapping of river banks	Other Programs	IIS Program (EPA funded) Puget Sound Cumulative Impacts Study (PSCIS) - The scope is a section of Puget Sound from Brown's Point to Tulalip Point, that is expected to show significant resource decline (process, function, habitat) in support of federal regulatory decision making and potentially for state and local land use decisions.	Corps	Ongoing, completion expected end of 2012	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase II	Ongoing		currently limited scope
US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water structures associated with railroads, Problems resulting from streamlined permits, Corps approved rip-rapping of river banks	Other Programs	Further development of the information regarding cumulative effects in Puget Sound to inform federal agencies in decision making (USFW, NOAA, EPA, Corps)	Corps	2013	PSCIS -> documentation of the cumulative impacts of development projects on Puget Sound -> prevent future incremental loss of habitat ->reduction in miles of Puget Sound shoreline modified.	Completion of Phase III	New		TBD

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US Army Corps of Engineers, Seattle District	Bulkheads/docks/overwater structures, Lack of properly functioning drift cells, Loss of forage fish and forage fish habitat, Disconnection of aquatic and terrestrial ecosystems, Bank hardening and over water structures associated with railroads	Other Programs	<ul style="list-style-type: none"> <li>Increase use of PAS and Section 203 Authority - Subject to availability of funding there is potential to cost-share in projects with Tribes for broad-based studies in Puget Sound.</li> <li>Continue increase coordination with the Tribes on current and future Civil Works and Regulatory projects.</li> </ul>	Corps, state, local agencies, tribes as appropriate	Ongoing	Ecosystem restoration studies-> development and funding of restoration projects ->improved habitat	Useful and relevant products of ecosystem restoration studies	New		TBD
National Park Service		N/A	Portions of watersheds within Mount Rainier, North Cascades and Olympic National Parks flow into Puget Sound. These major watersheds include the Skagit, Elwha, Dosewallips, Nisqually, Puyallup and White Rivers. Most of these major rivers have active watershed councils in which the NPS participates. Efforts to restore habitat, preserve native salmon runs and improve water quality are ALL important components of the NPS mission.	NPS	Ongoing	Participation in watershed councils -> improved habitat for salmon and shellfish -> improved salmon and shellfish health	Continued participation in local watershed councils	Ongoing		
National Park Service		N/A	The NPS North Cost and Columbia Cascade Network monitor several important Vital Signs within the 3 national parks that directly flow into Puget Sound. Vital signs are measurable, early warning signals that indicate changes that could impair the long-term health of natural systems. Early detection of potential problems allows managers to take steps to restore ecological health of park resources before serious damage can happen. Vital Sign protocols directly associates Puget Sound include: High Mountain Lakes, Water Quality, Glaciers, Intertidal (OLYM) and Climate.	NPS	Ongoing	Implementation of monitoring network -> tracking of vital signs -> improved decision making -> improved ecosystem health	Continued implementation of North Coast and Columbia Cascade Network	Ongoing		
National Park Service		N/A	The NPS mission is to maintain park resources unimpaired for the enjoyment of future generations. Five units of the National Park System (North Cascades, Mount Rainier, and Olympic National Parks; San Juan Island National Historical Park, and Ebey's	NPS	Ongoing	Participation in local salmon and habitat recovery efforts -> improved habitat for salmon and shellfish -> improved salmon and shellfish health	Continued interaction with local salmon and habitat recovery efforts	Ongoing		

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			Landing National Historical Reserve) protect and manage approximately 2,000,000 acres in the Puget Sound region. Much of the NPS acreage is upland watershed habitat, but three parks encompass significant coastal and tideland habitat as well (OLYM, SAJH, and EBLA). The NPS participates in watershed councils, notably for the Skagit River and Nisqually River, and collaborates with the Marine Resources Council in the San Juans and participated in the San Juan Initiative, a pilot project for the Puget Sound Partnership.							
National Park Service		N/A	The NPS Inventory and Monitoring program for the North Coast and Cascades network of parks includes protocols to monitor mountain lakes water quality, forests, tidelands, and a variety of other vital signs that serve as indicators of ecosystem health. The Inventory and Monitoring program contracted with the University of Washington to produce Coastal Watershed Assessments for the three Puget Sound parks with marine resources. Those assessments are being used by park managers to better protect water quality and coastal habitat.	NPS	Ongoing	Inventory and monitoring program -> increased understanding of ecosystem conditions -> improved protection of water quality and coastal habitat	Ongoing implementation of inventory and monitoring program	Ongoing		
National Park Service		N/A	The NPS collaborates with the Salmon Recovery Funding Board and other partners in salmon habitat restoration, for example with Seattle City Light to restore spawning habitat to coho and chum salmon. The NPS is leading the process to remove dams and restore salmon habitat on the Elwha River. The NPS partnered with the Northwest Straits Commission to remove creosoted wood from six miles of shoreline habitat in the San Juans.	NPS	Ongoing	Habitat restoration activities -> improved habitat for salmon -> improved salmon health	Participation in salmon habitat restoration activities	Ongoing		