

Appendix D: Summary of number of projects and total funding assigned to each PSA, and project status

PSA No.	Priority Science Action title	Total Budget (corrected)	No. of Projects	Project No. & Status (green = completed, red = ongoing, yellow = no information, grey = not determined)															
				P1	P2	P3	P4	P5	P6	P7	P8	P9							
1	Develop analytical tools to identify options for where to protect, where to restore, and where to develop while maintaining desired [freshwater and terrestrial] ecological goods and services.	\$2,848,396	9	P1	P2	P3	P4	P5	P6	P7	P8	P9							
2	Use social science to guide development of adaptive management structures that can effectively link [freshwater and terrestrial] restoration science to management decision-making.	\$872,607	2	P10	P11														
3	Develop ecological indicators; assess baseline conditions; and implement monitoring to measure [freshwater and terrestrial] ecosystem function relative to no net loss.	\$1,918,591	8	P12	P13	P14	P15	P16	P17	P18	P19								
4	Conduct social science studies to describe the key institutional challenges to attaining no net loss and improvements from [freshwater and terrestrial] restoration.	\$457,594	2	P20	P21														
5	Estimate the value of floodplains in terms of the ecosystems services they provide.	\$635,464	2	P22	P23														
6	Develop key ecological indicators and implement monitoring to assess status of floodplains.	\$1,436,398	3	P24	P25	P26													
7	Improve understanding of the effects of vegetation on dikes and other flood control structures.	\$89,499	1	P27															
8	Develop analytical tools to evaluate whether strategies to address factors limiting the productivity of salmon are being implemented in the most effective combinations, at the right times, and with appropriate amounts of effort to lead to recovery.	\$30,408	1	P28															
9	Identify the causes of apparent decline in marine survival of salmon as they leave their natal rivers and exit Puget Sound.	\$5,228,797	2	P29	P30														
10	Assess risks imposed by terrestrial and freshwater invasive species.	\$2,352,634	9	P31	P32	P33	P34	P35	P36	P37	P38	P39							
11	Develop robust ecological indicators and implement comprehensive monitoring for stream flows.	\$457,594	2	P40	P41														
12	Evaluate and improve stream flow targets in terms of their effects on abundance, productivity, distribution, and life-history diversity of salmon.	\$1,057,984	3	P36	P43	P44													
13	Develop analytical tools to identify priority areas for [marine and nearshore] protection, restoration, and stewardship.	\$2,663,003	11	P45	P46	P47	P48	P49	P50	P51	P52	P53	P54	P55					
14	Develop adaptive management structures that link [marine and nearshore] restoration science to management decision making.	\$5,583,470	14	P56	P57	P58	P59	P60	P61	P62	P63	P64	P65	P66	P67	P68	P69		
15	Identify the key stressors on eelgrass.	\$629,354	3	P70	P71	P72													
16	Develop analytical tools and information to understand the tradeoffs in managing foodwebs of marine species and the multiple stressors affecting those foodwebs.	\$0	1	P73															
17	Implement biological and sociological studies to understand the conservation and sociological roles of marine protected areas for habitat and species protection, ecosystem restoration, and sustaining usual and accustomed tribal fishing areas.	\$0	0																
18	Implement studies to identify stressors on forage fish.	\$779,192	6	P74	P75	P76	P77	P78	P82										
19	Implement studies to understand the causes of declines in marine bird abundance.	\$228,797	1	P80															
20	Conduct studies to identify sources of nutrients that enter Puget Sound that can be used to develop strategies for maintaining water quality for Puget Sound foodwebs.	\$0	0																
21	Assess risks imposed by marine invasive species.	\$289,307	2	P81	P82														

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				P83	P84	P85	P86	P87	P88	P89									
22	Implement studies on persistent, bioaccumulative chemicals to understand transport, trophic transfer, and associated ecological and human health risk and to ensure that Washington State's water quality standards and sediment management standards are protective of both fish and wildlife and allow human and wildlife consumption.	\$1,360,533	7	P83	P84	P85	P86	P87	P88	P89									
23	Describe the availability, feasibility, and safety of alternatives to products and processes that use and release toxic chemicals of concern into the Puget Sound ecosystem.	\$1,356,374	4	P90	P91	P92	P93												
24	Develop integrated monitoring and assessment of toxic chemical sources, exposure, and effects.	\$4,051,104	15	P94	P95	P96	P97	P98	P99	P100	P101	P102	P103	P104	P105	P106	P107	P108	
25	Synthesize information on emerging contaminants of concern.	\$1,101,954	6	P109	P110	P111	P112	P113	P114										
26	Develop monitoring and assessment of benthic invertebrates in small streams to evaluate stormwater management and other efforts to protect and restore streams.	\$699,983	1	P115															
27	Evaluate the effectiveness of low impact development (LID) projects and stormwater management best management practices and programs.	\$3,674,044	10	P116	P117	P118	P119	P120	P121	P122	P123	P124	P125						
28	Evaluate land uses and associated pollutants that would require treatment beyond sediment removal.	\$169,000	2	P126	P127														
29	Evaluate projected environmental benefits of structural stormwater retrofits given varying levels of effort to guide the extent of structural retrofits needed to help meet 2020 ecosystem recovery targets	\$456,333	2	P128	P129														
30	Evaluate individual and combined effects of commonly used pesticides on salmonids, other fish, and their foods.	\$0	0																
31	Evaluate nitrogen reduction in public domain on-site system treatment technologies.	\$615,130	1	P130															
32	Implement studies of human-related contributions of nitrogen to dissolved oxygen impairments in sensitive Puget Sound marine waters.	\$2,854,453	7	P131	P132	P133	P134	P135	P136	P137									
33	Establish and sustain pollution identification and correction (PIC) programs to identify and fix nonpoint pollution problems.	\$2,166,743	7	P138	P139	P140	P141	P142	P143	P144									
34	Research and implement monitoring to understand the specific environmental conditions that produce toxic harmful algal blooms (HABs) and pathogen events.	\$1,592,112	4	P145	P146	P147	P148												
35	Evaluate existing oil spill risk assessments and complete additional risk analyses of higher risk industry sectors to ensure there are appropriate levels of investment in reducing risk.	\$0	0																
36	Evaluate information on baseline conditions for key species at risk from oil spills and improve these as necessary so that baselines exist that can be used in assessments of natural resource damages.	\$257,661	2	P149	P150														
37	Expand monitoring of freshwater and marine water areas to assess human exposures to pollution during water-contact recreation.	\$291,979	2	P151	P152														
38	Design and implement monitoring for ocean acidification variables across the Puget Sound to understand the status, diversity and range of conditions.	\$20,000	1	P153															
39	Develop and implement studies to assess the risk and vulnerability of Puget Sound species to ocean acidification.	\$1,097,728	2	P154	P155														
40	Develop adaptation strategies given assessed vulnerability to ocean acidification.	\$40,000	1	P156															
41	Conduct institutional analyses of the overall governance and management structures in which Puget Sound recovery strategies operate.	\$70,613	2	P157	P158														
42	Conduct integrated risk assessments of the impacts of different pressures on the Puget Sound ecosystem.	\$200,000	1	P159															

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43	Develop a systematic, transparent, and ecologically-based prioritization tool for near-term actions in the Action Agenda that will support evolutionary learning and adaptation.	\$242,116	1	P160														
44	Implement and sustain a comprehensive, coordinated monitoring program to understand the status of the Puget Sound and the effectiveness of recovery actions.	\$3,107,542	9	P161	P162	P163	P164	P165	P166	P167	P168	P169						
45	Develop assessments of ecosystem services to help decision makers make informed decisions about restoration and protection.	\$1,383,763	6	P170	P171	P172	P173	P174	P175									
46	Develop socioeconomic indicators to help measure and report on the human dimensions in ecosystem recovery.	\$70,000	2	P176	P177													
47	Conduct a baseline literature review of social science research and a survey of data to identify resources and gaps that can be readily available and used by ecosystem recovery planners and practitioners.	\$338,826	1	P178														
48	Evaluate the most effective combinations of regulatory, incentive, and educational programs for different demographics in Puget Sound.	\$37,500	1	P179														
Other		\$457,594	2	P180	P181													
	TOTAL	\$55,272,177	181															