

SSC's 2014 Research Priority Recommendations, compared to 2013

(2013 ID)	ID	Title	Research Status	2014 Priority	2013 Priority	C's 2013 mgmt
115	144	District-wide survey for demersal shelf rockfish in Southeast Alaska	No action	Critical		
138	145	Continuation of State and Federal annual and biennial surveys	Underway	Critical		
146	146	Improve surveys in untrawlable habitat, particularly for rockfish, Atka mackerel, and sculpins	Partially underway	Critical		
139	165	Conduct routine surveys of subsistence in the northern Bering Sea and Arctic Ocean	Partially underway	Critical	High	
173	229	Evaluate the effectiveness of setting ABC and OFL levels for data-poor crab stocks	Partially underway	Critical	Medium	
215	249	Assess the movement of Steller sea lions, northern fur seals, Tanner crab, snow crab, and Pacific cod	Partially underway	Critical	Medium	
101	147	Life history research on non-recovering crab stocks	No action	High		
105	148	Spatial distribution of male snow crab	Partially underway	High		
107	149	Improve handling mortality rate estimates for crab	Partially underway	High		
110	150	Maintain the core biological and oceanographic data (e.g., biophysical moorings, stomach data, zooplankton, age 0 surveys) necessary to support integrated ecosystem assessment	Underway	High	consolidates 2013's 198	EBM capability
114	151	Develop a spatially-explicit model for BSAI pollock	Underway	High		
117	153	Study vertical distribution of Pacific cod to better understand catchability	Underway	High		
118	154	Pacific cod stock assessment for the Aleutian Islands	Underway	High		
119	155	Evaluation of salmon PSC mitigation measures	Underway	High		Salmon
120	156	Improve knowledge for salmon PSC impact assessment	Underway	High		Salmon
122	157	Improve methods of monitoring fishery interactions	Underway	High		
125	158	Research ecosystem indicators and their thresholds for inclusion in ecosystem-level management strategy evaluation	Underway	High		EBM capability
126	159	Evaluate interactions between fisheries and pinnipeds	Underway	High		SSL
127	160	Assess vital rates of Steller sea lions	Underway	High		SSL
128	161	Assess the health of Stellar sea lions	Underway	High		SSL
129	162	Quantify killer whale predation of Steller sea lions (M)	Underway	High		SSL
135	163	Conduct routine fish, crab, and oceanographic surveys in the northern Bering Sea and Arctic Ocean	Partially underway	High		
136	164	Effects of trawling on female red king crab and subsequent recruitment	Partially underway	High		
141	166	Estimate scallop stock abundance	Partially underway	High		
143	167	Alternative approaches to acquire fishery-independent abundance data for Aleutian Islands golden king crab	No action	High		
147	169	Studies on factors that affect catchability particularly for King and Tanner crab	Partially underway	High		
149	170	Quantitative reproductive index for the surveyed BSAI crab stocks	Underway	High		

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151	171	Acquire basic life history information (e.g., natural mortality, growth, size at maturity) for data-poor stocks.	Partially underway	High		
157	172	Develop and validate aging methods for crabs.	No action	High		
163	173	Expand studies to identify stock and management boundaries	Underway	High	<i>consolidates 2013's 116</i>	
164	174	Develop spatially explicit stock assessment models	Partially underway	High		
166	175	Develop age-structured models for scallop assessment	Partially underway	High		
167	176	Refine methods to incorporate uncertainty into harvest strategies for groundfish	Underway	High		
168	177	Conduct prospective and retrospective analyses of changes in the spatial and temporal distribution of fishing effort in response to management change	Underway	High		
169	178	Develop a framework for collection of economic information	Partially underway	High		
179	179	Conduct pre- and post-implementation studies of the benefits and costs, and their distribution, associated with dedicated access privileges	Partially underway	High		
181	180	Economic, social, and cultural valuation research on protected species	Underway	High		
182	181	Foraging ecology studies of Steller sea lions	Underway	High		<i>SSL</i>
188	182	Evaluate current and alternative Council PSC/bycatch reduction initiatives	Partially underway	High		<i>Salmon</i>
194	183	Research the role of habitat in population dynamics and ecosystem processes	Partially underway	High		<i>EBM capability</i>
203	187	Maintain indicator-based ecosystem assessment for EBS.	Underway	High		<i>EBM capability</i>
204	188	Develop indicator-based ecosystem assessments for AI (in progress), GOA, Arctic.	Partially underway	High		<i>EBM capability</i>
205	189	Develop stock-specific ecosystem indicators and incorporate into stock assessments	Partially underway	High		<i>EBM capability</i>
216	190	Collect and maintain time series of ocean pH	Partially underway	High		<i>EBM capability</i>
217	191	Assess whether changes in pH and temperature would affect managed species, upper level predators, and lower trophic levels.	Partially underway	High	<i>consolidates 2013's 218 (re</i>	<i>EBM capability</i>
220	192	Collect, analyze, and monitor diet information	Underway	High		
111	206	Biomass indices and alternate methodologies for lowest tier groundfish species	Partially underway	High	<i>Medium</i>	
170	226	Continue to evaluate the economic effects from fishery policy changes on coastal communities.	Underway	High	<i>Medium</i>	
174	230	Examine social and economic interactions between coastal communities and commercial fisheries	Underway	High	<i>Medium</i>	
221	250	Conduct ecosystem structure studies	Underway	High	<i>Medium</i>	
314	364	Updated sperm whale stock assessment	No action	High		

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312	366	Continue to investigate time variation and the shape of fishery and survey selectivity models	Underway	High		
311	367	Continue to improve stock assessment methodology with respect to uncertainty	Underway	High		
310	368	Develop a simulation model of Steller sea lion fishery interactions	No action	High		SSL
306	384	Effects of changes to the observer program	Partially underway	High		
305	385	Study Pacific halibut PSC, bycatch, and discard behavior in fisheries	Underway	High		
302	388	Study temporal and spatial patterns in size-at-age of Pacific halibut	Underway	High		
301	389	Investigate ecosystem effects and inter-species interactions of halibut	Underway	High		
104	193	Improve species identification	Partially underway	Low		
140	194	Identification and integration of archived data	Partially underway	Low		
154	195	Conduct multivariate analysis of bycatch data from the scallop observer program	Partially underway	Low		
159	196	Evaluate hybridization of snow and Tanner crabs.	No action	Low		
206	197	Develop methodologies to monitor for new/emerging diseases and/or parasites among exploited species and higher trophic levels	No action	Low		
210	198	Initiate and expand non-market valuation research of habitat, ecosystem services, and passive use considerations	No action	Low		
219	200	Monitor contaminant flux and loads in lower and higher trophic levels, and assess potential for impact on vital rates.	No action	Low	consolidates 2013's 218 (re	
134	216	Assess whether Bering Sea canyons are habitats of particular concern	Partially underway	Low	Medium	
317	361	Effects of Ocean Acidification on Scallops	No action	Low		
316	362	Monitoring potential water quality impacts	No action	Low		
304	386	Investigate long term effects of fishing on Pacific halibut	Underway	Low		
303	387	Determine effects of migration on the Pacific halibut population and management	Underway	Low		
144	168	Assess seasonal diets and species interactions of fish and shellfish	No action	Medium	High	
195	184	Evaluate efficacy of habitat closure areas and habitat recovery	Partially underway	Medium	High	
200	186	Collect and maintain zooplankton and meroplankton biomass and community composition time series	Partially underway	Medium	High	EBM capabili
103	202	Methods for reliable estimation of total removals	Underway	Medium	consolidates 2013's 102	
106	203	Improve discard mortality rate estimates for scallops	Partially underway	Medium		

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108	204	Tagging studies of Aleutian Islands Pacific cod and Atka mackerel	Partially underway	Medium		
109	205	Age determination methods for Pacific cod, Pacific sleeper sharks, and spiny dogfish	Partially underway	Medium		
112	207	Analyses of fishery effort and observer data for scallops	No action	Medium		
113	208	Research on stock- recruit relationships	Underway	Medium		
121	209	Investigate factors affecting the guided angler sector of the halibut fishery	Underway	Medium		
123	210	Develop bioeconomic models	Partially underway	Medium		
124	211	Benefits and costs of directed halibut catch and halibut PSC utilization	Underway	Medium		
130	212	Develop methods to estimate sea lion abundance	Underway	Medium		SSL
131	213	Assess the impact of the displacement of the groundfish fleet on Northern fur seals	Partially underway	Medium		
132	214	Evaluate the impact of seabird bycatch in fisheries on bird populations, and methods to reduce	Underway	Medium		
133	215	Determine potential impacts of fishing activities on marine mammals	No action	Medium		
137	217	Impact of fisheries on benthic habitat and trophic interactions	Underway	Medium		
142	218	Survey capability for forage fish	Partially underway	Medium		EBM capability
145	219	Monitor skate egg case concentration sites	No action	Medium		
148	220	Research on survey analysis techniques for species that exhibit patchy distributions	No action	Medium		
150	221	Collect maturity scans during fisheries that target spawning fish	Underway	Medium		
156	222	Improve estimates of natural mortality (M) for Pacific cod.	Partially underway	Medium		
160	223	Develop and evaluate global climate change models (GCM) or downscaled climate variability scenarios to assess impacts to recruitment, growth and spatial distributions.	Underway	Medium		
161	224	Climate and oceanographic information covering a wider range of seasons	Partially underway	Medium		
162	225	Development of projection models to evaluate (a) the robustness and resilience of different management strategies under varying environmental and ecological conditions and (b) to forecast seasonal an	Partially underway	Medium		
171	227	Improve estimation of fishery interactions with non-target groundfish, and prohibited species.	No action	Medium		
172	228	Conduct studies documenting the subsistence harvest (patterns, norms, quantities) in communities affected by Council actions.	Partially underway	Medium		
175	231	Retrospective analysis of the impact of Chinook salmon PSC avoidance measures on the BSAI pollock fishery	Partially underway	Medium		

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176	232	Develop management strategy evaluations that incorporate changing climate and market economic conditions.	Partially underway	Medium		
177	233	Develop an ongoing database of product inventories	No action	Medium		
178	234	Analyze current determinants of demand for principal seafood products	Partially underway	Medium		
184	235	Investigate gear modifications and changes in fishing practices to reduce bycatch and PSC	Partially underway	Medium		<i>Salmon</i>
185	236	Conduct studies of sperm whale and killer whale depredation of catch in long-line fisheries and surveys	Underway	Medium		
191	237	Improved habitat maps	Partially underway	Medium		
192	238	Develop a GIS relational database for habitat, to include a historical time series of the spatial intensity of interactions between commercial fisheries and habitat.	Partially underway	Medium		
193	239	Assess the extent of the distribution of corals	Partially underway	Medium	<i>consolidates 2013's 318</i>	
196	240	Develop a multivariate index of the climate forcing of the Bering Sea shelf	Partially underway	Medium		
197	241	Develop bottom and water column temperature database and indices	Partially underway	Medium		
199	242	Collect and maintain primary production time series	No action	Medium		
201	243	Collect and maintain data on forage fish community composition and abundance	Partially underway	Medium		
202	244	Collect and maintain time-series data on the community composition, production and biomass of benthic invertebrate and vertebrate fauna	Partially underway	Medium		
207	245	Assess the impact of increases in recovering whale populations on lower trophic level energy pathways	No action	Medium		
209	246	Cooperative research efforts to supplement existing at-sea surveys that provide seasonal, species-specific information on upper trophic levels	Partially underway	Medium		
211	247	Assess the relative importance of non-commercially exploited species to human communities	Partially underway	Medium		
214	248	Measure and monitor fish composition	No action	Medium		
223	251	Modeling studies of ecosystem productivity	Underway	Medium		
315	363	Area-specific variability in scallop population processes	No action	Medium		
313	365	Retrospective analysis of the impact of Chinook PSC avoidance measures on communities of western Alaska	No action	Medium		
309	381	Effects of changes to the observer program	No action	Medium	<i>duplicate of 2014 384 (high priority)</i>	
308	382	Investigate in situ methods of tagging species that experience barotrauma	No action	Medium		
307	383	Determine quantitative indicators of spatial structure, particular for walleye pollock and Pacific cod	No action	Medium		

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300	390	Assess the population status of harbor seals in the Aleutian Islands and determine factors affecting their population trajectories	No action	Medium		
NEW	391	Investigate spatial stock dynamics and population connectivity for Tanner Crab (2 stocks)	Pending	Medium	(new)	