



161	Assess the health of Stellar sea lions	Urgent	161	Assess the health of Stellar sea lions	Urgent	1
162	Quantify killer whale predation of Steller sea lions (M)	Urgent	162	Quantify killer whale predation of Steller sea lions (M)	Urgent	1
163	Conduct routine fish, crab, and oceanographic surveys in the northern Bering Sea and Arctic Ocean	Critical Ongoing Monitoring	163	Conduct routine fish, crab, and oceanographic surveys in the northern Bering Sea and Arctic Ocean	Critical Ongoing Monitoring	1
164	Effects of trawling on female red king crab and subsequent recruitment	Important	164	Effects of trawling on female red king crab and subsequent recruitment	Important	1
165	Conduct routine surveys of subsistence in the northern Bering Sea and Arctic Ocean	Critical Ongoing Monitoring	165	Conduct routine surveys of subsistence in the northern Bering Sea and Arctic Ocean	Critical Ongoing Monitoring	1
166	Estimate scallop stock abundance	Critical Ongoing Monitoring	166	Estimate scallop stock abundance	Urgent	#N/A
167	Alternative approaches to acquire fishery-independent abundance data for Aleutian Islands golden king crab	Urgent	167	Alternative approaches to acquire fishery-independent abundance data for unsurveyed crab stocks	Urgent	1
168	Assess seasonal diets and species interactions of fish and shellfish	Important (Near Term)	168	Assess seasonal diets and species interactions of fish and shellfish	Important (Near Term)	1
169	Studies on factors that affect catchability particularly for King and Tanner crab	Important (Near Term)	169	Studies on factors that affect catchability particularly for King and Tanner crab	Important (Near Term)	1
170	Quantitative reproductive index for the surveyed BSAI crab stocks	Urgent	170	Quantitative reproductive index for the surveyed BSAI crab stocks	Urgent	1
171	Acquire basic life history information (e.g., natural mortality, growth, size at maturity) for data-poor stocks	Urgent	171	Acquire basic life history information (e.g., natural mortality, growth, size at maturity) for data-poor stocks	Urgent	1
172	Develop and validate aging methods for crabs.	Urgent	172	Develop and validate aging methods for crabs.	Urgent	1
173	Expand studies to identify stock and management boundaries	Urgent	173	Expand studies to identify stock and management boundaries	Urgent	1
174	Develop spatially explicit stock assessment models	Urgent	174	Develop spatially explicit stock assessment models	Urgent	1
175	Develop age-structured models for scallop assessment	Important (Near Term) - or drop?	175	Develop age-structured models for scallop assessment	Strategic (Future Needs)	#N/A
176	Refine methods to incorporate uncertainty into harvest strategies for groundfish	Urgent	176	Refine methods to incorporate uncertainty into harvest strategies for groundfish	Urgent	1
177	Conduct prospective and retrospective analyses of changes in the spatial and temporal distribution of fishing effort in response to management change	Strategic (Future Needs)	177	Conduct prospective and retrospective analyses of changes in the spatial and temporal distribution of fishing effort in response to management change	Strategic (Future Needs)	1
178	Develop a framework for collection of economic information	Critical Ongoing Monitoring	178	Develop a framework for collection of economic information	Critical Ongoing Monitoring	1
179	Conduct pre- and post-implementation studies of the benefits and costs, and their distribution, associated with dedicated access privileges	Urgent	179	Conduct pre- and post-implementation studies of the benefits and costs, and their distribution, associated with dedicated access privileges	Urgent	1
180	Economic, social, and cultural valuation research on protected species	Important (Near Term)	180	Economic, social, and cultural valuation research on protected species	Important (Near Term)	1
181	Foraging ecology studies of Steller sea lions	Important (Near Term)				#N/A
182	Evaluate current and alternative Council PSC/bycatch reduction initiatives	Important (Near Term)	182	Evaluate current and alternative Council PSC/bycatch reduction initiatives for non-halibut, non-salmon species	Important (Near Term)	1

183	Research the role of habitat in population dynamics and ecosystem processes	Important (Near Term)	183	Research the role of habitat in population dynamics and ecosystem processes	Important (Near Term)	1
184	Evaluate efficacy of habitat closure areas and habitat recovery	Important (Near Term)	184	Evaluate efficacy of habitat closure areas and habitat recovery	Important (Near Term)	1
186	Collect and maintain zooplankton and meroplankton biomass and community composition time series	Critical Ongoing Monitoring	186	Collect and maintain zooplankton and meroplankton biomass and community composition time series	Critical Ongoing Monitoring	1
187	Maintain indicator-based ecosystem assessment for EBS.	Important (Near Term)	187	Maintain indicator-based ecosystem assessment for EBS.	Important (Near Term)	1
188	Develop indicator-based ecosystem assessments for AI (in progress), GOA, Arctic.	Important (Near Term)	188	Develop indicator-based ecosystem assessments for AI (in progress), GOA, Arctic.	Important (Near Term)	1
189	Develop stock-specific ecosystem indicators and incorporate into stock assessments	Important (Near Term)	189	Develop stock-specific ecosystem indicators and incorporate into stock assessments	Important (Near Term)	1
190	Collect and maintain time series of ocean pH <sub>A</sub>	Critical Ongoing Monitoring	190	Collect and maintain time series of ocean pH <sub>A</sub>	Critical Ongoing Monitoring	1
191	Assess whether changes in pH and temperature would affect managed species, upper level predators, and lower trophic levels.	Strategic (Future Needs)	191	Assess whether changes in pH and temperature would affect managed species, upper level predators, and lower trophic levels.	Strategic (Future Needs)	1
192	Collect, analyze, and monitor diet information	Critical Ongoing Monitoring	192	Collect, analyze, and monitor diet information	Critical Ongoing Monitoring	1
193	Improve species identification	Strategic (Future Needs)	193	Improve species identification	Strategic (Future Needs)	1
194	Identification and integration of archived data	Strategic (Future Needs)	194	Identification and integration of archived data	Strategic (Future Needs)	1
195	Conduct multivariate analysis of bycatch data from the scallop observer program	Strategic (Future Needs)	196	Evaluate hybridization of snow and Tanner crabs.	Strategic (Future Needs)	1
196	Evaluate hybridization of snow and Tanner crabs.	Strategic (Future Needs)				
197	Develop methodologies to monitor for new/emerging diseases and/or parasites among exploited species and higher trophic levels	Critical or Urgent	197	Develop methodologies to monitor for new/emerging diseases and/or parasites among exploited species and higher trophic levels	Urgent	#N/A
198	Initiate and expand non-market valuation research of habitat, ecosystem services, and passive use considerations	Strategic (Future Needs)	198	Initiate and expand non-market valuation research of habitat, ecosystem services, and passive use considerations	Strategic (Future Needs)	1
200	Monitor contaminant flux and loads in lower and higher trophic levels, and assess potential for impact on vital rates.	Strategic (Future Needs)	200	Monitor contaminant flux and loads in lower and higher trophic levels, and assess potential for impact on vital rates.	Strategic (Future Needs)	1
202	Methods for reliable estimation of total removals	Urgent	202	Methods for reliable estimation of total removals	Urgent	1
203	Improve discard mortality rate estimates for scallops	Critical Ongoing Monitoring	203	Improve discard mortality rate estimates for scallops	Critical Ongoing Monitoring	1
204	Tagging studies of Aleutian Islands Pacific cod and Atka mackerel	Important (Near Term)	204	Tagging studies of Aleutian Islands Pacific cod and Atka mackerel	Important (Near Term)	1
205	Age determination methods for Pacific cod, Pacific sleeper sharks, and spiny dogfish	Important, near term	205	Age determination methods for Pacific cod, Pacific sleeper sharks, and spiny dogfish	Important (Near Term)	1
206	Biomass indices and alternate methodologies for lowest tier groundfish species	Important (Near Term)	206	Biomass indices and alternate methodologies for lowest tier groundfish species	Important (Near Term)	1
207	Analyses of fishery effort and observer data for scallops	Critical Ongoing Monitoring	207	Analyses of fishery effort and observer data for scallops	Critical Ongoing Monitoring	1
208	Research on stock- recruit relationships	Urgent	208	Research on stock- recruit relationships	Urgent	1
209	Investigate factors affecting the guided angler sector of the halibut fishery	Should be evaluated as socio-economic	209	Investigate factors affecting the guided angler sector of the halibut fishery	Critical Ongoing Monitoring	1
210	Develop bioeconomic models	Important (Near Term)	210	Develop bioeconomic models	Important (Near Term)	1

211	Benefits and costs of directed halibut catch and halibut PSC utilization	Important (Near Term)	211	Benefits and costs of directed halibut catch and halibut PSC utilization	Important (Near Term)	1
212	Develop methods to estimate sea lion abundance	Important (Near Term)	212	Develop methods to estimate sea lion abundance	Important (Near Term)	1
213	Assess the impact of the displacement of the groundfish fleet on Northern fur seals	Urgent	213	Assess the impact of the displacement of the groundfish fleet on Northern fur seals	Urgent	1
214	Evaluate the impact of seabird bycatch in fisheries on bird populations, and methods to reduce	Important (Near Term)	214	Evaluate the impact of seabird bycatch in fisheries on bird populations, and methods to reduce	Important (Near Term)	1
215	Determine potential impacts of fishing activities on marine mammals	Urgent	215	Determine potential impacts of fishing activities on cetaceans	Strategic (Future Needs)	1
216	Assess whether Bering Sea canyons are habitats of particular concern	Important (Near Term)	216	Assess whether Bering Sea canyons are habitats of particular concern	Important (Near Term)	1
217	Impact of fisheries on benthic habitat and trophic interactions	Urgent	217	Impact of fisheries on benthic habitat and trophic interactions	Urgent	1
218	Survey capability for forage fish	Critical Ongoing Monitoring	218	Survey capability for forage fish	Critical Ongoing Monitoring	1
219	Monitor skate egg case concentration sites	Critical on-going monitoring / Important	219a	Investigate skate egg concentration areas as EFH and HAPC	Important (Near Term)	#N/A
			219b	Monitor skate egg case concentrations every 2 to 3 years using non-invasive research design, such as in situ observation	Critical Ongoing Monitoring	#N/A
220	Research on survey analysis techniques for species that exhibit patchy distributions	Important (Near Term)	220	Research on survey analysis techniques for species that exhibit patchy distributions	Important (Near Term)	1
221	Collect maturity scans during fisheries that target spawning fish	Strategic (Future Needs)	221	Collect maturity scans during fisheries that target spawning fish	Strategic (Future Needs)	1
222	Improve estimates of natural mortality (M) for Pacific cod.	Important (Near Term)	222	Improve estimates of natural mortality (M) for Pacific cod.	Important (Near Term)	1
223	Develop and evaluate global climate change models (GCM) or downscaled climate variability scenarios to assess impacts to recruitment, growth, and spatial distributions.	Strategic (Future Needs)	223	Develop and evaluate global climate change models (GCM) or downscaled climate variability scenarios to assess impacts to recruitment, growth, and spatial distributions.	Strategic (Future Needs)	1
224	Climate and oceanographic information covering a wider range of seasons	Strategic (Future Needs)	224	Climate and oceanographic information covering a wider range of seasons	Strategic (Future Needs)	1
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	Strategic (Future Needs)	225	Development of projection models to evaluate the robustness and resilience of different management strategies under varying environmental and ecological conditions	Strategic (Future Needs)	1
226	Continue to evaluate the economic effects from fishery policy changes on coastal communities.	Urgent	226	Continue to evaluate the economic effects from fishery policy changes on coastal communities.	Urgent	1
227	Improve estimation of fishery interactions with non-target groundfish, and prohibited species.	Urgent	227	Improve estimation of fishery interactions with non-target groundfish, and prohibited species.	Urgent	1
228	Conduct studies documenting the subsistence harvest (patterns, norms, quantities) in communities affected by Council actions.	GLH Critical on-going monitoring	228	Conduct studies documenting the subsistence harvest (patterns, norms, quantities) in communities affected by Council actions.	Critical Ongoing Monitoring	1
229	Evaluate the effectiveness of setting ABC and OFL levels for data-poor crab stocks	Urgent	229	Evaluate the effectiveness of setting ABC and OFL levels for data-poor crab stocks	Urgent	1
230	Examine social and economic interactions between coastal communities and commercial and recreational fisheries	Important (Near Term)	230	Examine social and economic interactions between coastal communities and commercial and recreational fisheries	Important (Near Term)	1
231	Retrospective analysis of the impact of Chinook salmon PSC avoidance measures on the BSAI pollock fishery	Important (Near Term)	231	Retrospective analysis of the impact of Chinook salmon PSC avoidance measures on the BSAI pollock fishery	Important (Near Term)	1

232	Develop management strategy evaluations that incorporate changing climate and market economic conditions.	Urgent	232	Develop management strategy evaluations that incorporate changing climate and market economic conditions.	Urgent	1
233	Develop an ongoing database of product inventories	Strategic (Future Needs)	233	Develop an ongoing database of product inventories	Strategic (Future Needs)	1
234	Analyze current determinants of demand for principal seafood products	Strategic (Future Needs)	234	Analyze current determinants of demand for principal seafood products	Strategic (Future Needs)	1
235	Investigate gear modifications and changes in fishing practices to reduce bycatch and PSC	Urgent	235	Investigate gear modifications and changes in fishing practices to reduce bycatch and PSC	Urgent	1
236	Conduct studies of sperm whale and killer whale depredation of catch in long-line fisheries and surveys	Important (Near Term)	236	Conduct studies of sperm whale and killer whale depredation of catch in long-line fisheries and surveys	Important (Near Term)	1
237	Improved habitat maps	Important (Near Term)	237	Improved habitat maps	Important (Near Term)	1
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.	Strategic (Future Needs)	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.	Strategic (Future Needs)	1
239	Assess the extent of the distribution of corals	Urgent	239	Assess the extent of the distribution of corals	Urgent	1
240	Develop a multivariate index of the climate forcing of the Bering Sea shelfA	Important (Near Term)	240	Develop a multivariate index of the climate forcing of the Bering Sea shelf	Important (Near Term)	1
241	Develop bottom and water column temperature database and indices	Important (Near Term)	241	Develop bottom and water column temperature database and indices	Important (Near Term)	1
242	Collect and maintain primary production time series	Strategic (Future Needs)	242	Collect and maintain primary production time series	Strategic (Future Needs)	1
243	Collect and maintain data on forage fish community composition and abundance	Critical Ongoing Monitoring				#N/A
244	Collect and maintain time-series data on the community composition, production and biomass of benthic invertebrate and vertebrate fauna	Strategic (Future Needs)	244	Collect and maintain time-series data on the community composition, production and biomass of benthic invertebrate and vertebrate fauna	Strategic (Future Needs)	1
245	Assess the impact of increases in recovering whale populations on lower trophic level energy pathways	Important (Near Term)	245	Assess the impact of increases in recovering whale populations on lower trophic level energy pathways	Important (Near Term)	1
246	Cooperative research efforts to supplement existing at-sea surveys that provide seasonal, species-specific information on upper trophic levels	Important (Near Term)	246	Cooperative research efforts to supplement existing at-sea surveys that provide seasonal, species-specific information on upper trophic levels	Important (Near Term)	1
247	Assess the relative importance of non-commercially exploited species to human communities	Important (Near Term)	247	Assess the relative importance of non-commercially exploited species to human communities	Important (Near Term)	1
248	Conduct focused studies to map and understand assemblage distribution and the spatial importance of predator-prey interactions in response to environmental variability	Strategic (Future Needs)	248	Conduct focused studies to map and understand assemblage distribution and the spatial importance of predator-prey interactions in response to environmental variability	Strategic (Future Needs)	1
249	Assess the movement of Steller sea lions, northern fur seals, Tanner crab, snow crab, and Pacific cod	Critical Ongoing Monitoring	249	Assess the movement of Steller sea lions, northern fur seals, Tanner crab, snow crab, and Pacific cod	Critical Ongoing Monitoring	1
250	Conduct ecosystem structure studies	Important (Near Term)	250	Conduct ecosystem structure studies	Important (Near Term)	1
251	Modeling studies of ecosystem productivity	Important (Near Term)	251	Modeling studies of ecosystem productivity	Important (Near Term)	1
361	Effects of Ocean Acidification on Scallops	Strategic (Future Needs)	361	Effects of Ocean Acidification on Scallops	Strategic (Future Needs)	1
362	Monitoring potential water quality impacts	Important (Near Term)	362	Monitoring potential water quality impacts	Important (Near Term)	1
363	Area-specific variability in scallop population processes	Important (Near Term)	363	Area-specific variability in scallop population processes	Important (Near Term)	1
364	Updated sperm whale stock assessment	Critical Ongoing Monitoring	364	Updated sperm whale stock assessment	Critical Ongoing Monitoring	1
365	Retrospective analysis of the impact of Chinook PSC avoidance measures on communities of western Alaska	Urgent	365	Retrospective analysis of the impact of Chinook PSC avoidance measures on communities of western Alaska	Urgent	1
366	Continue to investigate time variation and the shape of fishery and survey selectivity models	Urgent	366	Continue to investigate time variation and the shape of fishery and survey selectivity models	Urgent	1

367	Continue to improve stock assessment methodology with respect to uncertainty	Urgent	367	Continue to improve stock assessment methodology with respect to uncertainty	Urgent	1
368	Develop a simulation model of Steller sea lion fishery interactions	Urgent	368	Develop a simulation model of Steller sea lion fishery interactions	Urgent	1
381	Effects of changes to the observer program	Urgent	381	Effects of changes to the observer program	Urgent	1
382	Investigate in situ methods of tagging species that experience barotrauma	Important (Near Term)	382	Investigate in situ methods of tagging species that experience barotrauma	Important (Near Term)	1
383	Determine quantitative indicators of spatial structure, particular for walleye pollock and Pacific cod	Important (Near Term)	383	Determine quantitative indicators of spatial structure, particular for walleye pollock and Pacific cod	Important (Near Term)	1
384	Effects of changes to the observer program	Delete and put description into 381		Deleted		#N/A
385	Study Pacific halibut PSC, bycatch, and discard behavior in fisheries	Urgent	385	Study Pacific halibut PSC, bycatch, and discard behavior in fisheries	Urgent	1
386	Investigate long term effects of fishing on Pacific halibut	Strategic (Future Needs)	386	Investigate long term effects of fishing on Pacific halibut	Strategic (Future Needs)	1
387	Determine effects of migration on the Pacific halibut population and management	Important (Near Term)	387	Determine effects of migration on the Pacific halibut population and management	Important (Near Term)	1
388	Study temporal and spatial patterns in size-at-age of Pacific halibut	Urgent	388	Study temporal and spatial patterns in size-at-age of Pacific halibut	Urgent	1
389	Investigate ecosystem effects and inter-species interactions of halibut	Important (Near Term)	389	Investigate ecosystem effects and inter-species interactions of halibut	Important (Near Term)	1
390	Assess the population status of harbor seals in the Aleutian Islands and determine factors affecting their population trajectories	Critical Ongoing Monitoring	390	Assess the population status of harbor seals in the Aleutian Islands and determine factors affecting their population trajectories	Critical Ongoing Monitoring	1
391	Investigate spatial stock dynamics and population connectivity for Tanner Crab (2 stocks)	Important (Near Term)				#N/A
431	Develop tools for analyzing coastal community vulnerability to fisheries management changes	Important (Near Term)	431	Develop tools for analyzing coastal community vulnerability to fisheries management changes	Important (Near Term)	1
451	Pending - Arrowtooth flounder stock structure and movement	Important (Near Term)	451	Pending - Arrowtooth flounder stock structure and movement	Important (Near Term)	1
452	Pending - Dusky Rockfish and Shortspine Thornyhead genetics research for improved population structure	Important (Near Term)	452	Pending - Dusky Rockfish and Shortspine Thornyhead genetics research for improved population structure	Important (Near Term)	1
453	Pending - Cod density in untrawlable areas in the AI	Important (Near Term)	453	Pending - Cod density in untrawlable areas in the AI	Important (Near Term)	1
454	Pending - Sculpin natural mortality, seasonal food habits	Important (Near Term)	454	Pending - Sculpin natural mortality, seasonal food habits	Important (Near Term)	1
455	Pending - Shark aging, size at maturity, natural mortality	Important (Near Term)	455	Pending - Shark aging, size at maturity, natural mortality	Important (Near Term)	1
471	Develop assessment methods for data poor and data moderate stocks	Pending		Deleted		
472	Evaluate causes of variable meat size, undersize meats in scallops	Pending	472	Evaluate causes of variable meat size, undersize meats in scallops	Important (Near Term)	1
			NNN	Assess dependence and impacts of halibut management actions on communities	Urgent	#N/A
			NNN	Investigate factors underlying fishery responses to halibut PSC caps	Urgent	#N/A
			NNN	Examine the relative importance of historical closed areas in the vicinity of the Pribilof Islands as juvenile halibut nursery habitat relative to other regions coast-wide.	Urgent	#N/A

381	Foraging ecology studies of Steller sea lions	Important (Near-Term)	#N/A
395	Conduct multivariate analysis of bycatch data from the scallop observer program	Strategic (Future Needs)	#N/A
243	Collect and maintain data on forage fish community composition and abundance	Critical Ongoing Monitoring	#N/A
384	Effects of changes to the observer program	Delete and put description into 381	#N/A
391	Investigate spatial stock dynamics and population connectivity for Tanner Crab (2 stocks)	Important (Near-Term)	#N/A
471	Develop assessment methods for data-poor and data-moderate stocks	Strategic (Future Needs)	