

North Pacific Research Board: Request for Proposal (RFP) Evolution 2003-2008

Requests for proposals have been aligned with the NPRB Science Plan. Project topics summarize original language in each RFP. For easier cross-reference, Research Theme colors match those in the Science Plan.

RFPs		2003	2004	2005	2006	2007	2008
IERP	Bering Sea IERP (p 133)	• ---	<i>Also: Special Need 2</i>	• BSAI LME planning <i>Also: Special Need 2</i>	• Response of the Bering Sea ecosystem to climate change: modeling and retrospective studies • BSIERP LME team established	• Response of the Bering Sea ecosystem to climate change: full RFP for BSAI IERP	• Program funded for 2007-2012: BEST/BSIERP partnership, \$35M
	Gulf of AK IERP (p 136)	• ---	• ---	• GOA LME planning	• GOA LME team established	• GOA LME planning with team	• GOA LME implementation and partnerships
One-Time Special Needs		• ---	1 Develop methods for remote sensing of upper trophic level abundance 2 Evaluate ecosystem indicators 3 Forage Fish stock assessment methodologies (401) 4 Evaluation of ocean circulation models 5 Education and Outreach (402) 6 Alaska Marine Information System (404) 7 Arctic Ocean Synthesis 8 Southeast Alaska Synthesis (406)	1 Develop methods for remote sensing of upper trophic level abundance 2 Evaluate ecosystem indicators (502) 3 Arctic Ocean Synthesis (503) 4 Ecosystem modeling assessment conference (EMC) 5 Evaluate seabirds as ecosystem indicators (516) 6 Evaluate Plankton monitoring methods 7 Analysis of ongoing salmon programs (504) 8 Evaluation of bio-economic models for regulatory impact assessments 9 Synthesis of subsistence data availability and sampling programs	1 Marine habitat mapping technology workshop (615)	1 Establish a comprehensive sea ice database for the Bering Sea/Bering Strait region 2 Compile and analyze chlorophyll data 3 Design arctic baseline survey north of Bering Strait	
OTHER RESEARCH APPROACHES AND PARTNERSHIPS	Local and Traditional Knowledge (p 144)	• Need for LTK emphasized in text	• Need for LTK emphasized in text	• Need for LTK emphasized in text	• LTK encouraged in text • LTK related to other priorities <i>Also: Community Involvement</i>	• LTK encouraged in text • LTK related to other priorities <i>Also: Community Involvement</i>	• LTK encouraged in text • LTK related to other priorities <i>Also: Community Involvement</i>
	Coordination and Partnerships (p 147)	• ---	• ---	• ---	Oil Spill Recovery Institute • Forage fish	Oil Spill Recovery Institute • Socio-economics: modeling community impacts • Tracking and monitoring marine organisms Alaska Ocean Observing System • Evaluation of buoy locations	Oil Spill Recovery Institute • Socio-economics: modeling community impacts • Contaminant baseline assessment • Forage fish and near-shore habitat associations
	Cooperative Research with Industry (p 148)	• ---	• ---	• ---	• Cooperative research encouraged in text	Fishing Industry • Gear modification • Fisheries monitoring • Bycatch remediation • Ecosystem monitoring Oil and Gas Industry • Seaduck migration and impacts • Walrus in Chukchi Sea • Polar bears in Chukchi Sea • North Slope salmon	Fishing Industry • Gear modification • Fisheries monitoring • Bycatch reduction • Ecosystem monitoring and research • Whale entanglement avoidance and deterrents • Habitat mapping Oil and Gas Industry • Polar Bears • Marine mammal acoustic studies • Shoreline change • Ice Seals • Salmon distribution • Influence of oil and gas development on marine bird distribution, migration and habitat use
	Education, Outreach and Community Involvement (p 150)	Education and Outreach • Minimum \$1,500 per project Community Involvement • Encouraged in text	Education and Outreach • Minimum \$2,000 per project Community Involvement • Encouraged in text	Education and Outreach • Minimum \$2,000 per project Community Involvement • Encouraged in text	Education and Outreach • Minimum \$2,000 per project Community Involvement • Pilot project for community-based observation system	Education and Outreach • Minimum \$2,000 per project Community Involvement • Community-based research	Education and Outreach • \$60,000 to outreach professionals (BSIERP) • Minimum \$2,000 per project (non-BSIERP) Community Involvement • Community-based research

RFPs		2003	2004	2005	2006	2007	2008
NPRB SCIENCE PLAN RESEARCH THEMES	Lower Trophic Level Productivity (p 41)	<p>Ocean monitoring</p> <ul style="list-style-type: none"> Long term monitoring of NPZ <p>Lower trophic level productivity</p> <ul style="list-style-type: none"> Factors affecting marine productivity Influence of climate on ecosystems Unusual events (e.g., coccolithophorid blooms) Ecosystem models for managers 	<p>Ocean monitoring</p> <ul style="list-style-type: none"> Long term monitoring of NPZ <p>Lower trophic level productivity</p> <ul style="list-style-type: none"> Factors affecting marine productivity Influence of climate on ecosystems <p><i>Also: Special Needs 3, 4</i></p>	<p>Ocean monitoring</p> <ul style="list-style-type: none"> Determining ecosystem status <p><i>Also: Special Need 6</i></p>	<p>Ocean monitoring</p> <ul style="list-style-type: none"> CPR, M2-M8 buoys, GAK Line (non-RFP) <p>Lower trophic level productivity</p> <ul style="list-style-type: none"> Research related to Table 3-2, Science Plan 	<p>Ocean monitoring</p> <ul style="list-style-type: none"> Long-term ocean monitoring <p>Lower trophic level productivity</p> <ul style="list-style-type: none"> Shelf-inland water coupling in ACC; importance of freshwater runoff Seasonal/interannual variation in primary and secondary production in SE GOA Benthos Process driving secondary production 	<p>Oceanography & Lower Trophic Level Productivity</p> <ul style="list-style-type: none"> Coupling between shelf, nearshore and inland waters in the Alaska Coastal Current (ACC) as well as the importance of freshwater runoff Population dynamics, distribution and abundance, productivity and trophic roles of appendicularians and pteropods Oceanic zooplankton species in shelf food webs: on-shelf transport processes Euphausiid biology
	Fish Habitat (p 51)	<ul style="list-style-type: none"> Coral/sensitive substrate habitat maps Factors affecting habitat Impacts of fisheries and other human influences Fishery mgmt tools to protect habitat 	<ul style="list-style-type: none"> Coral/sensitive substrate habitat maps Factors affecting habitat Impacts of fisheries/human influences Fisheries impacts on prey/predators Fishery mgmt tools to protect habitat Evaluation of fish/habitat associations 	<ul style="list-style-type: none"> Coral/sensitive substrate habitat maps Effects of commercial fishing on groundfish essential habitat Ecosystem function of different habitats <p><i>Also: Special Need 1</i></p>	<ul style="list-style-type: none"> Recovery/resilience of fish habitat Research related to Table 3-3, Science Plan <p><i>Also: Special Need 1</i></p>	<ul style="list-style-type: none"> Recovery/resilience of fish habitat Effects of commercial fishing on groundfish essential habitat 	<ul style="list-style-type: none"> Habitat mapping in the Northern Bering Sea Research Area
	Fish and Invertebrates (p 65)	<p>Bycatch</p> <ul style="list-style-type: none"> Bycatch and mortality assessment and reduction techniques Stock composition research on bycatch spp. in groundfish fisheries <p>Stock assessment/recruitment processes</p> <ul style="list-style-type: none"> Improve stock assessment techniques and mortality estimates Interdependence of fisheries or stocks Salmon stock dynamics, mortality, migration Genetic identification of salmon stocks <p>Fishery mgmt/economics</p> <ul style="list-style-type: none"> Economic impacts of mgmt including capacity reduction 	<p>Bycatch</p> <ul style="list-style-type: none"> Bycatch and mortality assessment and reduction techniques Stock composition research on bycatch spp. in groundfish fisheries Info on lesser-known, non-target finfish spp. <p>Stock assessment/recruitment processes</p> <ul style="list-style-type: none"> Improve stock assessment techniques and mortality estimates Factors affecting stock dynamics and dist. Fishing effects on life histories/genetics Delineations of stock boundaries <p>Fishery mgmt/economics</p> <ul style="list-style-type: none"> Socio-economic impacts, including capacity reduction/habitat protection 	<p>Stock assessment/recruitment processes</p> <ul style="list-style-type: none"> Spatially explicit pollock assessments Life history information gaps Crab life history and ecology Research related to Table 3-4, Science Plan <p><i>Also: Special Need 7</i></p>	<p>Bycatch</p> <ul style="list-style-type: none"> Reduction of bycatch and bycatch rates <p>Stock assessment/recruitment processes</p> <ul style="list-style-type: none"> Life history, ecology and fluctuations in BSAI crab stocks Shark, skate, squid, sculpin and octopus stock assessment and life history Migration patterns and spatial connectivity Seasonal diets of exploited fish stocks Research related to Table 3-4, Science Plan 	<p>Bycatch</p> <ul style="list-style-type: none"> Bycatch estimation <p>Stock assessment/recruitment processes</p> <ul style="list-style-type: none"> Life history, ecology and fluctuations in BSAI crab stocks Local impacts of fishing on prey of upper trophic level consumers Squid and shark assessment Research related to Table 3-4, Science Plan and North Pacific Fishery Management Council Research Priorities 	<ul style="list-style-type: none"> Local impacts of fishing on prey availability for top trophic level consumers Stock assessment and life history of sleeper and salmon sharks Skate nurseries Rockfish Efficacy of bycatch mitigation measures Processes controlling recruitment dynamics for all crab species Over-winter survival of Pacific Salmon species Pacific Cod
	Marine Mammals (p 83)	<ul style="list-style-type: none"> Stressed/endangered spp. survival Responses to ocean climate trends and prey availability 	<ul style="list-style-type: none"> Factors, including fisheries, affecting pinnipeds (excluding Steller sea lions) and cetaceans <p><i>Also: Special Need 1</i></p>	<ul style="list-style-type: none"> Ice seal studies Northern fur seal studies <p><i>Also: Special Need 1</i></p>	<ul style="list-style-type: none"> Ice seal and walrus distribution/abundance Northern right whale distribution/abundance Research related to Table 3-9, Science Plan 	<ul style="list-style-type: none"> Sea otters North Pacific right whales Cook Inlet beluga whales Polar bears Fur seals 	<ul style="list-style-type: none"> Ice Seals Steller Sea Lions Pacific Walrus in the Chukchi Sea Polar Bears
	Seabirds (p 97)	<ul style="list-style-type: none"> Stressed/endangered spp. survival Responses to ocean climate trends and prey availability 	<ul style="list-style-type: none"> Fisheries and other factors affecting seabirds and seabirds <p><i>Also: Special Need 1</i></p>	<p><i>Also: Special Needs 1, 5</i></p>	<ul style="list-style-type: none"> Distribution/abundance of seabirds at sea Demographic parameters Human impacts during migration and overwintering 	<ul style="list-style-type: none"> Seabirds as indicators of forage fish Beached bird monitoring program Stressed and endangered spp. survival 	<ul style="list-style-type: none"> Seabird-ecosystem relationships Indirect and long-term population effect of contaminants Spectacled Eiders
	Humans (p 113)	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> Connecting fisheries, mgmt and science Fisheries mgmt systems and stewardship of living marine resources Conflict elimination in statutes, regulations Strengthening international agreements Impact of public participation in mgmt Fisheries history Regulatory enforcement/compliance Fishing safety measures analysis <p><i>Also: Special Needs 8,9</i></p>	<ul style="list-style-type: none"> Research related to Table 3-13, Science Plan 	<ul style="list-style-type: none"> Research related to Table 3-13, Science Plan and North Pacific Fishery Management Council Research Priorities 	<ul style="list-style-type: none"> Analyses of current determinants of exvessel, wholesale, international, and retail demands for principal seafood products from the GOA and BSAI Pre- and post-implementation studies of the benefits and costs associated with changes in management regimes Prospective and retrospective analyses of changes in the spatial and temporal distribution of fishing effort
	Other Prominent Issues (p 123)	<p>Contaminants</p> <ul style="list-style-type: none"> Sources, transport, and accumulation Effects on ecosystem structure and function Effects of climate change Oil spills, logging runoff, coastal development Predictive model development <p>Invasive Species</p> <ul style="list-style-type: none"> Origins and impacts 	<p>Contaminants</p> <ul style="list-style-type: none"> Sources, transport, and accumulation Effects on ecosystem structure and function 	<p>Contaminants</p> <ul style="list-style-type: none"> Sources, transport, and accumulation Effects on ecosystem structure and function 	<p>Contaminants</p> <ul style="list-style-type: none"> Sources, transport, effects and accumulation in subsistence, recreational and commercial spp., and other ecosystem components Shipping risk assessment studies 	<p>Contaminants</p> <ul style="list-style-type: none"> Shipping risk assessment studies Other 	<p>Contaminants</p> <ul style="list-style-type: none"> Long-term contamination Point source contamination
	Ecosystem Studies (p 133)	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<ul style="list-style-type: none"> --- 	<p>Aleutian Islands</p> <ul style="list-style-type: none"> Nearshore Dynamics of the Aleutian Islands Ecosystem impacts of climate and ocean conditions in the Aleutian Islands Fishing effect interactions Advancing ecosystem approach to fisheries management Development of forecasting tools that incorporate ecosystem indicators Ecosystem indicators including retrospective studies