AOOS 2013/14 Funding for Modeling Efforts Marine Operations

WRF Wind Model (\$100K)

 Maintain operational WRF model with daily model runs for GOA, PWS and Cook Inlet domains

ROMS Circulation Modeling (\$100K)

- Validate PWS ROMS forecasting system for 24/7; incorporate new hydro model
- Maintain & validate real-time PWS ROMS forecasts, add Bering Sea Cook Inlet Modeling (\$0)
 - Continue facilitating the Cook Inlet Modeling Working Group to help modelers network, integrate, and advance forecast models for wind, waves, and ocean circulation
 - Support NCOS development of Cook Inlet circulation model

SWAN Modeling for Cook Inlet (\$0)

 Continue partnering with Texas A&M University to maintain wave model for PWS and Cook Inlet

NCEP Model for Beaufort Sea (\$35K)

 Use wave data from bottom mounted pressure sensors to validate fall NCEP wave forecasts

Ecosystems, Fisheries and Climate Trends

Hydrological model validation for PWS (\$32.5K)

- Identify influence of rainfall on freshwater input, validate w/ clearly defined inputs
- Complete model validation, provide data to ROMS modeling effort

Downscaled Climate Models (funding through STAMP project)

• Develop downscaled models for entire AK coast (winds, sea surface temp, precipitation, ice)

Ocean Acidification Forecast (\$100k)

- Develop numerical model for GOA identifying areas most vulnerable to OA NPZ Model for PWS (\$0k)
- Maintain model developed by Fei Chai at U of Maine

Chinook Salmon Run Timing Outlook and Forecast in the Yukon River Delta