OPC Research Priorities for 2009:

Climate Change and Ocean Acidification

- Improve the State's understanding of the impacts of climate change and ocean acidification on California's ocean and coastal ecosystems—with a particular focus on biological resources
- Lead to the development of products, tools, and recommendations designed to allow the state to adapt management practices to address anticipated climate change impacts

Harmful Algal Blooms (HABs)

- Generate information that will help coordinate existing efforts and methodologies to advance California's capabilities to predict and monitor HAB events
- Advance the understanding of the factors, including anthropogenic and natural drivers, which influence HABs
- Lead to the development of a HAB information network, (e.g. data sharing protocols)—coordinated with existing or planned observing systems—which will improve California's predictive capabilities to HAB events

Invasive Species:

- Provide information that will enable more strategic and effective prevention, detection, and early intervention strategies
- Quantify risks posed by all vectors of marine and estuarine invasive species
- Develop state-wide invasive species detection protocols and improve the state's capacity to respond to, eradicate, and control invasive species once they have been detected

Water Quality

- Develop transparent and scientifically-valid basis for pollutant standards, water quality indicators, improved predictive models that include field verification of TMDLs and watershed functioning, or pollutant origin and dynamics

Wave and Tidal Energy Development

- Assess the potential ecological and economic impacts of wave and tidal energy development in California
- Identify and assess the effectiveness of methods to reduce or eliminate harmful effects
- Develop indicators that can inform development and monitoring plans.