

# ADAPTIVE MANAGEMENT

## THE ORPC APPROACH

ORPC places strong emphasis on minimizing effects to marine and riverine environments through the design and careful siting of our power systems. We work with federal and state resource agencies, local stakeholders, universities, national labs, and industry experts to develop and implement an adaptive approach to site development, project licensing, permitting, and environmental monitoring.

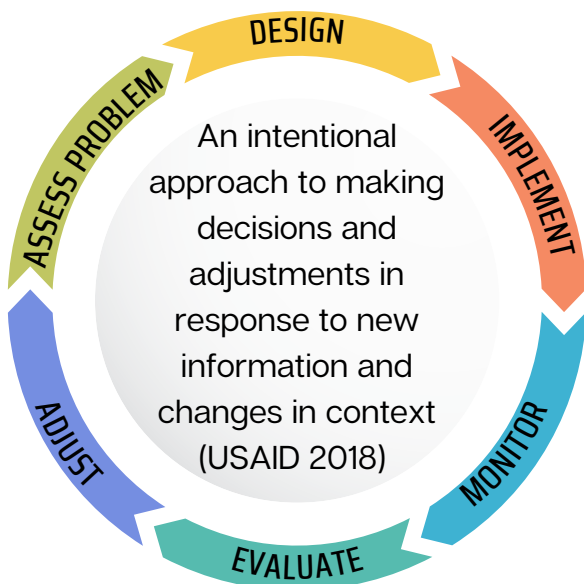
ORPC's careful and collaborative project development methods have helped us become the first and only company to deploy and operate grid-connected tidal and river hydrokinetic devices licensed by the Federal Energy Regulatory Commission in the United States.



### What are the benefits?

- De-risks innovative technologies
- Minimizes study requirements and duration
- Accelerates permit processes and amendments
- Encourages consistent and effective communication with scientific and regulatory agencies, governments and local communities

### What is adaptive management?



# ADAPTIVE MANAGEMENT IN COOK INLET, ALASKA

The American Tidal Energy Project, funded by the U.S. Department of Energy, aims to develop a 1 megawatt (MW) to 5 MW tidal site in Cook Inlet, Alaska, to generate clean, predictable, renewable energy for the Kenai Peninsula.

## Establishing *an adaptive plan*

ORPC has established and meets regularly with an adaptive management team to develop project monitoring plans for several protected species in Cook Inlet, including the beluga whale, short-tailed albatross, steller sea lion, northern sea otter and chinook salmon. This team consists of representatives from:

- »» NOAA Fisheries
- »» U.S. Fish and Wildlife Service
- »» U.S. Coast Guard
- »» U.S. Environmental Protection Agency
- »» Alaska Department of Fish and Game
- »» Alaska Department of Natural Resources
- »» Alaska Office of History and Archaeology
- »» Kenai Peninsula Borough



## Monitoring *experience*

- »» ORPC implemented multiple protected species monitoring plans with the adaptive management team for Cobscook Bay Tidal Energy Project in Eastport, Maine. During the project, environmental risk was retired and no negative effects to marine life were documented.
- »» ORPC implemented a fish monitoring plan with the Igiugig Hydrokinetic Project adaptive management team in Igiugig, Alaska. Since project start, there have been millions of turbine rotations and no observed injuries or mortalities to the population of migrating adult sockeye salmon.

