



CUMULATIVE IMPACTS



Cumulative Impacts

Cumulative impacts on the environment result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions; they can be individually minor, but collectively significant, and occur over a long period of time.

Additive cumulative effects are the sum of the effects on a resource.

Interactive cumulative effects can be **countervailing**, meaning the net adverse effect is less than the sum of the individual effects, or **synergistic**, meaning the net adverse effect is greater than the sum of the individual effects.



NOS Survey Vessels

NOS surveying and mapping activities



Oil and Gas Activities, Offshore California

Past, on-going, and reasonably foreseeable future actions within the Action Area

Cumulative impact on resources

Cumulative Actions in the Action Area

- Other Surveying and Mapping Efforts
- Offshore Oil and Natural Gas Development
- Offshore Renewable Energy Development
- Climate Change
- Commercial Shipping and Recreational Boating
- Marine Minerals Projects
- Offshore Carbon Storage Resource Assessments
- Offshore Liquefied Natural Gas (LNG) Terminals
- National Defense and Homeland Security Activities
- Submarine Telecommunication Cable Infrastructure
- Commercial and Recreational Fishing
- Coastal Development

The Proposed Action, when considered together with past, on-going, and reasonably foreseeable projects in the Action Area, would not significantly contribute to cumulative impacts on any of the resource areas analyzed.