NOAA OMICS NATIONWIDE IMPACT

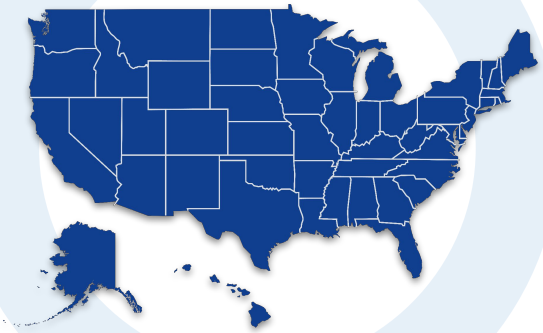
Insert short phrase about the impact

Invasive Species

The speed, accuracy, and sensitivity of eDNA data rapidly warns of invasions threatening national biosecurity. NOAA scientists deploy eDNA assays for European Green crabs and *Caulerpa* "killer algae" to enhance invasive species surveillance.

Scaling Environmental Observations

Utilizing 'omics methods with uncrewed vehicles has enabled unprecedented biological observations. In the Great Lakes, uncrewed vehicles provide near real-time toxic bacteria detection, ensuring more cost effective and reliable forecasts for safer drinking water.



Supporting American Fisheries

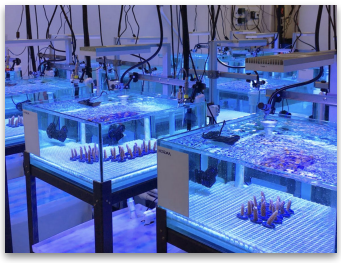
'Omics data informs fisheries managers of stock boundaries, biomass, and age for key commercial species. For example, NOAA 'Omics pioneered genetic technology to enhance U.S. salmon fisheries.

Seafood Forensics

Foreign seafood import fraud harms marine life and coastal economies. 'Omics technologies enhances traceability, protects consumers, and increases sustainable U.S. seafood competitiveness on the global market.

Strengthening Coral Ecosystems

Coral reefs are crucial for coastal protection and support the economy through fisheries and tourism. NOAA 'Omics is helping fight coral diseases and enhance coral restoration efforts.



Dive Deeper

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