

USVs to Protect Vulnerable Marine Sanctuaries and Ecosystems



Liquid Robotics and NOAA's Office of National Marine Sanctuaries (ONMS) Pacific Islands Region (PIR) has announced a multi-year agreement to develop solutions to help protect and preserve the Hawaiian and American Samoa marine sanctuaries and monuments. Liquid Robotics' Wave Glider, an autonomous surface ocean robot, will be the core technology to conduct long-term environmental monitoring and surveillance of the Pacific's most diverse and endangered underwater ecosystems. This partnership will help address the critical long-term monitoring and scientific data collection gaps that are not economically feasible with traditional research assets.

The use of autonomous systems and services to augment NOAA's ONMS current resources will greatly enhance their ability to assess and evaluate the increasing threats

posed by:

- Illegal, Unreported and Unregulated fishing (IUU)
- Water quality and marine debris
- Coral reef damage and bleaching
- Climate change

Over the past decade, Liquid Robotics have partnered with NOAA scientists on projects ranging from ocean acidification, measuring Arctic waves, and collecting storm intensity data from the surface of the hurricane, according to Gary Gysin, president and CEO of Liquid Robotics.

This partnership provides services to the National Marine Sanctuary System's six sanctuary units, as well as:

- NOAA's National Ocean Service (NOS)
- The State of Hawaii and the Territory of American Samoa
- The Humpback Whale National Marine Sanctuary (HHWNMS),
- National Marine Sanctuary of American Samoa (NMSAS),
- Papahānaumokuākea Marine National Monument (PMNM) and remote Northwestern Hawaiian Islands