

Artificial Reefs

Background: From a fisheries perspective artificial reefs (ARs) are a controversial topic with many unresolved questions. Their utility as a fishery management tool is poorly understood and applicable science is lacking. There is no comprehensive database of AR science, and the few existing studies generally are limited to cite or species specific considerations.

In May 2016, NOAA Fisheries and ASMFC co-hosted a national workshop focusing on ARs as a potential tool for fisheries management. Recognizing that NOAA Fisheries AR experience largely is limited to mitigation and restoration activities and that most AR experience resides with the coastal states, the workshop was designed to be exploratory with a focus on current AR-related experience and issues faced by state program managers, academic researchers, and recreational and commercial fisheries. The workshop was not intended to provide guidance on how or to what extent management agencies should engage the use of ARs.

Most State programs interact with the federal government in various capacities during permitting, planning, thus many state level workshop participants supported a more clearly defined federal role. Likewise the general public in attendance voiced support for a more defined federal role, despite mixed opinion ranging from strong support to strong opposition. Although NOAA issued a National Artificial Reef plan in 2007 to guide use of materials, siting and installation of ARs, NOAA Fisheries has not yet delineated its role regarding ARs. Despite geographically broad and strong recreational constituent interest in ARs, demonstrative state level interest in ARs, and the substantial funds becoming available in the Gulf of Mexico from the Deepwater Horizon settlement -- some portion of which could be used by states to expand AR activities--, NOAA does not appear to have a vision or strategy detailing its role with regard to ARs.

Potential MAFAC ask:

Request:

- 1) An overview NOAA Fisheries' statutory and/or policy mandates/obligations, historical involvement, and recent/ongoing work regarding ARs, including clarification of programmatic responsibility for AR within NOAA Fisheries. The discussion of artificial reefs should include not just artificial reefs, but also the larger concept of "artificial habitat," specifically meaning offshore energy facilities (e.g., oil and wind).
- 2) NOAA Fisheries to initiate a process envision its role and clarify responsibilities regarding artificial reefs in executing its core mission, including as a fisheries management tool and discussing NOAA's role in assuring fishing accessibility to off-shore energy sites.

Citizen Science

Background: The internet and mobile technology have led to an unprecedented explosion of interconnectedness, ability to capture data, and ability to share those data in real-time or near real-time. It is clear that many constituents share dissatisfaction with the current mechanisms in place for fisheries monitoring and data collection. Despite this frustration, there is a willingness among constituents to contribute better data and this connectivity and new technology has expanded opportunities for constituents to share ideas and opinions. As several Fishery Management Councils have recognized, these and other emerging capabilities provide enormous opportunity to engage citizens in data collection and science for a range topics. The South Atlantic Fishery Management Council has already held meetings and identified projects to pursue. Expanded public engagement on science brings with it a host of direct and ancillary benefits. NOAA Fisheries does not appear to have a concerted, coordinated vision or strategy for engaging the public and utilizing emerging technologies (e.g. mobile platforms) in support of science and approaches such as citizen science.

Potential MAFAC ask:

Request:

- 1) An overview of how NOAA Fisheries defines citizen science as it relates to fisheries.
- 2) An overview of NMFS sponsored citizen science actions/projects to date, and of NOAA Fisheries' potential vision for the role of citizen science in supporting its mission, including the use of mobile applications.
- 3) Development of a NMFS strategy/plan of engagement on citizen science with specific attention to the integration of resulting data into NOAA Fisheries science activities and products