



Artificial Habitats in FKNMS

Florida Keys National Marine Sanctuary: Marine Zoning and Regulatory Review

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Overview

- History of artificial habitat placement and use in the Florida Keys
- Current status of artificial habitat permitting, placement, and monitoring
- Artificial habitat definitions
- FKNMS mandates and regulation



History of artificial habitat placement

1975 Key Largo National Marine Sanctuary

- Protects coral, prohibits certain marine life collection & fish traps

1981 Looe Key National Marine Sanctuary

- Protects coral, prohibits certain marine life collection & fish traps

1990 Florida Keys National Marine Sanctuary designation

- Creates Area To Be Avoided, prohibits hydrocarbon exploration

1997 Florida Keys National Marine Sanctuary regulations

- Protects coral, creates marine zones, *prohibits discharge, prohibits altering the sea floor*, and other sanctuary-wide and zone-specific rules

55 artificial habitats deployed in Florida Keys between 1945 – 1996
under other state and federal authority
(does not include shipwrecks)

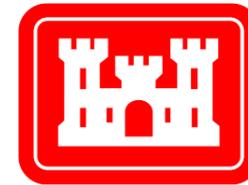
Current status of artificial habitats – permitting



State (Florida DEP) and federal (FKNMS, US Army Corps of Engineers) permits required for artificial habitat deployment in Florida Keys.

Consultation / coordination also required:

- US Fish & Wildlife Service
- US Coast Guard
- US Environmental Protection Agency
- NOAA
 - Habitat Conservation Division
 - Protected Resources Division
- Florida Fish and Wildlife Conservation Commission
- Municipalities, Monroe County
- National Environmental Policy Act (NEPA) – Environmental Assessment / Environmental Impact Statement
 - Executive orders (invasive species, coral reef protection)
 - Magnuson Stevens Act
 - Coastal Zone Management Act
 - Endangered Species Act
 - National Historic Preservation Act



Current status of artificial habitats – deployment and monitoring



Artificial reef (scuttled vessel) permits

Project	Deployed	Monitoring	Status
Ocean Freeze	1998	Agreement between Dade County, Biscayne NP, and FKNMS to monitor	not completed
Adolphus Busch	1998	Stability analysis, diver/use monitoring, fish monitoring, integrity of anchors & closures	not completed
Spiegel Grove	2002	5-year reef fish monitoring, diver/use/economic monitoring	completed
Vandenberg	2009	3-year reef fish monitoring, diver/use/economic monitoring	completed
		Biological monitoring, stability analysis	not completed

Current status of artificial habitats – deployment and monitoring

Education and research permits

Type	# permits	Reports submitted	Status of materials
Education	4	1	1 required removal; status unknown 3 permitted to be left in place
Research	17	10 (+3 not yet due)	11 status unknown 3 not yet required to remove

~ 10 inquiries/year for artificial habitat deployment

reef balls ● underwater memorials ● statuary/sculpture gardens ● fish attraction devices (FADs) ● debris disposal ● underwater hotels ● scuttled vessels



Definitions

US Environmental Protection Agency (adopted from London Convention)

An artificial reef is a submerged structure deliberately constructed or placed on the seabed to emulate some functions of a natural reef such as protecting, regenerating, concentrating, and/or enhancing populations of living marine resources. Objectives of an artificial reef may also include the protection, restoration and regeneration of aquatic habitats, and the promotion of research, recreational opportunities, and educational use of the area.



The term does not include submerged structures deliberately placed to perform functions not related to those of a natural reef – such as breakwaters, mooring, cables, pipelines, marine research devices or platforms – even if they incidentally imitate some functions of a natural reef.

Definitions

Florida Administrative Code 68E-9.002



“Artificial reef” for purposes of this rule means one or more manufactured or natural objects intentionally placed on the bottom in predominantly marine waters to provide conditions believed to be favorable in sustaining, or enhancing the spawning, breeding, feeding, or growth to maturity of Florida’s managed reef associated fish species as well as to increase the productivity of other reef community resources which support fisheries. Included in this definition are artificial reefs developed with one or more of the following additional objectives: enhancement of fishing and diving opportunities, fisheries research, and fisheries conservation/preservation purposes.

Definitions

US Army Corps of Engineers 33 CFR 322.2(g)
National Fishing Enhancement Act, section 206

The term artificial reef means a structure which is constructed or placed in the navigable waters of the United States or in the waters overlying the outer continental shelf for the purpose of enhancing fishery resources and commercial and recreational fishing opportunities.

The term does not include activities or structures such as wing deflectors, bank stabilization, grade stabilization structures, or low flow key ways, all of which may be useful to enhance fisheries resources.



FKNMS mandates & regulation



National Marine Sanctuaries Act (16 USC § 1431 *et seq.*) ~ 1972

- Sec. 301(b)(9) “to maintain, restore, and enhance living resources by providing places for species that depend upon these marine areas to survive and propagate.”

Florida Keys National Marine Sanctuary and Protection Act (PL 101-605) ~ 1990

- “to protect and preserve living and other resources of the Florida Keys marine environment.”
- “to protect the resources of the area..., to educate and interpret for the public regarding the Florida Keys marine environment, and to manage such human uses of the Sanctuary consistent with this Act.”

FKNMS mandates & regulation

FKNMS regulations 15 CFR 922 Subpart P ~ July 1, 1997

- 922.163(a)(2) – prohibits removing, injuring, touching, or taking coral
- 922.163(a)(3) – prohibits altering or placing any item on the seabed
- 922.163(a)(4) – prohibits discharge of materials
- 922.163(a)(11) – prohibits use of explosives
- 922.164(a) – Area To Be Avoided prohibits ships >50m length from operating in certain areas



How to keep engaged and where to find more information:

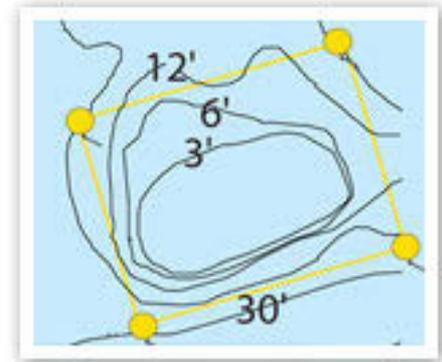


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Visit our website at floridakeys.noaa.gov

Contact your Sanctuary Advisory Council Member:
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REGULATORY REVIEW

