NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

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NOAA mCDR Permitting Process Fact Sheet

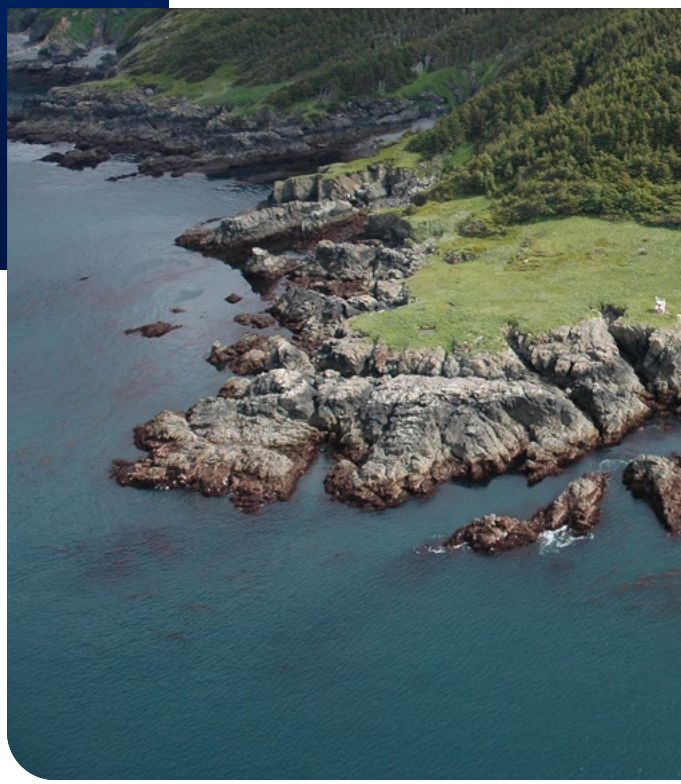

Image Credit: NOAA

The following information is intended to assist individuals with understanding NOAA's role in federal permitting for marine carbon dioxide removal (mCDR) projects. This information is not intended to be inclusive of all permitting requirements, but rather focuses on NOAA's role in the process. Most mCDR projects will require a permit from the U.S. Environmental Protection Agency (EPA) and/or the U.S. Army Corps of Engineers (USACE). Any mCDR project proponent should contact these permitting agencies for current guidance on their permitting processes.

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NOAA's Role in mCDR Permitting Process

NOAA may have several responsibilities in the permitting process for mCDR projects; the extent of NOAA's responsibilities may vary depending on the location and the natural resources affected.

Action Agency: A federal action agency authorizes, funds or carries out actions. NOAA may serve as an action agency and issue permits or authorizations if projects may impact National Marine Sanctuaries and/or Marine National Monuments and/or if a project may incidentally take marine mammals.

Consulting Agency: Some statutes require federal action agencies to consult with federal consulting agencies on proposed activities authorized, funded or undertaken by that action agency. For proposed mCDR projects, NOAA will serve as a consulting agency under the Endangered Species Act, the Magnuson Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act and National Marine Sanctuaries Act. These statutes require federal action agencies (e.g. EPA, USACE) to consult with NOAA.

Technical Assistance/Administration: Throughout the permitting process, NOAA provides technical assistance to federal permitting agencies, states, and project proponents. NOAA may serve as a cooperating agency under the National Environmental Policy Act, providing technical assistance and advice to lead federal action agencies. When applicable, NOAA would administer the federal consistency provision (Section 307) of the Coastal Zone Management Act.

NOAA is available to provide technical assistance for mCDR projects that involve macroalgae production. Applicants should contact their NOAA Fisheries Regional Aquaculture Coordinator to help navigate the regulatory processes. Information on these processes is provided in the Guide to Permitting Marine Aquaculture in the United States, as well as in region-specific guides for Alaska, Washington, California, the Pacific Islands, and the New England and Mid-Atlantic regions.



Image Credit: NOAA

National Marine Sanctuaries Permits and Consultations

mCDR projects occurring within a national marine sanctuary are likely to require a NOAA permit due to associated activities such as discharge or alteration of the submerged lands of the sanctuaries. NOAA would serve as the action agency for proposed projects within a national marine sanctuary. Information on how to apply for a permit within national marine sanctuaries is available on the main Office of National Marine Sanctuaries permitting page and additional guidance is available on the permitting frequently asked questions webpage.

A Federal agency proposing to authorize, fund, or carry out an mCDR project that is likely to destroy, cause the loss of, or injure any sanctuary resource is required to consult with NOAA's Office of National Marine Sanctuaries (ONMS) under Section 304(d) of the National Marine Sanctuaries Act (NMSA). The consultation process is described on the NOAA NMSA Consultations webpage with more specific information in an overview document. The NMSA defines "marine environment" to include the Exclusive Economic Zone (EEZ) and specifically provides that the statute applies throughout the EEZ; in addition, the NMSA specifies that it is to be applied in accordance with generally recognized principles of international law and in accordance with treaties, conventions, and other agreements to which the United States is a party.



Image Credit: NOAA

Marine National Monuments

NOAA and the U.S. Fish and Wildlife Service manage human activities in areas designated as Marine National Monuments under the Antiquities Act through permitting, ensuring environmental compliance. NOAA also coordinates scientific exploration and research programs within the monuments. As marine national monuments are co-managed between NOAA and USFWS, permits from one or both agencies may be required. In some monuments, joint NOAA-USFWS permits are issued. For proposed mCDR projects in the Pacific: contact Pacific Islands Regional Office. For projects within Papahānaumokuākea Marine National Monument or Rose Atoll Marine National Monument, also reach out to ONMS which is a co-manager of those National Marine Monuments. For proposed mCDR projects in the Atlantic: contact NOAA Fisheries Greater Atlantic Regional Fisheries Office.



Image Credit: NOAA

Marine Mammal Protection Act (MMPA) Authorization

Take of marine mammals is prohibited under the Marine Mammal Protection Act, with certain exceptions. Upon request, the National Marine Fisheries Service (NOAA Fisheries) may issue authorizations allowing for the incidental take of small numbers of marine mammals by U.S. citizens who engage in a specified activity within a specified geographic region provided certain findings are made. Most authorizations allow the taking of marine mammals incidental to activities that produce underwater sound such as military exercises, energy development, scientific research and construction projects. For questions about this process and whether there is potential for take from a specific mCDR project, see NOAA Fisheries Office of Protected Resources webpage for information and contacts. The MMPA is applicable to U.S. vessels and citizens within areas of national jurisdiction and in areas beyond national jurisdiction, including in foreign EEZs.



Image Credit: NOAA

Endangered Species Act (ESA) Section 7 Consultations

Under Section 7(a)(2) of the ESA, each federal action agency, in consultation with and with the assistance of NOAA or the USFWS (depending on the species), is required to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or adversely modify or destroy designated critical habitat. A federal agency proposing to authorize, fund, or carry out an mCDR project that may affect ESA-listed species or designated critical habitat is required to consult with NOAA Fisheries under Section 7 of the ESA. The consultation process is outlined on the NOAA Fisheries ESA Consultations webpage with links to more specific information by region. NOAA conducts ESA Section 7 consultations for federal actions within the United States, its territorial seas, and upon the high seas, as well as in foreign EEZs to provide ESA coverage to U.S. citizens.



Image Credit: Adobe

Magnuson-Stevens Fishery Conservation and Management Act (MSA) Consultations

mCDR projects located in state or federal waters would likely occur in areas identified in fishery management plans as Essential Fish Habitat (EFH) for federally managed species. The MSA requires federal agencies to consult with NOAA Fisheries, with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect EFH. Information specific to EFH and the consultation process are outlined on the NOAA Fisheries EFH webpage. The Essential Fish Habitat Mapper provides an interactive tool for viewing EFH designated in a project area.



Image Credit: NOAA

Fish and Wildlife Coordination Act (FWCA) Consultations

Federal action agencies must consider how projects would affect fish and wildlife and provide for improvement of these resources under the FWCA. NOAA Fisheries may consult with federal action agencies under the FWCA. Comments and recommendations provided under the FWCA are sometimes provided concurrent with the EFH consultation process. More information is provided on the NOAA Fisheries Habitat Consultations webpage.



Image Credit: NOAA

Federal Consistency under the Coastal Zone Management Act (CZMA)

Federal consistency requires that federal agency activities, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water) or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program. Federal actions include federal agency activities, federal license or permit activities, and federal financial assistance activities. The term "coastal zone," as applied to coastal states, includes the coastal waters, including the lands found in and under the coastal waters, and the adjacent shorelands. It also includes the Great Lakes. More information can be found on NOAA's Office for Coastal Management webpage.

Table 1. Summary of statutes applicable to NOAA's role in the permitting process for mCDR projects and the geographic scope of these statutes.

Legislation	NOAA Role	U.S. EEZ	International Waters	Foreign EEZ
Endangered Species Act	Consultation with federal action agencies	Activities that may affect ESA listed species and designated critical habitat	Activities authorized, funded or carried out by Federal agencies that can affect ESA listed species or any actions included in action agency permit. The list of ESA protected species includes species that occur outside of the U.S.	
Magnuson-Stevens Act		Activities that may adversely affect essential fish habitat	Essential fish habitat is designated within the U.S. EEZ. For projects outside the U.S EEZ, consultations would only apply if they may adversely affect EFH within the EEZ	
Fish and Wildlife Coordination Act		Activities that affect all fish and wildlife resources	Not applicable	
National Marine Sanctuaries	NOAA is action agency that issues permits	Activities that affect all fish and wildlife resources	Not applicable	
Marine National Monuments				
Marine Mammal Protection Act	NOAA is an action agency and may issue marine mammal take permits	Applies to activities of all U.S. citizens or vessels, regardless of location		
Coastal Zone Management Act (CZMA)	NOAA would comply with the federal consistency provision (Section 307) when applicable	Activities that have reasonably foreseeable effects on uses or resources of a state's coastal zone	Not applicable	