

U.S. Coral Reef Task Force

Handbook on Coral Reef Impacts: Avoidance, Minimization, Compensatory Mitigation, and Restoration

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December 2016

USCRTF
UNITED STATES
CORAL REEF TASK FORCE



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EXECUTIVE SUMMARY

In response to the National Ocean Council's Implementation Plan (National Ocean Policy Implementation Plan, 2013) and U.S. Coral Reef Task Force's (USCRTF) Resolution 16.7, the USCRTF developed the *Handbook on Coral Reef Impacts: Avoidance, Minimization, Compensatory Mitigation, and Restoration*. The Handbook is a review of the federal authorities, existing policies, and federal agency, state, and territory roles and responsibilities; a compendium of current best practices, science-based methodologies for quantifying ecosystem functions or services; and a general overview of basic protocols available for use when assessing impacts to coral reef ecosystems, and mitigating or restoring for unavoidable impacts to coral reef ecosystems, including the use of appropriate compensatory action to replace the lost functions and services. The Handbook is a compilation of current coral reef mitigation and restoration best management practices.

The target audience for this Handbook includes project applicants, proponents, permittees or consultants for projects that may affect coral reefs, or for responsible parties (RP) and their consultants in the event of unplanned impact events. This Handbook is also intended to be a reference for resource managers who are charged with project permitting, damage response, impact mitigation, and habitat restoration.

This document is not official agency guidance, nor does it represent a comprehensive policy statement, and nothing herein replaces requirements contained within statute, codified in regulation, or agency policy, or guidance documents, and it is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other person.

Coral reefs are subject to numerous local, regional, and global stressors. Managers and regulators working to address impacts to coral reefs are further constrained by the difficulty in restoring and replacing these complex systems. Natural reefs are biologically, chemically, physically, and morphologically complex, take many years to develop, and are difficult to restore. Many coral species are particularly slow-growing (one-tenth of an inch per year) and long-lived (decades to centuries) resulting in a long response and replacement time.

While existing guidance and tools have been developed for mitigation and restoration of stream and wetland impacts, new guidance and tools are needed to guide mitigation and restoration for coral reef impacts due to their differences in ecological structure, function, and dynamics, and the difficulty in replacing lost functions. Mitigation and restoration technology for freshwater and terrestrial systems has a longer track record, and has been refined through substantial trial and error experience. When working in the marine environment, other factors such as site ownership, site protection, the remote and hazardous nature of working underwater, and long-term maintenance present challenging hurdles, and are presently managed on a case-by-case basis. To date, many mitigation options have only been implemented a few times and across a wide geographic area. Wide dissemination of the information learned from these mitigation options is needed to provide lessons learned to project proponents.

With the current worldwide decline of coral reef ecosystems, it is imperative that the United States consistently and effectively acts to avoid impacts to coral reef habitats. When impacts

cannot be avoided, measures should be taken to minimize adverse impacts. Unavoidable impacts may warrant compensatory mitigation through appropriate actions to replace losses of functions and services. Consistent and targeted efforts should be made to address as many coral reef stressors that can be controlled by management and regulatory actions.

This Handbook provides a general summary of current avoidance, minimization, compensatory mitigation, and restoration strategies that may help address physical damage resulting from direct adverse impacts to coral reefs (e.g., dredging, placement of fill, vessel groundings, or accidental discharges like oil spills) and indirect adverse impacts to coral reefs (e.g., beach nourishment, sedimentation from poor land use practices, sedimentation from dredging or vessel movement, or storm water contaminants). In addition, the Handbook also reviews applicable policies and provides descriptions of various agency roles and responsibilities. The Handbook includes an evaluation framework for both planned impacts to coral reefs, and responding to unplanned impacts to coral reefs, recommendations for data collection for coral reef conditional assessment surveys, a summary of existing mitigation options for unavoidable impacts and key considerations for each option, and considerations for performance standards and monitoring of coral reef mitigation and restoration activities. Readers of this Handbook are advised to use this document for reference only. Although the Handbook is intended to summarize laws, regulations, policies, and best management practices it does not include a detailed overview of every agency's authorities, policies, and guidance. Readers are advised to always seek the guidance of the local, state, and federal agencies that may have regulatory authority over a project or trust resources that have been or will be impacted.

The USCRTF believes that due to the complex nature of the coral reef ecosystem, and the even more complex nature of identifying and providing appropriate compensatory mitigation for lost ecosystem services, the emphasis on maximizing avoidance and minimization of impacts cannot be overstated.

Appendix I – Legal and Policy Summary

There are numerous laws and regulations that govern activities in and around coral reef ecosystems. In some instances, activities in coral reefs may trigger multiple authorities across various federal, and state, or territorial agencies. Project proponents may be most familiar with the permitting requirements under CWA §404, and EFH consultation requirements under MSA §305(b) for planned activities, and with the NRDAR requirements for unplanned impacts. This appendix provides a more comprehensive list of laws and regulations that apply to activities and impacts within coral reef ecosystems. However, this is not an exhaustive list of every relevant federal, state, territorial, or Tribal authority.

The following two tables present the federal (Table 5), and state or territorial (Table 6) laws, regulations, and statutes that govern activities that may impact coral reefs. Specific sections of various regulations have been listed separately, because they are particularly applicable to activities that may impact coral reefs; however, it should be noted, that they are not the only sections of the relevant policies listed here that may apply in each situation. Links to the full language for each have been provided where possible.

Table 5: Collection of federal laws and regulations that govern activities that may impact coral reefs.

Statutes, Regulations, and Policies	Implementing Agencies	Description
<i>Abandoned Shipwreck Act</i> 43 U.S.C. §§2101-2106	NPS	Requires states to protect and preserve abandoned shipwrecks in their waters for recreational and historical purposes, encouraging the creation of underwater parks to provide additional protection.
<i>Antiquities Act/National Monuments</i> 54 U.S.C. §320301	U.S. President	Authorizes the President to designate landmarks, structures, and “other objects of historic or scientific interest” as national monuments.
<i>Clean Water Act</i> 33 U.S.C. §§1251-1387 and it’s implementing regulations.	EPA, USACE, and States/Territories (S/T)	<p>The CWA prohibits the unauthorized discharge of pollutants into U.S. waters in an effort to restore and maintain physical, chemical and biological integrity of waters. Particular sections of note include:</p> <ul style="list-style-type: none"> • CWA §301, the prohibition against unauthorized discharge, technology-based pollutant reduction requirements for industrial and municipal permittees. • CWA §303 water quality standards (WQS) program. States, tribes, and territories establish designated uses, water quality criteria, and an anti-degradation policy for waters within their jurisdictions, which are then submitted to EPA for review and approval or disapproval. Water quality standards are not “effective” for Clean Water Act purposes until approved or established by EPA. • CWA §309, EPA authority to initiate administrative and judicial enforcement of the prohibition against unpermitted discharge, and violations of discharge permits and dredged material permits.

Statutes, Regulations, and Policies	Implementing Agencies	Description
		<ul style="list-style-type: none"> • CWA §316(b), implemented through discharge permits, requires that the location, design, construction, operation, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. • CWA §319, nonpoint source management control program, federal grant program administered by states, tribes, and territories. • CWA §401, water quality certifications, administered primarily by states and territories discharges associated with any federally licensed or permitted activity comply with approved water quality standards. • CWA §402, National Pollutant Discharge Elimination System, discharge permitting programs administered primarily by states and territories subject to EPA minimum program requirements and permit oversight, but also by EPA in some jurisdictions. Point discharges are permitted under NPDES. • CWA §404, permitting program for discharge of dredged or fill material in waters of the United States, administered by USACE with oversight by EPA. EPA approves and oversees the delegation of CWA §404 authority to states and ensures state programs meet minimum program requirements and oversight. • Compensatory Mitigation for Losses of Aquatic Resources, regulatory program applicable to CWA §404 permitting, commonly known as the 2008 Mitigation Rule, 33 CFR Part 332, implemented by the USACE and EPA.
<p><i>Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)</i> 42 U.S.C. Ch.103</p>	<p>EPA</p>	<p>CERCLA, commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment and created a tax on the chemical and petroleum industries. In addition, CERCLA provides for the assessment and restoration of Natural Resource Damages.</p>
<p><i>Coastal Barriers Resources Act (CBRA)</i> 16 U.S.C. §§3501-3510</p>	<p>NOAA and S/T</p>	<p>CBRA encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting federal expenditures that encourage development, such as federal flood insurance. Areas within the CBRS can be developed provided that private developers or other non-federal parties bear the full cost.</p>
<p><i>Coastal Zone Management Act (CZMA)</i></p>	<p>NOAA and Dept. of Interior (DOI)</p>	<p>CZMA provides federal funding to assist states in developing and administering coastal zone management plans (CMPs) to carry out its purpose to</p>

Statutes, Regulations, and Policies	Implementing Agencies	Description
16 U.S.C. §§1451-1466		“preserve, protect, develop, and where possible, to restore or enhance the resources of the Nation’s coastal zone for this and succeeding generations.” CZMA §307, commonly called the Federal Consistency Provision, requires that federal actions, within and outside the coastal zone, that 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.
<i>Coral Reef Conservation Act (CRCA)</i> 16 U.S.C. §§6401-6409	NOAA and DOI	CRCA aims to preserve and protect coral reef ecosystems, to effectively manage those ecosystems with the aid of scientific research, and to fund programs consistent with those goals. It requires, in conjunction with existing environmental laws, coral reefs to be monitored, mapped, and researched in order to better understand how to manage their ecosystems.
<i>Endangered Species Act of 1973 (ESA)</i> 16 U.S.C. §1531 et seq.	NOAA, FWS, and USCG	ESA provides for the conservation of endangered and threatened species and for the conservation of “the ecosystems upon which endangered species and threatened species depend.” USCG has enforcement authority.
<i>Executive Order 13089 – Coral Reef Protection</i> 63 FR 32701 (June 11, 1998)	USCRTF	The EO creates task force charged with overseeing the mapping and monitoring of all U.S. coral reefs, researching coral degradation, conserving and restoring coral reefs, and promoting coral reef conservation internationally.
<i>Executive Order 13158 - Marine Protected Areas</i> 65 FR 34909 (May 31, 2000)	NOAA and DOI	The EO is intended to (a) strengthen the management, protection, and conservation of existing MPAs and establish new or expanded MPAs; (b) develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems, and the Nation’s natural and cultural resources; and (c) avoid causing harm to MPAs through federally conducted, approved, or funded activities.
<i>Fish and Wildlife Coordination Act (FWCA)</i> 16 U.S.C. §§661-667e	FWS, NMFS, and S/T	FWCA states that “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, ...or modified for any purpose whatever, ...by any department or agency of the U.S., or by any public or private agency under Federal permit or license, such department or agency first shall consult with the FWS, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and

Statutes, Regulations, and Policies	Implementing Agencies	Description
		improvement thereof in connection with such water-resource development.”
<i>Lacey Act</i> 16 U.S.C. §§3371-3378	NOAA and FWS	The Lacey Act prohibits the importation, exportation, sale, receipt, acquisition, or purchase of any fish, wildlife, or plant taken in violation of U.S., foreign, or Indian tribal law or in interstate or foreign commerce in violation of any state or foreign law.
<i>Magnuson Stevens Fishery Conservation and Management Act (MSA)</i> 16 U.S.C. §§1801-1891	NMFS and USCG	<p>In the regulatory context, one of the most important provisions of the MSA for conserving fish habitat is that which requires federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have adverse effects on designated EFH. The consultation requirements in the MSA direct federal agencies to consult with NFMS when any of their activities may have an adverse effect on EFH. Furthermore, with goals to reduce bycatch and overfishing, fishery management plans may prohibit or limit fishing practices that are harmful to coral reefs. MSA directly protects deep-sea corals through the Deep-Sea Coral Research and Technology Program, as well as the MSA’s authorization to designate zones to protect deep-sea corals. Coral reefs designated as essential fish habitat in FMPs will receive additional protection.</p> <p>USCG has enforcement authority.</p>
<i>Marine Mammal Protection Act (MMPA)</i> 16 U.S.C. §§1361-1423	NOAA and FWS	MMPA prohibits the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine products in the United States. The MMPA states that the essential habitats, which may include coral reef ecosystems, used by marine mammals should be protected, and marine mammals should be protected from the harmful actions of man. NMFS can authorize take under certain activities and conditions.
<i>The Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972</i> 33 U.S.C. §§1401-1445	USACE and EPA	MPRSA, specifically Title I, sometimes referred to as the Ocean Dumping Act, generally prohibits (1) the transportation of material from the United States for the purpose of ocean dumping; (2) transportation of material from anywhere for the purpose of ocean dumping by U.S. agencies or U.S.-flagged vessels; (3) dumping of material transported from outside the United States into the U.S. territorial sea. A permit is required to deviate from these prohibitions. The standard for permit issuance is whether the dumping will “unreasonably degrade or endanger” human health, welfare, or the marine environment. USACE issues permits for the ocean disposal of dredged material; EPA issues permits for other materials. Disposal sites are designated by EPA. USACE authorizes clean dredged material disposal in consultation with EPA.

Statutes, Regulations, and Policies	Implementing Agencies	Description
<i>MARPOL – International Convention for the Prevention of Pollution by Ships</i>		The objective of MARPOL is to limit ship-borne pollution by restricting operational pollution and reducing the possibility of accidental pollution. MARPOL specifies standards for stowing, handling, shipping, and transferring pollutant cargoes, as well as standards for discharge of ship-generated operational wastes. The United States is party to Annexes I-III, V, and VI and they have been incorporated into U.S. law. Although Annex IV has not been ratified, the United States has equivalent regulations under the CWA for the treatment and discharge of sewage from vessels.
<i>National Environmental Policy Act (NEPA)</i> 42 U.S.C. §§4321-4370	CEQ, applies to all federal agencies	NEPA requires all federal agencies to analyze the potential environmental impacts of their proposed actions “significantly affecting the quality of the human environment,” which could include actions’ effects on coral reef ecosystems.
<i>National Marine Sanctuaries Act (NMSA)</i> 16 U.S.C. §§1431-1445	NOAA and S/T	NMSA designates “areas of the marine environment which are of special national significance” as national marine sanctuaries, providing for their protection, management, and conservation.
<i>Natural Resource Damage Assessment and Restoration (NRDAR) Procedures</i> 43 CFR 11 42 U.S.C. 9651(c)	DOI and Dept. of Commerce	NRDAR is the legal process that federal agencies like NOAA, together with the states and Indian tribes, use to evaluate the impacts of oil spills, hazardous waste sites, and ship groundings on natural resources both along the Nation's coast and throughout its interior.
<i>54 U.S.C. Chapters 1001-1007 cover general provisions, establishment of the NPS, areas of the system, and resource (formerly known as the NPS Organic Act)</i>	NPS	54 U.S.C. §§1001-1007 establishes the NPS and authorizes it to regulate the National Park System.
<i>Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment. (November 3, 2015)</i>	DOI, USDA, EPA, and NOAA	The memorandum directs agencies to adopt a clear and consistent approach for avoidance and minimization of, and compensatory mitigation for, the impacts of their activities and the projects they approve.

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<i>Presidential Memorandum: Incorporating Natural Infrastructure and Ecosystem Services in Federal Decision-Making.</i> (October 7, 2015)	Federal Agencies	The memorandum directs federal agencies to factor the value of ecosystem services into federal planning and decision-making.
<i>Oil Pollution Act (OPA)</i> 33 U.S.C. §§2701-2762	USCG, EPA, and NOAA	<p>OPA created a comprehensive prevention, response, liability, and compensation regime to deal with vessel- and facility-caused oil pollution to U.S. navigable waters. OPA greatly increased federal oversight of maritime oil transportation, while providing greater environmental safeguards by:</p> <ul style="list-style-type: none"> • Setting new requirements for vessel construction and crew licensing and manning. • Mandating contingency planning. • Enhancing federal response capability. • Broadening enforcement authority. • Increasing penalties. • Creating new research and development programs. • Increasing potential liabilities. • Significantly broadening financial responsibility requirements. <p>Full description can be found at http://www.uscg.mil/hpfc/About_NPFC/opa.asp under the OPA Overview Section.</p>
<i>Resource Conservation and Recovery Act (RCRA)</i> 40 CFR Parts 239 – 282. 42 U.S.C. §6901 et seq.	EPA	RCRA regulates the management of solid waste (e.g., garbage), hazardous waste, and underground storage tanks holding petroleum products or certain chemicals to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner.
<i>Rivers and Harbors Act of 1899 (RHA)</i> 33 U.S.C. §§401-426	USACE	RHA regulates construction and prohibits the discharge of “any refuse matter of any kind” into navigable waters in the United States. Of particular note, RHA §10 applies to physical structures or work in navigable waters.
<i>Sikes Act</i> 16 U.S.C. §§670a-670o	Dept. of Defense, NOAA, and FWS	Sikes Act requires development of integrated natural resource management plans for military installations in consultation with FWS and NOAA.
<i>System Unit Resource Protection Act</i> 54 U.S.C. 100721 (SURPA)	NPS	Gives NPS authority to seek damages from responsible parties for injuries to system unit resources within park system units. System unit resources include natural, cultural, and facility living or non- living resources. Also give NPS the authority to retain damages to be used to restore resource injuries.

Statutes, Regulations, and Policies	Implementing Agencies	Description
<p><i>Water Resources Development Act</i> <i>Citations include, but are not limited to:</i> WRDA 1986, Pub.L. 99-662 WRDA 2000, Pub.L. 106-541 WRDA 2007, Pub.L. 110-114; WRDA 2014, Pub. L 113-121</p>	USACE	<p>The WRDAs provide the authority for the federal government to assist states and territories in the development of water resource management activities including navigation, flood risk management, and aquatic ecosystem restoration. Eligible projects are shown to have a federal interest to national economic development and/or national ecosystem restoration goals and objectives.</p>

Table 6: Summary of state and territorial laws and regulations that govern activities that may impact coral reefs.⁶

Statutes, Regulations, and Policies	Implementing Agencies	Description
Commonwealth of the Northern Mariana Islands (CNMI)		
<i>Coastal Resource Management Rules and Regulations</i> (NMIAC 15-10)	Division of Coastal Resources Management	Chapter 15-10 primarily outlines permitting criteria and enforcement of permitting for projects in the coastal zone. The law states that “significant adverse impacts to reefs and corals shall be prevented” and there shall be no “destruction of reefs and corals not associated with permitted projects.” (a) Lagoon and Reef Area of Particular Concern (APC); Management Standards. (b) Lagoon and Reef APC; Use Priorities. (1) General Lagoon and Reef APCs. (2) Lagoon and Reef APC; Managaha. (3) Lagoon and Reef APC; Anjota Island. (4) Lagoon and Reef APC; Coral Reefs. (f) Mitigation of Adverse Impact. Wherever practicable, adverse impact of the proposed project on the environment shall be mitigated. http://www.cnmilaw.org/admincode/Title15/T15.html
<i>Coastal Resources Management Act of 1983</i> (2 CMC §§1501 et seq).	Division of Coastal Resources Management	This law established DCRM and outlines its purpose, including: manage ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats, and preserve the functions and integrity of reefs, marine meadows, salt ponds, mangroves, and other significant natural areas. http://www.cnmilaw.org/pdf/public_laws/03/pl03-47.pdf
<i>Non-Commercial Fish and Wildlife Regulations</i> (NMIAC 85-30.1)	Division of Fish and Wildlife (DFW)	Collection of Hard Corals Prohibitions: The collection and/or removal from the waters of the CNMI of any and all species of hard Hermatypic reef building corals, soft corals, or stony hydrozoans, is prohibited, except as specifically allowed by this section. Marine Reserves: The Director may acquire and designate aquatic habitats or easements as marine reserves in accordance with 2 CMC §5104(a)(5). Marine reserves are created to protect important fish and aquatic species populations and their habitats. http://www.cnmilaw.org/admincode/Title85/T85.html
<i>Submerged Lands Act</i> 2 CMC §§ 1201 et seq.	Department of Lands and Natural Resources	The purpose of this chapter is to provide for water and non-water-dependent uses of CNMI-owned submerged lands and to provide for the exploration, development of, and extraction of petroleum deposits

⁶ Depending on the federal action, some of the state and territorial laws may not apply. Work closely with the state or territorial regulatory office to determine which laws apply to the proposed activity.

Statutes, Regulations, and Policies	Implementing Agencies	Description
		<p>or mineral deposits in submerged lands of the Northern Mariana Islands. http://www.cnmilaw.org/pdf/cmc_section/T2/1211.pdf</p> <p>The department shall consider the natural values of CNMI-owned submerged lands as wildlife habitat, natural area preserve, representative ecosystem, or spawning area prior to issuing any initial lease or authorizing any change in use. The department may withhold from leasing lands which it finds to have significant natural values, or may provide within any lease for the protection of such values. http://www.cnmilaw.org/pdf/cmc_section/T2/1221.pdf</p>
<p><i>Commonwealth Environmental Protection Act</i> 2 CMC §§ 3101 et seq.</p>	<p>Division of Environmental Quality (DEQ)</p>	<p>The legislature declares that it is the policy of the CNMI:</p> <ul style="list-style-type: none"> • To affirmatively protect the right of each person to a clean and healthful public environment. • To establish and enforce environmental standards to protect and preserve the marine resources of CNMI. <p>This law charges DEQ with administering water quality programs and regulating earth-moving, including disturbances to the sea floor, lagoon bottom, or coral reef. http://www.cnmilaw.org/pdf/cmc_section/T2/3111.pdf</p>
<p><i>Water Quality Standards</i></p>	<p>Bureau of Environmental and Coastal Quality</p>	<p>9.6 (b)(3) Dredging and Discharge of Dredged of Fill Material. Dredging and the discharge of dredged or fill material can adversely affect colonies of reef building organisms by burying them, by releasing contaminants such as hydrocarbons into the water column, by reducing light penetration through the water, and by increasing the level of suspended particulates. Coral organisms are extremely sensitive to even slight reductions in light penetration or increases in suspended particulates (i.e., turbidity). These adverse effects will cause a loss of productive colonies which in turn provide habitat for many species of highly specialized aquatic organisms.</p> <p>For activities which have the potential to adversely affect coral reproduction, a stoppage period of 21 days, starting five days after the late May or early June full moon (to be determined by DEQ), is required. The stoppage period, if determined to be applicable, shall be no less than twenty one (21) calendar days. In determining whether an activity has the potential to affect coral spawning, DEQ shall consider all of the following:</p>

Statutes, Regulations, and Policies	Implementing Agencies	Description
		1) the magnitude of the sediment plume generated by the proposed activity; 2) the most likely extent and direction(s) of drift of the sediment plume; 3) the type of sediment and its composition; and 4) the proximity of broadcast spawning coral species to the proposed activity and expected sediment plume.
<i>Fish, Game and Endangered Species Act</i> 2 CMC §§5101 et seq.	DFW	The protection of fish, game, and endangered and threatened species is vested exclusively in the department. This law gives DFW jurisdiction over fish and wildlife including determining the status of, and any requirement for the survival of, resident species of fish, wildlife, or plants. http://www.cnmilaw.org/pdf/cmc_section/T2/5104.pdf
<i>Moratorium on Seaweed, Sea Grasses, and Sea Cucumber</i> 2 CMC §5601	Coastal Resources Management Office	There is hereby established for a period of at least ten years a moratorium on the harvest of all non-commercially grown seaweed, sea grass, or sea cucumbers or other edible echinoderms. Any hotel directly fronting or adjacent to the Saipan lagoon shall be exempted from subsection (a). The Coastal Resources Management Office in consultation with the DFW shall promulgate rules governing the area of allowance for the removal of seaweed and sea grass. http://www.cnmilaw.org/pdf/cmc_section/T2/5601.pdf
<i>Fair Fishing Act</i> 2 CMC §5631	Department of Lands and Natural Resources	Except as provided in subsections (b) and (c), it shall be unlawful for any commercial and non-commercial fishermen to use explosives, poisons, electric shocking devices, scuba tank or hookah when fishing for reef fish and harvesting other marine life within waters of CNMI. www.cnmilaw.org/pdf/cmc_section/T2/5631.pdf
<i>Protecting of Rays and Sharks</i> 2 CMC §5641, §5642	DFW	It shall be unlawful for any person, within the CNMI or any place subject to the jurisdiction thereof, to knowingly, or with wanton disregard for the consequences of his act, feed, take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner any ray, alive or dead, or any part thereof, without being permitted to do so as provided in this section, or to violate any permit or regulation issued pursuant to this section. http://www.cnmilaw.org/pdf/cmc_section/T2/5641.pdf

Statutes, Regulations, and Policies	Implementing Agencies	Description
		<p>It is unlawful for any person, within the nearshore waters of the CNMI to knowingly, or with wanton disregard for the consequences of this act feed in any manner any shark, without first obtaining a permit from the Director of the DFW, or violates any permit or regulation issued pursuant to this section. http://www.cnmilaw.org/pdf/cmc_section/T2/5642.pdf</p>
<p><i>Shark Finning Prohibition</i> 2 CMC §5651</p>	<p>Department of Lands and Natural Resources</p>	<p>It shall be unlawful for any person to possess, sell, offer for sale, trade, or distribute shark fins in the CNMI. http://www.cnmilaw.org/pdf/cmc_section/T2/5651.pdf</p>
<p>State of Florida</p>		
<p><i>Environmental Resource Permitting</i> Florida Statute (F.S.) §373.129., .413 & .414</p>	<p>Florida Department of Environmental Protection (FDEP)</p>	<p>Within FDEP the Submerged Lands and Environmental Resources Program (SLERP) administers Environmental Resources Permits (ERPs). ERPs regulate activities involving the management and alteration of surface water flows. This includes upland construction activities that generate storm water runoff, which contributes to such aspects as:</p> <ul style="list-style-type: none"> • Runoff quantity (i.e., storm water attenuation and flooding of other properties) in both wetlands and uplands; • Water quality (i.e., storm water treatment) in both wetlands and uplands; and, • Dredging and filling in most surface waters and wetlands (whether isolated or connected to other waters). In addition, this includes the alteration of mangroves. <p>The ERP also handles the submerged lands authorization for any construction on or use of submerged lands owned by the state of Florida.</p> <p>The ERP program is authorized pursuant to Chapter 373, Part IV, F.S., Management and Storage of Surface Waters and implemented by a variety of Florida Administrative rules. A list of the rules are available at the following webpage: http://www.dep.state.fl.us/water/wetlands/erp/rules/index.htm.</p> <p>A Joint Coastal Permit (JCP) program involves concurrent processing of applications for a coastal construction authorization, an ERP, and a sovereign submerged land authorization. A JCP is required for construction activities on Florida’s natural sandy beaches, adjacent state sovereignty lands and associated inlets, or activities that are likely to have a material physical effect on existing coastal</p>

Statutes, Regulations, and Policies	Implementing Agencies	Description
		conditions, natural shore processes, or inlet processes. The JCP is authorized pursuant to Sections 161.021, 161.041 and 161.055, F.S., Rule 62B-41, F.A.C., Rules and Procedures 22 Florida Coastal Management Program Guide for Application for Coastal Construction Permits, and Rule 62B-49, F.A.C., Joint Coastal Permits and Concurrent Processing of Proprietary Authorizations.
<i>Surface Water Quality Standards</i> Florida Administrative Code (F.A.C) 62 – 302.500 & 530	FDEP	62-302.500, F.A.C. – Minimum & General Criteria. Turbidity cannot exceed 29 Nephelometric Turbidity Units (NTUs) above natural background conditions in Class I – V Waters. Turbidity cannot exceed ambient background conditions in Aquatic Preserves due to their status as Outstanding Florida Waters (OFW). 62–302.530, F.A.C. – Surface WQ Standards. This rule defines the general state water quality standards for all activities. If an activity will potentially violate these standards, then it will likely require a FDEP permit (ERP or Joint Coastal Permit) unless eligible for exemption.
<i>Permit Guidelines, Mixing Zones</i> F.A.C. 62 – 4.242 &.244	FDEP	62-4.242&.244, F.A.C. – Mixing Zones. Mixing zones can be granted for selected projects that otherwise can't meet water quality standards within close proximity to the construction activity. More information is available at: https://www.flrules.org/gateway/RuleNo.asp?id=62-4.244
<i>Protection of Sovereign Submerged Lands</i> F.S. §253.04	FDEP	Chapter 253 FS addresses the state's administration of public lands and property of this state. The statute provides direction regarding the acquisition, disposal, and management of all state lands. The Board of Trustees of the Internal Improvement Trust Fund (Board) of the state is vested and charged with the acquisition, administration, management, control, supervision, conservation, protection, and disposition of all lands owned by the state, except for lands acquired for certain purposes. 18-14, F.A.C., implements the fine schedule for violations.
<i>Pollution Control</i> F.S. § 403.121 & .201 (& others)	FDEP	§403.121, F.S.: The Environmental Litigation Reform Act (ELRA): Allows swifter, more efficient use of administrative process for imposing damages and penalties (up to \$10,000 per offense). Outlines administrative penalties for specified violations rules and statutes. §403.141 and §403.161, F.S. Allow imposition of damages and civil liability for causing pollution that

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		<p>harms aquatic life. Remedies are all judicial rather than administrative.</p> <p>For adjusted penalties >\$10,000, FDEP instead considers program specific guidelines for characterizing violations and assessing penalties. If a settlement cannot be reached consistent with FDEP’s Settlement Guidelines for Civil and Administrative Penalties (FDEP Directive 923), FDEP will file an enforcement action in state court.</p>
<p><i>Florida Coastal Management Program</i> Chapter 380, F.S., Part II, Coastal Planning and Management</p>	<p>FDEP</p>	<p>FDEP’s Florida Coastal Office, is charged with overseeing the state’s coastal management program and handles the following Florida Coastal Management Program (FCMP) activities:</p> <ul style="list-style-type: none"> • Compiles and submits the federal applications for receiving funds pursuant to the CZMA. • Adopts rule procedures and criteria for the evaluation of Coastal Partnership Initiative (CPI) and state agency sub-grant applications for funds allocated to the state under the CZMA. • Administers the Coastal and Estuarine Land Conservation Program (CELCP), a federally-funded land acquisition program. • Conducts the CZMA § 309 assessment and strategies for coastal resource issues. • Administers the Beach Access Sign Program, the Beach Warning Flag Program, and the Rip Current Awareness Program. • Prepares routine program updates to incorporate annual statutory changes. • Guides the coordination of the Federal Consistency review process. <p>“Federal Consistency” is the requirement that federal actions that affect any land, water, or natural resource of a state’s coastal zone must be consistent with the enforceable policies of the state. The FCMP federal consistency process consists of a network of 24 Florida Statutes (i.e., enforceable policies) administered by FDEP and a group of partner agencies responsible for implementing the statutes.</p>
<p><i>Joint Coastal Permit</i> F.S. §161.054 & .055</p>	<p>FDEP</p>	<p>The Joint Coastal Permit (JCP) Program allows FDEP to concurrently process applications for coastal construction permits, environmental resource permits, and sovereign submerged lands authorizations.</p> <p>The consolidation of these programs and the assignment of responsibility to a single bureau has eliminated the potential for conflict between permitting agencies and helped ensure that reviews</p>

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		are conducted in a timely manner. JCP permit applications are forwarded to the USACE from FDEP or SFWMD for separate processing and review.
<i>Marine Life Rule</i> 68B-42.009, F.A.C.	Florida Fish and Wildlife Conservation Commission (FWC)	Harvest of any hard or stony coral (Order Scleractinia), black coral (Order <i>Antipatharia</i>), fire coral (Genus <i>Millepora</i>), or sea fans (<i>Gorgonia flabellum</i> or <i>G. ventalina</i>) is prohibited.
<i>Special Activity License</i> 68B-8, F.A.C.	Florida FWC	Authorization required for the collection or take of corals for education, research, enhancement, restoration, or mitigation activities.
<i>Coral Protection in State Parks</i> F.S. §258.008(3)(a)	FDEP	Any person who engages in any of the following activities within the boundaries of a state park without first obtaining the express permission of the Division of Recreation and Parks commits a misdemeanor of the second degree, punishable as provided in s. <u>775.082</u> or s. <u>775.083</u> , and shall be ejected from all property managed by the division: (a) Cutting, carving, injuring, mutilating, moving, displacing, or breaking off any water-bottom formation or coral. (b) Capturing, trapping, or injuring a wild animal. (c) Collecting plant or animal specimens. (d) Leaving the designated public roads in a vehicle. (e) Hunting.
<i>Rules Relating to Endangered or Threatened Species</i> 68A-27, F.A.C.	Florida FWC	Staghorn coral (<i>Acropora cervicornis</i>) Elkhorn coral (<i>Acropora palmata</i>) Pillar coral (<i>Dendrogyra cylindrus</i>) Lobed star coral (<i>Orbicella annularis</i>) Mountainous star coral (<i>Orbicella faveolata</i>) Boulder star coral (<i>Orbicella franksi</i>) Rough cactus coral (<i>Mycetophyllia ferox</i>)
Guam		
<i>E.O. 78-37</i>	Bureau of Statistics and Plans, Guam Coastal Management Program	Coastal Zone Resource Policies: Sets forth criteria and enforceable policies determining permitting for projects in the coastal zone. This law establishes management policies for Guam's ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats, and preserves the functions and integrity of reefs, beaches, marine preserves, mangroves, hydrological systems, and other significant natural coastal areas.
<i>E.O. 2013-05</i>	Bureau of Statistics and Plans, Guam Coastal Management Program	Coral Reef Resource Policies: Establishes the Guam Coral Reef Initiative Coordinating Committee to develop, update, and monitor Guam's Local Action Strategies, funding, and determine management policies to preserve the function and integrity of Guam's coral reef ecosystems.
<i>Fish and Wildlife Regulations</i>	Guam Department of	Statutory and regulatory rules governing fish and wildlife resources for the territory of Guam, including

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(5 Guam Code Annotated, Chapter 63, Article 1, §§63101 et seq.)	Agriculture, Division of Aquatic and Wildlife Resources	coral protection, hunting and fishing regulation, and 5 existing limited take Marine Preserves.
<i>Guam Endangered Species Act</i> 5 Guam Code Annotated, Chapter 63, Article 2, §§63201 et seq.	Guam Department of Agriculture, Division of Aquatic and Wildlife Resources	Protection of Fish, Game, and Wildlife: Protects fish, game, and wildlife, including determining the status of, and any requirement for the survival of, resident species of fish, wildlife, or plants; particularly any species of plant or wildlife which appears likely, within the foreseeable future, to become endangered and which has been so designated by the Guam Department of Agriculture, or that has been determined to be listed as an endangered or threatened species pursuant to the U.S. ESA.
<i>Submerged Lands Act; and Guam Exclusive Economic Zone (Ocean Resources)</i> Public Law 93-435	Department of Land Management	Submerged Lands of Guam: Provides for water and non-water-dependent uses of Guam-owned submerged lands; for concurrent local and federal jurisdiction for civil and criminal offenses; and for Guam's ownership of the rights to management, exploration, development of, and extraction of petroleum or mineral deposits in submerged lands of Guam; and the natural values of Guam-owned submerged lands as wildlife habitat, natural area preserve, representative ecosystem, or spawning area with respect to leasing or authorizing any use of these submerged lands.
<i>Organic Act of Guam</i> Article 1§1704 et seq.; & 1 Guam Code Annotated § 402	Department of Land Management	Concurrent Resource natural resource jurisdiction on submerged lands adjacent to federal property and oversight of submerged lands from the high tide mark out to three miles in territorial waters.
<i>Guam Environmental Protection Agency Act</i> 10 Guam Code Annotated, Chapter 45, §§45101 et seq.	Guam Environmental Protection Agency	Water Quality Standards: Provides that the policy of Guam is to affirmatively protect the right of each person to a clean and healthful public environment; and to establish and enforce environmental standards to protect and preserve the environmental health of Guam, including its marine resources. This law charges Guam EPA with administering water quality programs and regulating earth-moving, including disturbances to the sea floor, lagoon bottom, or coral reef.
<i>Guam Water Pollution Control Act</i> 10 Guam Code Annotated, Chapter 47, §§47101 et seq.	Guam Environmental Protection Agency	Water Pollution Control: Prohibits the discharge of pollutants into or upon all of the waters of Guam, including inland waters and coastal waters, beaches, or lands adjoining the coasts of Guam. Pollution is defined as the presence in the outdoor atmosphere or waters of Guam any one or more substances or pollutants in quantities which are or may be potentially harmful or injurious to life, including wildlife, fish and aquatic life; and which may

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		progressively obstruct agricultural, industrial, recreational, and other beneficial uses of water.
<p><i>Guam Territorial Seashore Protection Act</i> 21 Guam Code Annotated, Chapter 63, §§63101 et seq.</p>	<p>Guam Department of Land Management, and Guam Land Use Commission</p>	<p>Seashore Reserve: Creates a Seashore Reserve area in Guam, consisting of the land and water area of Guam extending seaward to the ten-fathom contour, and recognizes that the Seashore Reserve is a distinct and valuable natural resource belonging to all the people of Guam and existing as a delicately balanced ecosystem; provides for the protection of the natural, scenic, historical resources, wildlife, marine life, and other ocean resources, and the natural environment of the seashore reserve by limiting and prescribing development within the Seashore Reserve area.</p>
State of Hawaii		
<p><i>Hawaii Constitution, Article XI</i></p>		<p>Art. XI, §1 (Conservation and Development of Resources) “For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self- sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.” This section embodies Hawaii’s public trust doctrine.</p> <p>Art. XI, §2 (Management and Disposition of Natural Resources)</p> <p>Art. XI, §6 (Marine Resources) “The State shall have the power to manage and control the marine, seabed and other resources located within the boundaries of the State, including the archipelagic waters of the State, and reserves to itself all such rights outside state boundaries not specifically limited by federal or international law.”</p> <p>Art. XI, § 11 (Exclusive Economic Zone)</p>
<p><i>Hawaii Revised Statute (HRS) Chapter 343</i></p>	<p>Depends</p>	<p>Chapter 343 is Hawaii’s Environmental Policy Act (HEPA). Chapter 343 requires that an agency or applicant prepare an environmental assessment or an environmental impact statement if a proposed action meets any of nine “triggers” listed in the statute.</p>
<p><i>HRS Chapter 171</i></p>	<p>Department of Land and Natural Resources (DLNR)</p>	<p>Chapter 171 addresses Hawaii’s management of its public lands (including submerged lands) through the DLNR. DLNR is tasked with managing and administering the “aquatic life, aquatic life sanctuaries, public fishing areas, boating, ocean</p>

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		recreation, coastal programs . . . and other functions assigned by law.” DLNR is authorized to recover natural resource damages for violations of the chapter. Violations include engaging in prohibited activities or prohibited uses.
<i>HRS Chapter 183C</i>	DLNR	Chapter 183C provides a framework for Hawaii to manage lands in the conservation district, including the ocean and submerged lands, in a manner that protects and preserve the natural ecosystems within them. DLNR is responsible for managing lands in the Conservation District. These responsibilities include the following: maintaining an inventory of lands classed conservation lands; identifying and zoning lands in the district; establishing conditions on use and categories of use and activities; adopting rules; and setting and enforcing land use regulations. HRS § 183C-7 describes the penalties for violating the chapter: “Any person violating this chapter or any rule adopted in accordance with this chapter shall be fined not more than \$15,000 per violation in addition to administrative costs, costs associated with land or habitat restoration, and damages to public land or natural resources, or any combination thereof.” Willful violations may result in an additional fine of “up to \$15,000 per day per violation for each day in which the violation persists.” In addition, the Board of Land and Natural Resources “may set, charge, and collect the fine based on the value of the natural resource that is damaged, the market value of the natural resource damaged, and any other factor it deems appropriate, such as the loss of the natural resource to its natural habitat and environment and the cost of restoration or replacement. The remedies provided for in this subsection are cumulative and in addition to any other remedies allowed by law.”
<i>HRS Chapter 187A</i>	DLNR	Chapter 187A authorizes DLNR to manage and administer Hawaii’s aquatic life and aquatic resource including: <ol style="list-style-type: none"> 1) establish, manage, and regulate public fishing areas, artificial reefs, fish aggregating devices, marine life conservation districts, shoreline fishery management areas, refuges, and other areas pursuant to title 12; 2) enforce all laws relating to the protecting, taking, killing, propagating, or increasing of aquatic life within the State and the waters subject to its jurisdiction; 3) issue permits for take of aquatic life and recover penalties for violations of the chapter; and 4) formulate and from time to time recommend to the governor and legislature such additional legislation necessary or desirable to implement

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		the objectives of title 12.
<i>HRS Chapter 190</i>	DLNR	Chapter 190 provides that all of Hawaii’s marine waters are constituted marine life conservation areas to be managed by DLNR. Under HRS § 190-3, DLNR is responsible for adopting rules regulating the take and conservation of marine species, including rules that prohibit the disruption, alteration, and degradation of marine environment. HRS § 190-4.5 requires DLNR to adopt rules for the regulation of boating, anchoring, and mooring in the conservation area.
<i>HRS Chapter 195D</i>	DLNR	<p>Chapter 195D is Hawaii’s version of the U.S. ESA: “Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the ESA shall be deemed to be an endangered species under this chapter and any indigenous species of aquatic life, wildlife, or land plant that has been determined to be a threatened species pursuant to the ESA shall be deemed to be a threatened species under this chapter. The department may determine, in accordance with this section, however, that any such threatened species is an endangered species throughout all or any portion of the range of such species within this State.”</p> <p>DLNR is authorized to issue licenses for the take of certain species for limited durations of time. Chapter 195D also contains provisions for conservation programs and habitat conservation plans.</p>
<i>HRS Chapter 200</i>	DLNR	Chapter 200 governs ocean recreation and coastal areas programs, including limitations of private use of ocean waters, permits for boat harbors, and boating laws.
<i>Hawaii Administrative Rule (HAR) Chapter 13-95</i>	DLNR	<p>“Live rock” defined as any natural hard substrate to which marine life is visibly attached or affixed. “Stony coral” defined as any invertebrate species belonging to the Order Scleractinia, characterized by having a hard, calcareous skeleton that are native to the Hawaiian Islands.</p> <p>It is unlawful for any person to:</p> <ol style="list-style-type: none"> 1) take, break, or damage any stony coral or live rock; 2) damage any stony coral or live rock by any intentional or negligent activity causing the introduction of sediment, biological contaminants, or pollution into state waters; or, 3) to sell any live rock or stony coral, except that stony coral rubble pieces or fragments imported for the manufacture and sale of coral jewelry, or dead stony coral obtained through legal dredging

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		operations in Hawaii for agricultural or other industrial uses, may be sold.
<i>HAR Chapters 13-(28, 29, 30, 31, 32, 33, 34, 35, 37, 37, 38)</i>	DLNR	These chapters govern Marine Life Conservation Districts.
<i>HAR Chapter 124</i>	DLNR	Chapter 124 expands on Hawaii's Endangered Species Act (HRS Chapter 195D), including prohibited activities; scientific, propagation, and educational permits; and lists of indigenous, threatened, and endangered wildlife.
<i>2010 Hawaii Coral Reef Strategy</i>	DLNR	The 2010 Hawaii Coral Reef Strategy (HCRS) is the guiding coral reef management document used by the DLNR Division of Aquatic Resources with support from the NOAA Coral Reef Conservation Program.
<i>2013 Hawaii Ocean Resources Management Plan</i>	Office of Planning, various	The Hawaii Ocean Resources Management Plan (ORMP) is a comprehensive state plan that provides a framework for ocean and coastal resource management in Hawaii. The ORMP lists marine resources and coral reefs as management priorities 4 and 5, respectively.
<i>HAR Chapter 11-54</i>	Department of Health (DOH)	Establishes beneficial uses and water quality standards for all waters, enables biological criteria, and includes bottom criteria for coral reefs.
<i>HAR Chapter 11-55</i>	DOH	Hawaii's NPDES rules regulating point discharges including construction general permit for sites > 1 ac and municipal storm water.
Puerto Rico		
<i>Organic Law of the Planning Board of Puerto Rico (Law 75) 5-24-1975</i>	Puerto Rico Planning Board (PRPB)	The PRPB is responsible for setting standards for the development of a society based on a sustainable economy, while conserving and protecting the environment for the benefit of future generations. The PRPB is composed of several programs and subprograms responsible for permitting, project design, and land use including the Coastal Zone Unit which implements the Federal Consistency evaluation process according to CZMA regulations.
<i>Public Environmental Policy Law of the Environmental Quality Board (Law 416) 9-22-2004</i>	Environmental Quality Board (EQB)	The EQB has the principal function of protecting and conserving the environment using the resources necessary to impede or eliminate environmental damage and maintain a balance between economic development and the environment. The EQB Water Quality Area division is required to monitor, protect, improve, and maintain water quality in water bodies in order to achieve the propagation and preservation of desirable species and human consumption of water, among other uses. This area determines whether waters can be used for domestic, recreational, agricultural, and industrial purposes, as well as establishing regulations for the disposal of wastewater from these activities.

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<i>Organic Law of the Administration of Regulations and Permits</i> (Law 76) 5-24-1975	Administration of Regulation and Permits (ARPE)	The primary function of ARPE is to apply existing laws, ordinances, or regulations to the use and development of lands, construction, use or alteration of buildings or structures, and the installation of signs and announcements island-wide. Any building development requires ARPE permit and in most cases an endorsement from DNER.
<i>Puerto Rico Permits Process Reform Act</i> (Law 161)	Office of Permits Management (OGPE)	Act 161 created the OGPE to improve the quality and efficiency in the management of the process regarding the evaluation of applications for the approval or denial of final determinations and permits for the development of construction projects in Puerto Rico. The Environmental Compliance Division of the OGPE is responsible for conducting the environmental impact review under the Law 416 and issuing its recommendations. This division also evaluates “Green Permits” as categorical exclusions if the proposed project complies with green design guidelines.
U.S. Virgin Islands		
<i>Establishment of Wildlife and Marine Sanctuaries</i> Virgin Islands Code (VIC) Ch 1 Subch VII §96 - 99	USVI Department of Planning and Natural Resources (DPNR)	Gives authority to Commissioner of DPNR to establish wildlife and marine sanctuaries inside which, without a permit, no one can take or possess any bird, fish, or other wildlife from the designated sanctuary or throw, place, or deposit any waste within a designated sanctuary. Establishes the St. Croix East End Marine Park (STXEEMP) and authorizes the territorial system of marine parks. This authority has since been used to create the St. Thomas East End Reserve.
<i>Protection of indigenous, endangered and threatened fish, wildlife and plants</i> 12 VIC Ch 2 §101-107	DPNR	Establishes the Endangered Species Preservation Commission, which has the responsibility to take action to identify and preserve threatened and endangered species in the territory and implement the U.S. ESA. Covers all animal life including all coral reef vertebrate and invertebrate species, mangroves, and seagrasses. Permits for exceptions may be issued by the Commissioner on a case-by-case basis. Examples: scientific research, aquarium collectors, propagation activities, etc.
<i>Water Pollution Control</i> 12 VIC Ch 7 §181 - 198	DPNR	Declares public policy of the USVI to conserve the waters of the USVI and to protect, maintain, and improve the quality thereof for public water supplies, the propagation of wildlife, fish, and aquatic life, and for domestic, recreational, and other legitimate beneficial uses; to provide that no waste be discharged into any waters of the USVI without

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		treatment. Authorizes the USVI to implement the provisions of the CWA.
<i>Commercial Fishing</i> 12 VIC Ch 9A §301 - 326	DPNR – Division of Fish and Wildlife	To preserve, manage, and protect the fishery resources, to regulate fishing and to secure its increase and development in all marine, estuarine and freshwaters within the jurisdiction of the USVI. This document is broad when referring to limits on seasons and size; it is simply setting up the authority of the commissioner to determine the limitations. Species-specific size regulations and closed seasons are found in the Virgin Islands Rules and Regulations.
<i>Environmental Protection</i> 12 VIC Ch 13 §531-539	DPNR – Environmental Protection Program	States that the lands and waters comprising the watersheds of the USVI are great natural assets and resources. Improper development of land results in changed watershed conditions, which can negatively impact fish and marine life. In order to protect these resources, it is necessary to establish by law an environmental protection program for land development to prevent soil erosion.
<i>Virgin Islands Coastal Zone Management act of 1978</i> 12 VIC Ch 21 §901 - 914	DPNR – Coastal Zone Management Program (CZMP)	Establishes the Coastal Zone Management Program and defines its many goals concerning the protection and sustainable development of the coastal zone and the limiting of any negative impact on natural resources. Approves the coastal land and water use plan. Gives CZMP power to recommend designation of areas of particular concern (APCs).