(21) "navigable waters" means the waters of the United States, including the territorial sea; . . .

(23) "oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act; . . .

(26) "owner or operator" means (A) in the case of a vessel, any person owning, operating, or chartering by demise, the vessel, and (B) in the case of an onshore facility, and an offshore facility, any person owning or operating such onshore facility or offshore facility, and (C) in the case of any abandoned offshore facility, the person who owned or operated such facility immediately prior to such abandonment; . . .

(32) "responsible party" means the following:

(A) Vessels. In the case of a vessel, any person owning, operating, or demise chartering the vessel.

(B) Onshore facilities. In the case of an onshore facility (other than a pipeline), any person owning or operating the facility, except a Federal agency, State, municipality, commission, or political subdivision of a State, or any interstate body, that as the owner transfers possession and right to use the property to another person by lease, assignment, or permit.

(C) Offshore facilities. In the case of an offshore facility (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974, the lessee or permittee of the area in which the facility is located or the holder of a right of use and easement granted under applicable State law or the Outer Continental Shelf Lands Act for the area in which the facility is located (if the holder is a different person than the lessee or permittee), except a Federal agency, State, municipality, commission, or political subdivision of a State, or any interstate body, that as owner transfers possession and right to use the property to another person by lease, assignment, or permit. . .

(E) Pipelines. In the case of a pipeline, any person owning or operating the pipeline. . . .

(34) "tank vessel" means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that

(A) is a vessel of the United States;

(B) operates on the navigable waters; or

(C) transfers oil or hazardous material in a place subject to the jurisdiction of the United States;

(35) "territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea.
and the line marking the seaward limit of inland waters, and extending seaward a
distance of 3 miles;

Section 2702. Elements of liability

(a) In General.

Notwithstanding any other provision or rule of law, and subject to the provisions
of this Act, each responsible party for a vessel or a facility from which oil is
discharged, or which poses the substantial threat of a discharge of oil, into or upon
the navigable waters or adjoining shorelines or the exclusive economic zone is liable
for the removal costs and damages specified in subsection (b) that result from such
incident.

(b) Covered Removal Costs and Damages.

(1) Removal costs.

The removal costs referred to in subsection (a) are—

(A) all removal costs incurred by the United States, a State, or an Indian
tribe under subsection (c), (d), (e), or (1) of section 311 of the Federal Water
Pollution Control Act, as amended by this Act, under the Intervention on the
High Seas Act, or under State law; and

(B) any removal costs incurred by any person for acts taken by the person
which are consistent with the National Contingency Plan.

(2) Damages. The damages referred to in subsection (a) are the following:

(A) Natural resources.

Damages for injury to, destruction of, loss of, or loss of use of, natural
resources, including the reasonable costs of assessing the damage, which shall
be recoverable by a United States trustee, a State trustee, an Indian tribe
trustee, or a foreign trustee.

(B) Real or personal property.

Damages for injury to, or economic losses resulting from destruction of, real
or personal property, which shall be recoverable by a claimant who owns or
leases that property.

(C) Subsistence use.

Damages for loss of subsistence use of natural resources, which shall be
recoverable by any claimant who so uses natural resources which have been
injured, destroyed, or lost, without regard to the ownership or management of
the resources.

(D) Revenues.

Damages equal to the net loss of taxes, royalties, rents, fees, or net profit
shares due to the injury, destruction, or loss of real property, personal property,
or natural resources, which shall be recoverable by the Government of the
United States, a State, or a political subdivision thereof.

(E) Profits and earning capacity.

Damages equal to the loss of profits or impairment of earning capacity due
to the injury, destruction, or loss of real property, personal property, or natural
resources, which shall be recoverable by any claimant.
(F) Public services.

Damages for net costs of providing increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by a discharge of oil, which shall be recoverable by a State, or a political subdivision of a State.

(c) Excluded Discharges.

This title does not apply to any discharge--
(1) permitted by a permit issued under Federal, State, or local law;
(2) from a public vessel; or
(3) from an onshore facility which is subject to the Trans-Alaska Pipeline Authorization Act.

(d) Liability of Third Parties.

(1) In general.

(A) Third party treated as responsible party. Except as provided in subparagraph (B), in any case in which a responsible party establishes that a discharge or threat of a discharge and the resulting removal costs and damages were caused solely by an act or omission of one or more third parties described in section 2703(a)(3) (or solely by such an act or omission in combination with an act of God or an act of war), the third party or parties shall be treated as the responsible party or parties for purposes of determining liability under this title.

(B) Subrogation of responsible party. If the responsible party alleges that the discharge or threat of a discharge was caused solely by an act or omission of a third party, the responsible party--

(i) in accordance with section 2713, shall pay removal costs and damages to any claimant; and

(ii) shall be entitled by subrogation to all rights of the United States Government and the claimant to recover removal costs or damages from the third party or the Fund paid under this subsection.

(2) Limitation applied.

(A) Owner or operator of vessel or facility.

If the act or omission of a third party that causes an incident occurs in connection with a vessel or facility owned or operated by the third party, the liability of the third party shall be subject to the limits provided in section 2704 as applied with respect to the vessel or facility.

(B) Other cases.

In any other case, the liability of a third party or parties shall not exceed the limitation which would have been applicable to the responsible party of the vessel or facility from which the discharge actually occurred if the responsible party were liable.
Section 2703. Defenses to liability

(a) Complete Defenses.

A responsible party is not liable for removal costs or damages under section 2702 if the responsible party establishes, by a preponderance of the evidence, that the discharge or substantial threat of a discharge of oil and the resulting damages or removal costs were caused solely by--

(1) an act of God;
(2) an act of war;
(3) an act or omission of a third party, other than an employee or agent of the responsible party or a third party whose act or omission occurs in connection with any contractual relationship with the responsible party (except where the sole contractual arrangement arises in connection with carriage by a common carrier by rail), if the responsible party establishes, by a preponderance of the evidence, that the responsible party--
   (A) exercised due care with respect to the oil concerned, taking into consideration the characteristics of the oil and in light of all relevant facts and circumstances; and
   (B) took precautions against foreseeable acts or omissions of any such third party and the foreseeable consequences of those acts or omissions; or
(4) any combination of paragraphs (1), (2), and (3).

(b) Defenses As To Particular Claimants.

A responsible party is not liable under section 2702 to claimant, to the extent that the incident is caused by the gross negligence or wilful misconduct of the claimant.

(c) Limitation on Complete Defense.

Subsection (a) does not apply with respect to a responsible party who fails or refuses--

(1) to report the incident as required by law if the responsible party knows or has reason to know of the incident;
(2) to provide all reasonable cooperation and assistance requested by a responsible official in connection with removal activities; or
(3) without sufficient cause, to comply with an order issued under subsection (c) or (e) of section 311 of the Federal Water Pollution Control Act, as amended by this Act, or the Intervention on the High Seas Act.

Section 2704. Limits on liability

(a) General Rule.

Except as otherwise provided in this section, the total of the liability of a responsible party under section 1002 [33 U.S.C. § 2702] and any removal costs

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incurred by, or on behalf of, the responsible party, with respect to each incident shall not exceed--

(1) for a tank vessel, the greater of--
   (A) $1,200 per gross ton; or
   (B)(i) in the case of a vessel greater than 3,000 gross tons, $10,000,000; or
   (ii) in the case of a vessel of 3,000 gross tons or less, $2,000,000;
(2) for any other vessel, $600 per gross ton or $500,000, whichever is greater;
(3) for an offshore facility except a deepwater port, the total of all removal costs plus $75,000,000; and
(4) for any onshore facility and a deepwater port, $350,000,000. (b)

(c) Exceptions.

(1) Acts of responsible party. Subsection (a) does not apply if the incident was proximately caused by--
   (A) gross negligence or willful misconduct of, or
   (B) the violation of an applicable Federal safety, construction, or operating regulation by, the responsible party, an agent or employee of the responsible party, or a person acting pursuant to a contractual relationship with the responsible party (except where the sole contractual arrangement arises in connection with carriage by a common carrier by rail).
(2) Failure or refusal of responsible party. Subsection (a) does not apply if the responsible party fails or refuses--
   (A) to report the incident as required by law and the responsible party knows or has reason to know of the incident;
   (B) to provide all reasonable cooperation and assistance requested by a responsible official in connection with removal activities; or
   (C) without sufficient cause, to comply with an order issued under subsection (c) or (e) of section 311 of the Federal Water Pollution Control Act, as amended by this Act, or the Intervention on the High Seas Act.

Section 2706. Natural resources

(a) Liability.

In the case of natural resource damages under section 2702(b) (2)(A), liability shall be-- [to the federal government, state, Indian tribe, or foreign country for resources "belonging to, managed by, controlled by, or appertaining to" the respective entities.]
(b) Designation of Trustees.

(1) In general.
The President, or the authorized representative of any State, Indian tribe, or foreign government, shall act on behalf of the public, Indian tribe, or foreign country as trustee of natural resources to present a claim for and to recover damages to the natural resources. . . .

(c) Functions of Trustees.

[Trustees of the federal government, state, Indian tribe, or foreign government:]

(A) shall assess natural resource damages under section 2702(b)(2)(A) for the purposes of this Act for the natural resources under their trusteeship; and

(B) shall develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship.

. . . .

(5) Notice and opportunity to be heard. Plans shall be developed and implemented under this section only after adequate public notice, opportunity for a hearing, and consideration of all public comment.

(d) Measure of Damages.

(1) In general.
The measure of natural resource damages under section 2702(b)(2)(A) is--

(A) the cost of restoring, rehabilitating, replacing, or acquiring the equivalent of, the damaged natural resources;
(B) the diminution in value of those natural resources pending restoration;
plus
(C) the reasonable cost of assessing those damages.

. . . .

(2) Rebuttable presumption.
Any determination or assessment of damages to natural resources for the purposes of this Act made under subsection (d) by a Federal, State, or Indian trustee in accordance with [federal] regulations . . . shall have the force and effect of a rebuttable presumption on behalf of the trustee in any administrative or judicial proceeding under this Act.

. . . .
Section 2708. Recovery by responsible party

(a) In General.

The responsible party for a vessel or facility from which oil is discharged, or which poses the substantial threat of a discharge of oil, may assert a claim for removal costs and damages under section 2713 only if the responsible party demonstrates that—

(1) the responsible party is entitled to a defense to liability under section 2703; or

(2) the responsible party is entitled to a limitation of liability under section 2704.

(b) Extent of Recovery.

A responsible party who is entitled to a limitation of liability may assert a claim under section 2713 only to the extent that the sum of the removal costs and damages incurred by the responsible party plus the amounts paid by the responsible party, or by the guarantor on behalf of the responsible party, for claims asserted under section 2713 exceeds the amount to which the total of the liability under section 2702 and removal costs and damages incurred by, or on behalf of, the responsible party is limited under section 2704.

Section 2711. Consultation on removal actions

The President shall consult with the affected trustees designated under section 2706 on the appropriate removal action to be taken in connection with any discharge of oil. For the purposes of the National Contingency Plan, removal with respect to any discharge shall be considered completed when so determined by the President in consultation with the Governor or Governors of the affected States. However, this determination shall not preclude additional removal actions under applicable State law.

Section 2716. Financial responsibility

(a) Requirement.

The responsible party for—

(1) any vessel over 300 gross tons (except a non-self-propelled vessel that does not carry oil as cargo or fuel) using any place subject to the jurisdiction of the United States; or

(2) any vessel using the waters of the exclusive economic zone to transship or lighter oil destined for a place subject to the jurisdiction of the United States; shall
establish and maintain, in accordance with regulations promulgated by the Secretary, evidence of financial responsibility sufficient to meet the maximum amount of liability to which ... the responsible party could be subject under section 2704(a)(1) or (d) ... section 2704(a)(2) or (d) ... If the responsible party owns or operates more than one vessel, evidence of financial responsibility need be established only to meet the amount of the maximum liability applicable to the vessel having the greatest maximum liability.

....

(c) Offshore Facilities.

(1) In general.

...[E]ach responsible party with respect to an offshore facility shall establish and maintain evidence of financial responsibility of $150,000,000 to meet the amount of liability to which the responsible party could be subjects under section 2704(a) in a case in which the responsible party would be entitled to limit liability under that section. In a case in which a person is the responsible party for more than one facility subject to this subsection, evidence of financial responsibility need be established only to meet the maximum liability applicable to the facility having the greatest maximum liability.

....

Section 2718. Relationship to other law

(a) Preservation of State authorities; Solid Waste Disposal Act

Nothing in this chapter of the Act of March 3, 1851 [Limitation of Liability Act] shall--

(1) affect, or be construed or interpreted as preempting, the authority of any State or political subdivision thereof from imposing any additional liability or requirements with respect to--

(A) the discharge of oil or other pollution by oil within such State; or

(B) any removal activities in connection with such a discharge; or

(2) affect, or be construed or interpreted to affect or modify in any way the obligations or liabilities of any person under the Solid Waste Disposal Act or State law, including common law.

(b) Preservation of State Funds.

Nothing in this Act or in section 9509 of the Internal Revenue Code of 1986 shall in any way affect, or be construed to affect, the authority of any State--

(1) to establish, or to continue in effect, a fund any purpose of which is to pay for costs or damages arising out of, or directly resulting from, oil pollution or the substantial threat of oil pollution; or

(2) to require any person to contribute to such a fund.
(c) Additional Requirements and Liabilities; Penalties.

Nothing in this Act, the Act of March 3, 1851 (46 U.S.C. 183 et seq.), or section 9509 of the Internal Revenue Code of 1986 shall in any way affect, or be construed to affect, the authority of the United States or any State or political subdivision thereof:-

(1) to impose additional liability or additional requirements; or
(2) to impose, or to determine the amount of, any fine or penalty (whether criminal or civil in nature) for any violation of law; relating to the discharge, or substantial threat of a discharge, of oil.

(d) Federal Employee Liability.

For purposes of section 2679(b)(2)(B) of title 28, United States Code, nothing in this Act shall be construed to authorize or create a cause of action against a Federal officer or employee in the officer's or employee's personal or individual capacity for any act or omission while acting within the scope of the officer's or employee's office or employment.

NOTES

1. Section 311 of the Clean Water Act (the common name for the Federal Water Pollution Control Act) continues to be applicable to a number of issues concerning spills of oil and hazardous substances. The fundamental policy of the act is that there "should be no discharges of oil or hazardous substances into or upon the navigable waters of the United States, the adjoining shoreline, . . . [or on the OCS or EEZ]." The discharge of oil and hazardous substances is prohibited in quantities that "may be harmful to the public health and welfare of the United States" as established by the President by regulation. Spillers have an obligation under the CWA to report all such spills. Failure to report incurs criminal liability.

The question of what constitutes a spill of reportable quantity has been the subject of a saga concerning Chevron that has spanned fifteen years. Regulations have established that a quantity that creates a sheen on the water "may be harmful." An earlier version of § 311(b)(3) was written in terms of "harmful quantities" and Chevron challenged the sheen test because the statute required actual injury. In United States v. Chevron Oil (Chevron I), 583 F.2d 1357 (1978), the court held that the sheen test created only a rebuttable presumption of harm to the environment. Although § 311 was amended to prohibit even quantities that "may be harmful," Chevron has continued to contest the imposition of civil penalties when a reportable spill nevertheless has little or no actual impact on the environment. Most recently, in Chevron v. Yost, 919 F.2d 27 (1990), the court upheld the "sheen test" as the basis
for imposing civil liability. "While it is apparent that such an approach sometimes overregulates, it is equally apparent that this imprecision is a trade-off for the administrative burden of case-by-case proceedings." Quoting Gulf Transport Co. v. United States, 711 F. Supp. 344, 347 (W.D.Ky.1989), the court reasoned:

That Congress could have prohibited all discharges through a specific declaration and chose not to do so does not negate the effect of the amendment, a common sense reading of which illustrates that Congress chose to prohibit discharges which might not be harmful. Whether a spill resulted in actual harm to the environment is irrelevant to the determination of whether Section 311's prohibition of discharges of oil in quantities which may be harmful has been violated. The only pertinent inquiry is whether the spill was in a quantity which may be harmful as determined by the EPA. Because EPA has determined that a spill of oil which creates a sheen is a quantity which 'may be harmful,' such a spill is subject to the penalty provisions of 33 U.S.C. § 1321 and 40 CFR Part 110.3.

2. Do the reporting requirements violate the constitutional prohibition against self-incrimination? In United States v. Ward, 448 U.S. 242 (1980), the U.S. Supreme Court found that because reporting resulted in civil, rather than criminal, penalties, the Fifth Amendment did not apply.

3. Does the OPA overturn the Robins rule?

4. Calculation of natural resource damages is the subject of much debate since the Exxon Valdez spill. How do you calculate the value of irreplaceable or endangered species? Replacement value is not an option. In Ohio v. U.S. Dep't of Interior, 880 F.2d 432 (D.C. Cir. 1989), the court struck down DOI regulations for natural resources damages. Liability that was limited to the lesser of restoration or replacement costs or diminution of use values was found to be contrary to the intent of Congress which had shown a preference for restoration cost. Does the OPA sanction such a method of evaluation?

5. Section 311 explicitly limited liability for clean up to United States waters. See United States v. Oswego Barge Corp., 664 F.2d 327 (1981). The OPA now contains specific provisions relating to foreign country claims at 33 U.S.C. § 2707:

Section 2707. Recovery by foreign claimants

(a) Required Showing by Foreign Claimants.

(1) In general.
In addition to satisfying the other requirements of this Act, to recover removal costs or damages resulting from an incident a foreign claimant shall demonstrate that—
(A) the claimant has not been otherwise compensated for the removal costs or damages; and
(B) recovery is authorized by a treaty or executive agreement between the United States and the claimant's country, or the Secretary of State, in consultation with the Attorney General and other appropriate officials, has certified that the claimant's country provides a comparable remedy for United States claimants.

(2) Exceptions.
Paragraph (1)(B) shall not apply with respect to recovery by a resident of Canada in the case of an incident described in subsection (b)(4).

(b) Discharges in Foreign Countries.

A foreign claimant may make a claim for removal costs and damages resulting from a discharge, or substantial threat of a discharge, of oil in or on the territorial sea, internal waters, or adjacent shoreline of a foreign country, only if the discharge is from—

(1) an Outer Continental Shelf facility or a deepwater port;
(2) a vessel in the navigable waters;
(3) a vessel carrying oil as cargo between 2 places in the United States; or
(4) a tanker that received the oil at the terminal of the pipeline constructed under the Trans-Alaska Pipeline Authorization Act (43 U.S.C. 1651 et seq.), for transportation to a place in the United States, and the discharge or threat occurs prior to delivery of the oil to that place.

(c) Foreign Claimant Defined.

In this section, the term "foreign claimant" means--

(1) a person residing in a foreign country;
(2) the government of a foreign country; and
(3) an agency or political subdivision of a foreign country.

6. Most states, including Florida, have strict liability statutes to recover clean up costs and damages for spills of oil and hazardous substances. Florida's statutory scheme is summarized in the following excerpt:

Christie, Florida's Ocean Future: Toward a State
Ocean Policy, 5 J. LAND USE & ENVT'L. L. 447, 563-65 (1990)

4. Florida's Oil Spill Legislation and Regulation

Florida's Pollutant Spill Prevention and Control Act' largely parallels provisions of the Clean Water Act in that it prohibits coastal and ocean discharges of

'(n.483)FLA. STAT. §§ 376.011-.17, 376.19-.21 (1989).
pollutants. Any person discharging a pollutant into Florida waters is responsible for the immediate cleanup of the substance. Liability of vessels for state cleanup costs is up to $14 million or $100 per gross registered ton, whichever is less. Strict liability for spills applies both to cleanup and to damages to individuals; however, there is no limitation on private property damages. A violator's defenses and the standard for lifting cleanup liability limitations are identical to federal exceptions. Vessels must establish and maintain proof of financial responsibility as required by federal law.

The Act also regulates terminal facilities. Terminals are defined to include pipelines and every shore facility from a gas pump at a small marina to the largest tank farms and refineries. All terminal facilities must be registered by DNR, based on a showing of satisfactory containment and cleanup capabilities. Cleanup liability for terminals for state costs is limited to $8 million. Terminal owners must maintain evidence of financial responsibility.

The Department of Natural Resources has responsibility for oil spill control in the state's coastal waters. To complement the national and regional oil spill contingency plans, DNR has developed the Florida Coastal Pollutant Spill Contingency Plan and a response team—the State Hazardous Materials Task Force. In most cases, the Coast Guard and DNR will coordinate the response, with the federal On-Scene Coordinator taking the lead. The state Task Force will generally only be activated in the case of a major spill episode. Florida's policy is that no state moneys be expended on pollutant spill cleanup until federal funds have been depleted or the federal government declines to clean up the spill.

Like the federal government, Florida has established a fund to assure prompt and adequate response to oil spills. In addition to having funds available for emergency response, the Florida Coastal Protection Trust Fund moneys may be used for rehabilitation of natural resources, to compensate private parties for damages, and to provide grants to local governments to remove derelict vessels from public waters. DNR is responsible for recovering moneys expended from the fund from the persons responsible for the spill or from the federal government.

7. Oil discharges and spills are also the subject of a large body on international law. The following describes the treaties that provide the international framework to prevent oil discharges and assign liability for damages:

Christie, Florida’s Ocean Future: Toward a State Ocean Policy, 5 J. LAND USE & ENVT. L. 447, 559-61 (1990)

Recognizing that pollution of the seas by oil is a truly international issue, nations have negotiated a number of treaties to control intentional discharges and to minimize accidental discharges. The major treaties include the following:
1) The 1954 Oil Pollution Prevention Convention prohibited the discharge of oil and oily mixtures into the sea in certain areas. Prohibited zones were defined to include all sea areas within fifty miles of a coast, but a number of special areas extended to 100 miles offshore. An Oil Record Book was required to document discharges of oil and the surrounding circumstances. Amendments in 1969 added a rule that discharges must be *en route* and proscribed a rate of discharge in addition to the distance-from-land rule. Amendments in 1971 related to tank size and arrangement and created a fifty-mile prohibited zone around the Great Barrier Reef.

2) The 1969 Convention on Intervention on the High Seas gives contracting parties the authority to take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty . . . which may reasonably be expected to result in major harmful consequences.

3) The 1969 Convention on Civil Liability for Oil Pollution Damage provides a legal basis for claims for damages to the territorial sea or coast of a state. The convention also provides a limitation of liability and defenses for shipowners and requires that all ships carrying over 2,000 tons of oil have financial security or insurance to the limit of liability.

4) The 1971 Convention Concerning an International Fund for Compensation for Oil Pollution Damage is a supplement to the 1969 Liability Convention. It supplements the liability compensation limits and provides compensation to individuals who suffer pollution damage. The Fund is maintained by oil companies in each treaty state, rather than by the oil tanker owners and operators.

5) The 1973 Convention for the Prevention of Pollution from Ships (MARPOL) supersedes the 1954 convention and extends the scope of the international pollution prevention effort to discharges of any harmful substance and to virtually all vessels and oil platforms. Tankers over 150 gross tons and other ships over 400 gross tons must be inspected and certified that they meet convention requirements. MARPOL emphasizes improved technology. Port reception facilities are required to eliminate the necessity of flushing tanks at sea.

In addition to these public law treaties, private oil companies have created a worldwide insurance syndicate for compensation of damages arising from tanker oil spills. The 1969 Tank Owners' Voluntary Agreement Concerning Liability for Oil Pollution provides cleanup costs to governments up to $10 million, and the 1971 Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution extends coverage to other governmental costs and private damages. Liability is based on negligence, but the burden of proof is on the charterer or shipowner.
Although international efforts have had a significant effect in the area of liability and cleanup costs for pollution from oil and hazardous substances, many commentators believe that the conventions have actually provided very little relief from chronic discharges from vessels. The major weakness of the conventions is inadequate coastal-state enforcement authority, even within "prohibited" zones. Enforcement is the responsibility of the flag country, and unfortunately there is very little economic incentive for a country to engage in vigorous enforcement of treaty obligations against its ships in distant waters. The 1982 Law of the Sea Convention offers increased opportunities for coastal-state enforcement, but the United States is unlikely to become a party to the treaty.

The United States and fifteen other countries are also parties to the 1983 Cartagena de Indias Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and the Protocol concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region, commonly called the Cartagena Convention. An additional sixteen countries are participating in a Caribbean Action Plan to implement the treaty. The convention was intended to address a number of sources of marine pollution, including vessels, dumping, seabed activities, airborne pollution, and land-based sources and to provide a dispute resolution procedure. In addition to adopting the protocol on oil spills, the parties have adopted a resolution urging nations in the region to refrain from ocean incineration, dumping, and disposal of nuclear wastes, except in accordance with the 1972 London Dumping Convention. The United States has proposed that the oil spill protocol be extended to include other hazardous substances.

III. Endangered Species: Sea Turtles

STATE OF LOUISIANA v. VERITY
853 F.2d 322 (5th Cir. 1988)

Appellants, the State of Louisiana and the Concerned Shrimpers of Louisiana ("Concerned Shrimpers"), appealed the district court's entry of summary judgment in favor of the Commerce Department, upholding in all respects the Secretary's regulations requiring shrimp trawlers to install and use "turtle excluder devices," also known as "TEDs," in their nets or to limit their trawling to 90 minutes or less at a time. . . . We now offer our reasons for affirming summary judgment below.

I.

Five species of sea turtles—the Kemp's ridley, loggerhead, leather-back, green, and hawksbill—frequent the Gulf of Mexico and the Atlantic Ocean, off the southeast coast of the United States. All of these species are listed as either "endangered" or "threatened" under the Endangered Species Act of 1973 ("ESA"), 16 U.S.C. § 1531 et seq. Upon inclusion of any species or the list as endangered, section 9 of the ESA prohibits any person from "taking" any such species within the United States, the territorial waters of the United States, or upon the high seas. In the case of sea turtles, it is equally forbidden to take threatened and endangered species. In addition to these prohibitions, the ESA permits the Secretaries of Commerce and the Interior to promulgate protective regulations.

1 (n.2) An "endangered" species is one that is in danger of extinction throughout all or a significant part of its range. A "threatened" species is one likely to become endangered within the foreseeable future throughout all or a significant part of its range.

Although the Kemp's ridley is the most critically endangered sea turtle, the four other species are in serious danger of extinction as well. By 1978, the Secretary of Commerce had listed the Kemp's ridley, leatherback, and hawksbill turtles as endangered species, and the loggerhead and green turtles as threatened. 50 C.F.R. § 222.23 (1987) (list of endangered sea turtles, effective 1974); 50 C.F.R. § 227.4 (1987) (list of threatened sea turtles, effective 1978). Under the Secretary's authority to list endangered or threatened species by region, the green turtle was also listed as endangered in Florida waters. 50 C.F.R. § 222.23 (1987). The Pacific, or Olive ridley, not at issue in this case, is listed as threatened, except for the population off the Pacific coast of Mexico, which is listed as endangered.

2 (n.3) To "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct." 16 U.S.C. § 1532(19).

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On June 29, 1987, the Commerce Department, through its National Marine Fisheries Service ("NMFS"), promulgated final regulations requiring shrimp trawlers in the Gulf and South Atlantic to reduce the incidental catch and mortality of sea turtles in shrimp trawls. The regulations attempt to supplement ESA’s prohibitions against the "taking" of protected species, and were to become effective for Louisiana on March 1, 1988. Specifically, the regulations require shrimpers operating in offshore waters and in vessels 25 feet or longer to install and use certified "turtle excluder devices," or "TEDs," in each of their trawls. If the vessel is less than 25 feet or is trawling in inshore waters, the shrimper may limit each towing period to 90 minutes or less as an alternative to using a TED.

The reason for the regulations is simple: Researchers have found that during shrimping operations sea turtles are caught in the large nets, or trawls, pulled behind commercial shrimping vessels. The nets drag the turtles behind the boats and thereby prevent them from surfacing for air. According to one study, once a turtle is within the mouth of a shrimp trawl, the animal’s initial reaction is to attempt to outswim the device. Of course, this strenuous effort consumes oxygen but affords the turtle no opportunity to replenish the supply. Once trapped, if the exhausted turtle is not released quickly, it will drown. Research cited in the administrative record indicates that trawl times in excess of 90 minutes are highly likely to result in the death of a captured turtle.

In October 1987, the State of Louisiana filed a complaint in federal district court, contending that both the TED and tow limit requirements are invalid. . . .

II.

B.

The core of appellants’ challenge on appeal concerns the sufficiency of the administrative record to support the TED and trawling-period regulations. In particular, they assert that the record insufficiently demonstrates the impact of shrimp trawling on sea turtle mortality, the efficacy of the regulations as applied to inshore Louisiana waters, and the impact of the regulations on the Louisiana economy. Appellants also challenge the regulations insofar as the administrative record supporting them fails to address serious causes of sea turtle mortality other than shrimping. Based upon the limited scope of our review, we find that the record amply supports the Secretary’s decision to issue the regulations in question.

1. The Impact of Shrimp Trawling on Sea Turtle Mortality.

The relationship of shrimping to sea turtle mortality is strongly demonstrated by data contained in the administrative record. Since 1973, on-board observers have documented the capture and drowning of sea turtles by shrimp trawlers. Using
mere two capturings of the Kemp’s ridley turtles during the entire time test trawls were pulled off Louisiana’s shores. The insufficiency of this sample is borne out, they believe, by the discrepancy between the Henwood-Stuntz extrapolations and observations made by the Louisiana Department of Wildlife and Fisheries. From 1967 until 1986, the Louisiana Department conducted a total of 36,837 trawl samples, but in none of these was a single sea turtle ever reported to have been captured. At the very least, appellants conclude, the methodology of Henwood-Stuntz is prone to grossly over-estimating the killing of sea turtles in shrimp trawls.

Although we believe appellants’ challenge is not totally without merit, we are mindful that under the arbitrary-and-capricious standard, our deference to the agency is greatest when reviewing technical matters within its area of expertise, particularly its choice of scientific data and statistical methodology. In reviewing such technical choices, "[w]e must look at the decision not as the chemist, biologist or statistician that we are qualified neither by training nor experience to be, but as a reviewing court exercising our narrowly defined duty of holding agencies to certain minimal standards of rationality." Accordingly, where, as here, the agency presents scientifically respectable conclusions which appellants are able to dispute with rival evidence of presumably equal dignity, we will not displace the administrative choice. Nor will we remand the matter to the agency in order that the discrepant conclusions be reconciled.

From our admittedly lay perspective, the Henwood-Stuntz method of extrapolating the magnitude of sea turtle takings in shrimp trawls does not necessarily appear unreasonable. There are more than 18,000 domestic shrimp vessels operating in the Gulf and South Atlantic. Each of these vessels simultaneously pulls from 1 to 4 trawls, generally for 2 to 6 hours at a time. Shrimping occurs in the Gulf year-round, with most activity concentrated between June and December. Therefore, while the 16,785 hours of observer effort invested in the Henwood-Stuntz study represents the equivalent of less than one hour of fishing by the entire shrimping fleet, we recognize that the size of the industry realistically precludes statistical findings based totally upon actual observation rather than extrapolation.

....

2. The Efficacy of the Regulations as Applied to Louisiana’s Inland Waters.

The administrative record amply demonstrates that sea turtles are found in inshore waters. Kemp’s ridleys, for example, are known to frequent the inshore waters of the Gulf, which hosts their favorite food species, the blue crab. Kemp’s ridleys are most abundant in Louisiana, particularly in the near-shore white shrimp grounds. At least one expert has observed that "Kemp’s ridley could logically be labelled the Louisiana turtle, because its greatest abundance is found there.... It is beyond doubt the commonest marine turtle in the state, concentrated in the shallow water from Marsh Island to the Mississippi Delta." Of all tag returns of nesting Kemp’s ridley females, 59% are from Louisiana near-shore waters. Other
extrapolations based upon more than 27,000 hours of shrimp trawl observation, experts have concluded that more than 47,000 endangered and threatened sea turtles are caught in shrimp trawls each year; 11,179 of these turtles drown in the shrimpers’ nets. Tag returns on the Kemp’s ridley also provide a fertile source of information: 84% of the Kemp’s ridley turtles tagged by scientists and later recovered were captured by shrimp trawlers.

The capture and mortality statistics for Louisiana waters were derived largely from the so-called Henwood-Stuntz study, a series of extrapolations based upon 16,785 hours of observer effort in the Gulf of Mexico. Of this total, 4,333 hours were spent on shrimp boats off the Louisiana shore. During the Louisiana observation period, 12 sea turtles were taken, 5 of which had died by the time the trawl was retrieved. This mortality rate of 42% is among the highest of any state, the Gulf-wide rate being 29%. More than one-third of the turtles that were observed to have died in Gulf shrimp trawls, died off Louisiana.

Although the observers spent substantial hours on the shrimp boats, their effort recorded the results of only a small fraction of the annual shrimping effort. Each year, commercial shrimpers are estimate to spend 2,063,074 hours trawling off Louisiana. Using a simple ratio of $5/4,333 = X/2,063,074$ and solving for $X$, a total 2,381 endangered and threatened turtle would be estimated to be killed annually off Louisiana alone.

"Stranding" data further supports the conclusion that shrimping is responsible for large numbers of sea turtle deaths. Beginning in 1980, volunteers established the Sea Turtle Stranding and Salvage Network ("Network") to monitor the number types of sea turtle carcasses stranded on beaches and in marshes and bayous. More than 8,300 dead sea turtles, including nearly 600 Kemp’s ridleys, were reported to NMFS by the Network. Although determining the precise cause of a stranded sea turtle’s death is difficult, a causal link to shrimping appears reasonable in light of the fact that strandings occur predominantly in areas adjacent to shrimping grounds, and that the number of sea turtle strandings increases dramatically with the advent of the shrimping season.

In addition, the administrative record established that, based upon tag returns between 1966 and 1984, 32% of the Kemp’s ridley turtles incidentally captured are caught in Louisiana waters, by far the highest rate of any state or country. Twenty-two percent of the Kemp’s ridley strandings in the Gulf occur in Louisiana. In a 1984 study, 12 out of 15 Louisiana shrimpers interviewed said they caught from 1 to 2 sea turtles each year.

In challenging the administrative fact finding that links shrimp trawling to sea turtle mortality, appellants assert that the Secretary failed to consider the best scientific data available before issuing the regulations. The Henwood-Stuntz extrapolations heavily relied upon by the agency are flawed, appellants contend, because one of the field samples on which they are based is unscientifically small. Specifically, appellants point out that researchers conducting the study recorded a
species, including loggerheads and green turtles, also frequent inshore Louisiana waters. The Kemp's ridley is also found in nearby Texas coastal waters, as are green turtles and loggerheads.

Sea turtles not only frequent inshore waters; the record is replete with evidence to show that they are captured there as well. . . .

. . . .

3. The Impact of the Regulations on Louisiana's Economy.

The proposed regulations, which were to be phased in over a two-year period, will require 17,200 shrimpers using certain size nets to install TEDs and use them when fishing in offshore waters during the shrimping seasons. Shrimpers will purchase and install certified TEDs at an expected cost of $200-400 per TED. The average annual cost to the entire industry was estimated at $5.9 million, which included the cost of expected shrimp loss during the start-up period, before gear adjustments and changes in trawling technique overcome any initial inefficiencies. There is substantial evidence in the administrative record indicating that anticipated catch loss resulting from use of the TEDs will amount to no more than 5%.

Although we do not denigrate appellants' concern with the expense and inconvenience the regulations will visit on Louisiana's shrimping industry, Congress has decided that these losses cannot compare the "incalculable" value of genetic heritage embodied in any protected living species. While we do not mean to imply that economic impact can never be considered in determining whether a particular regulation promulgated under the ESA is arbitrary or capricious, the protections afforded by the regulations before us have not been shown to be achievable through less costly means. Thus, the costs shouldered by the industry are not arbitrary, but reasonably related to Congress's purpose.3

4. The Secretary's Failure To Regulate Other Major Causes of Sea Turtle Mortality.

Appellants argue that the TED regulations are arbitrary and capricious because they do not address other serious causes of sea turtle mortality. . . .[T]he agency's decision to attack one of the major causes of sea turtle mortality through regulation is entirely within its discretion. That dredges, commercial fishermen from other

3(n.20) In this regard, we must be ever cognizant that "[w]e are judges, not legislators." Congress has made the policy determination that endangered species are to be protected, and an administrative agency has decided that sea turtles are to be protected despite substantial economic consequences for an important industry. We express no opinion on those choices. If the trade-off between marine life and economic success has been skewed in the wrong direction, it is for the legislative and executive branches, not the courts, to correct that imbalance.
nations, and pollution also contribute to sea turtle deaths does not undermine the validity of these restrictions.

Appellants' second contention is based upon the proposition enunciated in *Connor v. Andrus*, 453 F.Supp. 1037, 1041 (W.D. Tex.1978), that regulations issued under the ESA must halt, or even reverse, the population depletion of an endangered species. . . .

An essential part of appellants' argument assumes that the ESA authorizes the Secretary to issue protective regulations only if found actually to save an endangered species from extinction. We believe, however, that this assumption finds no support in the statutory grant of regulatory authority, 16 U.S.C. § 1533(d). To be sure, that statute mandates the Secretary to "issue such regulations as he deems necessary and advisable to provide for the conservation of [threatened] species." "Conservation" is elsewhere defined in the ESA as "all methods and procedures which are necessary to bring endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary." 16 U.S.C. § 1532(3).

In addition to this mandatory duty, however, the ESA also provides the Secretary discretionary authority to prohibit by regulation the taking of any threatened species of fish and wildlife. This regulatory authority supplements the statutory prohibition against the taking of endangered species, the enforcement which is not conditioned upon any showing that the prohibition will itself operate to restore the species to a

\*\(n.22\) 16 U.S.C. § 1533(d) provides in relevant part as follows:

Whenever any species is listed as a threatened species pursuant to subsection (c) of this section, the Secretary shall issue such regulations as he deems necessary and advisable to provide for the conservation of such species. The Secretary may be regulation prohibit with respect to any threatened species any act prohibited under section 1538(a)(1) of this title, in the case of fish or wildlife. . . .

16 U.S.C. § 1538(a)(1) provides in relevant part as follows:

Except as provided in sections 1535(g)(2) and 1539 of this title, with respect to any endangered species of fish or wildlife listed pursuant to section 1533 of this title it is unlawful for any person subject to the jurisdiction of the United States to-

\[(A)\ldots;\]
\[(B)\] take any such species within the United States or the territorial sea of the United States;
\[(C)\] take any such species upon the high seas; . . .
level considered unendangered. Rather, Congress simply presumes that prohibited takings will deplete the species. We must honor that legislative determination.

In sum, therefore, regulations aimed at preventing the taking of a protected species cannot be invalidated on the ground that the record fails to demonstrate that the regulatory effort will enhance the species' chance of survival. . . . Rather, the record need only show that such regulations do in fact prevent prohibited takings of protected species. Here, the record developed by the Secretary amply satisfies this burden.

. . . .

IV.

For the foregoing reasons, the judgment of the district is AFFIRMED.

Anticipating the Fifth Circuit's upholding the TED regulations, the shrimpers sought relief from Congress. In September 1989, Congress passed the Endangered Species Act Amendments of 1988 which were signed by the President on October 7, 1988. The Act provides:

(a) Delay of Regulations.—The Secretary of Commerce shall delay the effective date of regulations promulgated on June 29, 1987, relating to sea turtle conservation, until May 1, 1990, in inshore areas, and until May 1, 1989, in offshore areas, with the exception that regulations already in effect in the Canaveral area of Florida shall remain in effect. The regulations for the inshore area shall go into effect beginning May 1, 1990, unless the Secretary determines that other conservation measures are proving equally effective in reducing sea turtle mortality by shrimp trawling. If the Secretary makes such a determination, the Secretary shall modify the regulations accordingly.

(b) Study.—

(1) In general.—The Secretary of Commerce shall contract for an independent review of scientific information pertaining to the conservation of each of the relevant species of sea turtles to be conducted by the National Academy of Sciences with such individuals not employed by Federal or State government other than employees of State universities and having scientific expertise and special knowledge of sea turtles and activities that may affect adversely sea turtles.

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(2) Purposes of review.--The purposes of such independent review are--
(i) to further long-term conservation of each of the relevant
species of sea turtles which occur in the waters of the United
States;

....

(vi) in particular to assist in determining whether more or less stringent
measures to reduce the drowning of sea turtles in shrimp nets are
necessary and advisable for conservation of each of the relevant species
of sea turtles and whether such measures should be applicable to
inshore and offshore areas as well as to various geographic locations;
and

(vii) to furnish information and other forms of assistance to the
Secretary for his use in reviewing the status of each of the relevant
species of sea turtles and in carrying out other responsibilities
contained under this Act and law.

....

(6) Recommendations of Secretary.--The Secretary, after receipt of any
portion of the independent review from the panel, shall consider, along with
the requirements of existing law, the following before making
recommendations:

....

(iv) the relationship of any more or less stringent measures to reduce the
drowning of each of the relevant species of sea turtles in shrimp nets to
the overall conservation plan for each such species;
(v) whether increased reproductive or other efforts on behalf of each
of the relevant species of sea turtles would make no longer necessary
and advisable present or proposed conservation regulations regarding
shrimping nets;

....

(7) Modification of regulations.--For good cause, the Secretary may modify
the regulations promulgated on June 29, 1987, relating to sea turtle
conservation, in whole or part, as the Secretary deems advisable.

....

(10) Purpose of this section.--[This amendment] is intended to assist the
Secretary in making recommendations and in carrying out his duties under
law, including the Endangered Species Act and nothing herein alters the
Secretary's powers or responsibilities to review, determine or redetermine, at
any time, his obligations under law.
In State of Louisiana v. Mosbacher, Civil Action No. 89-1899 (E.D. La. 1989), shrimpers and the state of Louisiana sought to enjoin enforcement of the TED regulations pending the completion of the National Academy of Science Study required by the ESA Amendments in 1988. Quoting the legislative history of the Amendments, the court stated:

The secretary, however, need not—indeed, cannot, absent new information relevant to the conservation needs of turtles—await the completion of the study before implementing the regulations. The dates upon which the regulations are to be implemented in inshore and offshore areas are fixed and independent of when the special study may be completed or what its conclusions may be. 134 Cong. Rec. H8257 (September 26, 1988)

By enacting the legislation we are considering, Congress does two things, it ratifies the Secretary of Commerce's action in promulgating TED regulations. It also clarifies the Secretary's right to modify the regulations if he determines that it is necessary to require shrimpers to use TEDs in months when they are not now required to use them. The only things he cannot do is to delay the implementation of regulations beyond the dates set forth in the legislation. 134 Cong. Rec. H8254 (September 26, 1988).

The court found no grounds for issuing an injunction to forestall enforcement of the regulations.

The D.C. District Court agreed that the Secretary could not delay implementation of the TED regulations. In National Wildlife Federation v. Mosbacher, Civil Action No. 89-2189 (1989), the NWF challenged the legality of the Secretary of Commerce's decision to delay for 45 days the implementation of the TED regulations. Finding that "at a minimum, the Secretary had to show that interim turtle conservation measures were considered before the existing regulations were considered before the existing regulation could be revoked." The 1988 Amendment of the ESA allows the Secretary to modify the regulations for "good cause." The Secretary did not make such a showing.

Shrimpers hoped that the National Academy of Sciences Study would support their claims that trawling was a relatively minor contributor to turtle mortality. Instead, the report estimated that as many as 50,000 per year are killed in trawls.

The National Fisherman, Yearbook 1991 at 16, reports that

[compliance with TEDs regulations in the northern Gulf during the early part of the year was estimated at 50%. That led enforcement officials to seep up
boardings and arrests as well as make violations criminal offenses in some cases. Violators were slapped with stiff fines for their actions.

The following case illustrates the federal "get tough" policy in enforcing the TED regulations.

UNITED STATES v. TRAN, DUC QUANG NGUYEN, and BINH VAN NGUYEN

Appellants, who are shrimp fishermen, were charged in a two-count indictment with unlawful possession of an endangered species, a Kemp’s Ridley Sea Turtle . . . and failure to use a Turtle Excluder Device . . . . Each appellant pled guilty to Count 1 of the indictment in return for the agreement of the Government to dismiss Count 2 at the time of sentencing. The PSI’s recommended, and the magistrate judge found, that each appellant’s base offense level was 6 and that each appellant was entitled to a two-point downward adjustment for acceptance of responsibility. Appellant Tran was given a two-level upward adjustment for his role as master of the vessel. Tran then had an offense level of 6 and Duc and Binh each had an offense level of 4.

. . . .

The Government . . . sought a four-level upward adjustment pursuant to U.S.S.G. § 2Q2.1(b)(3)(B), which states:

If the offense involved a quantity of fish, wildlife or plants that was substantial in relation either to the overall population of the species, or to a discrete subpopulation, increase by 4 levels.

After hearing testimony from [government experts], the magistrate judge found that this guideline provision applied and increased the total offense level of each appellant by four levels. The sole issue in this appeal is whether the magistrate judge erred in finding that the Kemp’s Ridley Sea Turtle possessed by appellants constituted a substantial quantity of its species in relation to the overall population of the species or to a discrete subpopulation of the species.

Appellants argue that the magistrate judge’s ruling should be reviewed de novo as an error of law because it constituted an incorrect application of the sentencing guidelines. The Court disagrees. It is clear from the record that the magistrate judge’s application of § 2Q2.1(b)(3)(B) was a result of a factual determinations that one female Kemp’s Ridley Sea Turtle was substantial in relation to the population of the species or to a discrete subpopulation of the species. The magistrate judge’s findings must therefore be affirmed unless they are clearly erroneous.

Appellants each argue that the magistrate judge erred because the Government failed to prove that one Kemp’s Ridley Sea Turtle was substantial in relation to the
overall population of that species, and more particularly, failed to prove the overall population of this species.

The testimony of Dr. Woody and Dr. Caillouet establishes that the Kemp’s Ridley Sea Turtle is one of the ten most endangered species in the world and is near extinction. These experts testified that the only significant nesting ground for the Kemp’s Ridley Sea Turtle is in Rancho Nuevo, Mexico, and that fewer than 400 female Kemp’s Ridley Sea Turtles nested in 1990. Although a sexually mature female sea turtle may lay 100 eggs per nest and may nest as many as three times per season, only approximately one Kemp’s Ridley egg in 1,000 eggs will survive to adulthood based upon natural mortality rates. As soon as sea turtle eggs hatch, they are subject to a number of predators, including marine birds, vultures, raccoons, crabs, and other beach dwellers and to an additional set of predators once they reach the water. This low survival rate is exacerbated because of the additional threat to sea turtles through capture by shrimpers. Because of these threats to young turtles, a female turtle has to nest ten times before producing an offspring that will reach adulthood. The survival of each mature female turtle is therefore significant to the survival of the species.

The turtle found in appellants’ possession was determined to be a young adult female on the verge of reproducing with developing eggs in its reproductive tract. The turtle was captured in April, at the beginning of the April through August or September nesting season.

Notwithstanding the Government’s failure to prove the overall population of Kemp’s Ridley Sea Turtles at the time of the offenses charged, given the lengthy time it takes a female Kemp’s Ridley Sea Turtle to reach reproductive capacity, the low survival rate of its eggs, and the fact that the species is extremely endangered, this Court concludes that the magistrate judge was not clearly erroneous in finding that the one sea turtle involved in this case was substantial in relation to the overall population of the species. Alternatively, viewing sexually mature female Kemp’s Ridley Sea Turtles as a discrete subpopulation within the meaning of Guideline § 2Q2.1(b)(3), the magistrate judge’s finding is even more supportable on the evidence before her.

The judgments of conviction and sentences of each appellant are AFFIRMED.

Florida’s Marine Fisheries Commission (MFC) was concerned that the time periods covered by federal TED requirements did not fully protect endangered turtles in Florida waters during certain seasons. Whether the MFC had authority, however, to promulgate season and gear limitations for turtle protection was a major issue.
We have for review an order of the County Court in and for Franklin County, Florida, which certified to the First District Court of Appeal the following question of great public importance:

Does the Florida Marine Fisheries Commission have the statutory authority to promulgate rules requiring the use of turtle excluder devices in shrimp nets in order to protect endangered and threatened Florida sea turtles?

For the reasons expressed below, we answer the question in the affirmative, finding that the Marine Fisheries Commission ("Commission") acted within the ambit of its statutory authority. We reverse the judgment of the county court, which held to the contrary.

Responding to what it perceived as an "immediate danger to the public welfare," the Commission instituted emergency rule 46ER89-3 pursuant to the authority vested in the Commission by sections 370.025 and 370.027 of the Florida Statutes (1987). The rule requires persons operating fishing trawls or possessing trawls rigged for fishing aboard a vessel at least twenty-five feet in length to have qualified turtle excluder devices (TEDs) installed in such trawls. Vessels smaller than twenty-five feet in length using trawls would be permitted either to reduce tow times to ninety minutes or to use TEDs. The rule became effective August 9, 1989.

On August 10, 1989, the Marine Patrol cited appellee, David Davis, with possessing a trawl rigged for fishing that did not have a qualified TED installed, in violation of emergency rule 46ER89-3(2). Davis filed a motion in the county court to dismiss the charge. On November 27, the county court granted the motion on the ground that the Commission exceeded its statutory authority by implementing emergency rule 46ER89-3.

The state of Florida appealed the county court's order to the district court, which accepted jurisdiction but did not rule on the merits. Instead, . . . the district court certified the issue to this Court as one of great public importance requiring immediate resolution. We accepted jurisdiction to resolve the issue.

The gravamen of Davis' initial argument is that the Commission's rule constitutes an invalid exercise of delegated legislative authority because section 370.027 prohibits any action by the Commission pertaining to endangered species. Since sea turtles are considered to be "endangered," and since the purpose of the rule requiring TEDs is to protect sea turtles, Davis argues that the rule is invalid. We cannot read section 370.027 as Davis urges.
"While legislative intent controls construction of statutes in Florida, that intent is determined primarily from the language of the statute. The plain meaning of the statutory language is the first consideration." Thus, we must examine the plain meaning of the language in section 370.027, which provides in pertinent part as follows:

(1) Pursuant to the policy and standards in s. 370.025, the Marine Fisheries Commission is delegated full rulemaking authority over marine life, with the exception of endangered species, subject to final approval by the Governor and Cabinet sitting as the head of the Department of Natural Resources, in the areas of concern herein specified.

(2) Exclusive rulemaking authority in the following subject matter areas relating to marine life, with the exception of endangered species, is vested in the commission:

(a) Gear specifications;
(b) Prohibited gear;
(c) Bag limits;
(d) Size limits;
(e) Species that may not be sold;
(f) Protected species;
(g) Closed areas, except for public health purposes;
(h) Quality control, except for oysters, clams, mussels, and crabs;
(i) Seasons; and
(j) Special considerations relating to egg-bearing females.

We find that a plain reading of section 370.027 does not preclude the Commission from establishing rules that might impact upon endangered species. Rather, the plain import of the reference to "endangered species" is to modify the Commission's otherwise "full" and "exclusive" rulemaking authority relating to all marine life. The statute does not say that the Commission cannot act at all with reference to endangered species; it says that the Commission is not the only agency permitted to act with reference to endangered species. Moreover, a TED is a shrimping gear specification. Clearly the Commission has the authority to regulate gear specifications. Thus, we are persuaded that the Commission's rulemaking power is circumscribed only by the requirement in the statute that the Commission act reasonably pursuant to the policy and standards in section 370.025.

Section 370.025 provides as follows:

(1) The Legislature hereby declares the policy of the state to be management and preservation of its renewable marine fishery resources, based upon the best available information, emphasizing protection and enhancement of the marine and estuarine environment in such a manner as to provide for optimum sustained benefits and use to all the people of this state for present and future generations.
(2) All rules relating to saltwater fisheries adopted by the department pursuant to this chapter or adopted by the Marine Fisheries Commission and approved by the Governor and Cabinet as head of the department shall be consistent with the following standards:

(a) The paramount concern of conservation and management measures shall be the continuing health and abundance of the marine fisheries resources of this state.

(b) Conservation and management measures shall be based upon the best information available, including biological, sociological, economic, and other information deemed relevant by the commission.

(c) Conservation and management measures shall permit reasonable means and quantities of annual harvest, consistent with maximum practicable sustainable stock abundance on a continuing basis.

(d) When possible and practicable, stocks of fish shall be managed as a biological unit.

(e) Conservation and management measures shall assure proper quality control of resources that enter commerce.

(f) State marine fishery management plans shall be developed to implement management of important marine fishery resources.

(g) Conservation and management decisions shall be fair and equitable to all the people of this state and carried out in such a manner that no individual, corporation, or entity acquires an excessive share of such privileges.

(h) Federal fishery management plans and fishery management plans of other states or interstate commissions should be considered when developing state marine fishery management plans. Inconsistencies should be avoided unless it is determined that it is in the best interest of the fisheries or residents of this state to be inconsistent.

Davis argues that sea turtles cannot be considered "renewable marine fishery resources" within the meaning of subsection (1) because sea turtles are not fish; and they have not been harvested since 1973. We find these distinctions inapplicable. The concept embodied in the term "renewable marine fishery resources" is a far broader concept than Davis would have us hold.

First, the plain language of the statute goes beyond the classification of "fish," extending the legislative policy to the protection of "marine fishery resources." The statute was expressly designed to emphasize protection and enhancement of the "marine and estuarine environment," of which sea turtles are a part. Second, the legislature did not clearly limit the phrase "benefits and use" in subsection (1) to mean only the harvest of marine life. Although harvest may be a major concern of the statute, the phrase "optimum sustained benefits and use to all the people of this state for present and future generations" reasonably could include the study, observation, recording, and other enjoyment of marine life. Third, even if the legislature's only concern in section 370.025 was harvesting, the statute does not require that "renewable marine fishery resources" be currently harvested to fit within the Commission's rulemaking authority. Sea turtles have been harvested in the past.
and may be harvested in the future if the various species are allowed to survive and multiply. The Commission cannot comply with the legislative mandate to provide optimum benefits to all the people for "present and future" generations if it does not have the power to restore a fishery resource that has failed because of overfishing, habitat loss, or pollution. It cannot manage a species for "future" generations if it does not have the authority to assist in the recovery of that depleted species. The common sense meaning of the term "renewable" supports this conclusion. Likewise, the term "resources" is a broad one clearly encompassing all marine life and its habitat. Accordingly, the Commission has the power under sections 370.027 and 370.025 to protect and recover marine resources through fishing gear regulations just as it has the power to do so through season closures, bag limits, or fishery management plans.

Moreover, we cannot accept Davis’ argument that legislative policy was contravened by the emergency rule in light of overwhelming evidence to the contrary. Florida law makes clear that the protection of the environment, including all forms of marine life, is a primary policy of the people and the legislature of Florida. For example, article II, section 7 of the Florida Constitution, provides that "[i]t shall be the policy of the state to conserve and protect its natural resources and scenic beauty." The Florida Statutes also are replete with provisions designed to protect the state’s invaluable and inestimable natural resources.

The need to protect natural resources is most compelling when the survival of a species is in jeopardy. That is why the legislature has seen fit to provide special protections for species of fish and wildlife deemed to be endangered or threatened. In the Florida Endangered and Threatened Species Act of 1977, the legislature recognized that it is the policy of the state to "conserve and wisely manage" its "wide diversity of fish and wildlife" resources "with particular attention to those species defined ... as being endangered or threatened. As Florida has more endangered and threatened species than any other continental state, it is the intent of the Legislature to provide for research and management to conserve and protect these species as a natural resource." § 372.072(2), Fla. Stat. (1987). A further expression of policy is found in subsections 370.021(2)(c)(5)(d)-(h) of the Florida Statutes (1987), in which the legislature imposed enhanced penalties for taking, harvesting, or possessing sea turtles that belong to certain enumerated threatened or endangered species. See also § 370.12(1), Fla. Stat. (1987)(protection of marine turtles, nests, and eggs).

Sections 370.025 and 370.027 must be read in light of the clear intent and policy of the legislature to protect threatened or endangered species of sea turtles. It is consistent with legislative policy to conclude that endangered or threatened species of sea turtles are "renewable marine fishery resources." That would preserve the turtles "for sustained benefits and use to all the people of this state for present and future generations," whether for catching, taking, studying, observing, recording, photographing, or other lawful purposes. It would be inconsistent with legislative policy to conclude, as the county court did, that the Commission has no authority to make shrimp trawling rules that protect threatened or endangered species of sea
turtles. It is far more likely that the Commission's rulemaking authority is limited by statute to prevent the Commission from enacting rules that allow the taking or harvesting of endangered species of sea turtles. Furthermore, common sense dictates that the Commission may consider environmental concerns when it implements rules regulating shrimp trawling.

We answer the certified question in the affirmative and reverse the judgment of the county court. Our decision renders moot the state's motion for a stay of the judgment of the county court.

It is so ordered.

NOTES

1. Do shrimpers deserve protection from economic competition from fishermen of countries that do not use turtle protection devices? For example, should shrimp imports from countries that do not require TEDs be banned? Tuna imports are restricted from countries that use methods that do not minimize dolphin mortality. Is this a measure to protect marine mammals worldwide or to protect United States tuna fishermen from an economic disadvantage? Because a large proportion of tuna is canned, is the measure also to ensure that tuna fishermen will not circumvent United States regulations by relocating in Mexico or Central America? Is this an option for United States shrimpers? Is it significant that a large proportion of imported shrimp is raised through aquaculture?

2. Shrimpers woes do not end with TEDs and foreign competition. Trawling for shrimp is notoriously inefficient, producing a large amount of bycatch that is generally discarded because other licenses are required for those fisheries or the species may not have a market. The large bycatch is thought to be devastating for some species impacted by trawling, and regulations are anticipated by 1994 to require finfish excluders on shrimp nets as well as TEDs.
IV. Marine Salvage and Historic Preservation

Christie, Florida’s Ocean Future: Toward a State
Ocean Policy, 5 J. LAND USE & ENVT. L. 447, 478-86 (1990)

V. Marine Salvage, Finds, and Historic Preservation

A. Background

Shipwrecks are some of Florida’s most important historic sites. Despite the fact that shipwrecks within the territorial sea are located on or in state lands, these sites may be among the least protected historical and archaeological features of the state. New technologies and improved research techniques have led to the discovery of numerous vessels and have triggered major disputes among private salvors, recreational divers, historians and archaeologists, and the State of Florida.

George R. Bass, President of the Institute of Nautical Archeology, states succinctly the view of many marine archaeologists:

Early shipwrecks are being looted at an alarming rate around the world. There is no public outcry. The public, in fact, usually applauds the looters. Intelligent people who would stoutly defend land monuments such as Mount Vernon from being dismantled for private gain, by the sale of bricks and stones as souvenirs, feel that shipwrecks are resources to be mined in the name of free enterprise.¹

Private salvors, on the other hand, do not perceive themselves as "looters." They argue that shipwrecks are not usually found by archaeologists, because states and institutions generally lack the funding for the archival research and the expensive expeditions used to find or excavate historic wreck sites. Wrecks are most often found by sport divers or professional salvors, making state archaeologists largely dependent on the cooperation of these groups to document, recover, and preserve artifacts of historical significance. Moreover, salvors assert that a large percentage of privately salvaged artifacts become part of museum or research collections through donation or sale. The discovery of shipwrecks and the use of proper archaeological procedures in the recovery and preservation of artifacts benefit historians, and public and private archaeologists, and therefore should be encouraged and rewarded.

¹Bass, The Men Who Stole the Stars, 12 SEA HISTORY 30, 30 (Fall 1979), reprinted in 4 EARLY MAN MAGAZINE 3, 3 (1982).
"Treasure hunting" is perceived by the public as a glamourous and exciting life, filled with prospects of wealth beyond one's wildest dreams. Even courts have contributed to the aura of romance and adventure surrounding the treasure hunters. In *Cobb Coin Co. v. The Unidentified, Wrecked and Abandoned Sailing Vessel (Cobb Coin I)*, for example, a federal district court dramatically described the historical background of the case:

In the early morning hours of July 31st [1715], the wind suddenly shifted to the east-northeast, and the hurricane struck with all its fury. . . . Ultimately, as the oaken hulls of the once proud and mighty Spanish Treasure Fleet were ripped by the cruel coral of the Florida coast, the seawater poured into the smashed ships and they heeled over and sank. . . . Destiny brought the ghosts of these Spanish Galleons, that had set sail bravely from Havana Harbor July 24, 1715, to a rendezvous in an Admiralty Court at the United States Courthouse in Key West, Florida, two hundred and sixty-six years later on July 27, 1981.3

During the last two decades, numerous shipwreck cases have addressed the propriety of the applying the maritime law of salvage or finds and the issues of jurisdiction, preemption, ownership, and eleventh amendment immunity of states from suit. The courts have not been entirely consistent in their conclusions. The most important principle to emerge from these cases is that in *in rem* admiralty cases federal courts have no power to adjudicate a state's interest in a shipwreck or its antiquities without the state's consent.4 In addition, the federal government apparently cannot claim ownership of wrecks on the continental shelf outside the

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3Disputing this perception, treasure salvor Bob Marx has stated:

[N]o one, no matter how lucky or skillful, can ever make a reasonable living from the commercial salvage of ancient shipwrecks. I have been one of the most successful salvors in the field and have found millions of dollars worth of treasures and artifacts, yet after paying all the costs involved in the search, recovery, and preservation of the artifacts, not to mention the shares paid to financial backers, governments, and the divers employed on each venture, I have not made a proper living from this work. . . . The only people who make any big money in this field are those who get gullible people to invest in wildly hyped, highly publicized treasure hunt schemes which grossly exaggerate the actual amounts of treasure.


territorial sea based on the Abandoned Property Act, the Antiquities Act of 1906, the Truman Proclamation, or the Outer Continental Shelf Lands Act. The federal government does protect, however, under the Antiquities Act, shipwreck sites on lands owned or controlled by the federal government, including national parks and national marine sanctuaries.

Even in the application of federal maritime and admiralty law, questions persist concerning whether the law of salvage or of finds is appropriate and how the tests for these laws are to be applied. Under the law of salvage, the original owner retains title to goods saved from peril by a salvor. However, the salvor who meets certain requirements is entitled to a reward for rescuing the goods from marine peril based on the labor, expense, skill, degree of peril to the salvors and the property, and value of the property involved. In the case of ancient shipwrecks, many courts, including the Fifth and Eleventh Circuit Courts of Appeals, reject the legal fiction of salvage law that the "owner intends to return" and the application of salvage law to ancient shipwrecks.

Under the law of finds, a finder who takes possession and exercises control over lost or abandoned property acquires title. However, the property is not considered legally lost if it is embedded in the soil or if the owner of the land has constructive possession of the property.  

7Proclamation No. 2667, 3 C.F.R. § 67 (1945).
9See Treasure Salvors, Inc., 569 F.2d at 337. See also Klein v. The Unidentified Wrecked and Abandoned Sailing Vessel, 758 F.2d 1511 (11th Cir. 1985).
10See, e.g., Treasure Salvors, Inc., 569 F.2d 330; Klein, 758 F.2d 1511.
11See Klein, 758 F.2d 1511 (finding that the United States had constructive possession of a ship embedded in the soil of Biscayne Bay National Park and that a "finder" was entitled to no salvage award). See also Chance v. Certain Artifacts Found & Salvaged from The Nashville, 606 F. Supp. 801 (S.D. Ga. 1984), aff'd, 775 F.2d 302 (11th Cir. 1985) (declaring Georgia the owner of a Confederate raider embedded in the Ogeechee River).
Common law principles do not specifically address the issue of preservation of historical and archaeological artifacts during salvage operations, but admiralty courts have begun to fashion rules. For example, in *Chance v. Certain Artifacts Found & Salvaged from The Nashville*, the court refused any salvage award because, instead of "rescuing" the antiquities from marine peril, the salvors were increasing the likelihood of their deterioration. Likewise, the court in *Cobb Coin Co. v. The Unidentified, Wrecked and Abandoned Sailing Vessel (Cobb Coin II)* held "that in order to state a claim for salvage award on an ancient vessel of historical and archaeological significance, it is an essential element that the salvors document to the Admiralty Court's satisfaction that it has preserved the archaeological provenance of a shipwreck." In other words, these courts have found that evidence of preservation is not just a standard for determining the amount of or enhancing the salvage award, but is also a threshold requirement for determining entitlement to any salvage award.

Caught in the middle of the emotional, highly technical, and enormously expensive legal dispute between the private salvors and the state are the recreational and sport divers. Preservation is clearly in the interest of divers who enjoy the opportunity and excitement of "diving on" historic wrecks, and teams of archaeologists and recreational divers often jointly research wreck sites. However, divers often side with the salvors because of fear that state management will mean registration requirements, fees, and restricted access and, perhaps, because of some anticipation of finding an unexpected treasure trove. Since the transition from sport diver to private salver may take place quite rapidly upon the discovery of a gold doubloon some commentators suggest that the sport diver/salvor dichotomy is a false one.

**B. The Abandoned Shipwreck Act of 1987**

After several years of debate, Congress enacted the Abandoned Shipwreck Act of 1987 (Shipwreck Act) in the spring of 1988. Congress exercised its sovereign prerogative in claiming title to any abandoned shipwreck embedded in submerged lands or coralline formations of a state. Congress then transferred that title to the state in or on whose submerged lands the wreck may lie. Thus, federal admiralty jurisdiction over salvage activities no longer applies to such shipwrecks within a

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15 The Shipwreck Act creates no complex jurisdictional problems, however, since the Act relies on the Submerged Lands Act definition of "submerged lands," which recognizes Florida's extended jurisdiction in the Gulf of Mexico. In other words, even shipwrecks in the area of the Gulf between three-miles and three-league are undisputedly the property of the state.
state's territorial sea, except for salvage actions instituted in federal court prior to April 28, 1988.16

Congress found that certain abandoned shipwrecks are the type of resources that states should manage, because they are "irreplaceable State resources for tourism, biological sanctuaries, and historical research," and because they offer unique recreational and educational opportunities.17 The Shipwreck Act attempts to address the multi-use aspects of the situation by directing states to develop the following "appropriate and consistent" policies:

(A) protect natural resources and habitat areas;  
(B) guarantee recreational exploration of shipwreck sites; and  
(C) allow for appropriate public and private sector recovery of shipwrecks consistent with the protection of historical values and environmental integrity of the shipwrecks and the sites.18

The Act also encourages the states to create underwater parks to provide additional protection and provides funds under the National Historic Preservation Act19 for the "study, interpretation, protection, and preservation of historic shipwrecks and properties."20

The Shipwreck Act requires the Director of the National Park Service within the Department of Interior to issue guidelines "to encourage the development of underwater parks and . . . administrative cooperation."21 The proposed guidelines issued in April 1989 seek "to enhance cultural resources, foster a partnership among the various interested groups, facilitate recreational access and use, and recognize the interests of those engaged in shipwreck discovery or salvage."22 The guidelines are available to assist states in developing legislation and management programs for shipwreck sites covered by the legislation.23 The federal government is granted no

16See id. § 2106(c).

17Id. § 2103(a)(1).

18Id. § 2103(a).


21Id. § 2104(a).


23Id.
authority to review state programs, and the transfer of ownership of shipwrecks is not dependent on federal approval of state management schemes.

C. Florida’s Management of Historic Shipwreck Sites

It is . . . declared to be the public policy of the state that all treasure trove, artifacts, and such objects having intrinsic or historical and archaeological value which have been abandoned on state-owned lands or state-owned sovereignty submerged lands shall belong to the state with the title thereto vested in the Division of Historical Resources of the Department of State for the purposes of administration and protection.24

Through the provisions of the Florida Historical Resources Act,25 Florida has claimed title to shipwrecks and other submerged antiquities since 1967. The Division of Historical Resources, in which title to historic wrecks abandoned on state lands is vested, has the responsibility to survey and maintain an inventory of historic resources and to develop a comprehensive statewide historic preservation plan. The Division, which was established to develop and administer a state program meeting the requirements of the National Historic Preservation Act,26 also cooperates with federal and state agencies, local governments, organizations, and individuals in planning, development, programs, and public education and information. The Division has broad authority to "[t]ake such other actions necessary or appropriate to locate, acquire, protect, preserve, operate, interpret, and promote the location, acquisition, protection, preservation, operation, and interpretation of historic resources."27 The Division also has authority to establish professional standards for preservation of historic resources in state ownership or control. State policy in the Florida Historical Resources Act emphasizes that historic properties are irreplaceable, nonrenewable resources and should be managed to preserve the legacy for future generations. State-owned and state-controlled historic resources, therefore, should be administered in "a spirit of stewardship and trusteeship."28

The Division of Historical Resources carries out its responsibilities with respect to shipwreck sites primarily through (1) permitting and standards for exploration and salvage on historic shipwreck sites, (2) permitting standards for archaeological research, (3) establishing archaeological reserves within which no salvage may occur, (4) creating underwater archaeological parks, (5) encouraging public education and

28Id. § 267.061(1)(a)(2).
public participation, and (6) protecting historic sites and recovering property through litigation when necessary.\textsuperscript{29} Any person wanting to explore, excavate, or salvage archaeological materials from sovereignty submerged lands must enter into an agreement with the Division.\textsuperscript{30} Finders are not guaranteed any priority to a salvage agreement, nor are they provided any reward or protection. Moreover, the Division will not enter into an agreement unless the applicant demonstrates both professional qualifications to conduct salvage operations and archaeological expertise to recover, process, and preserve artifacts in accordance with accepted archaeological practice.\textsuperscript{31} If artifacts are recovered, the state asserts ownership over them pursuant to the agreement, but awards a substantial part of the artifacts for salvage services based on the terms of the salvage agreement.\textsuperscript{32} Although neither the Act nor rules contain criteria for determining compensation for salvage, the state's standard form contract provides that the state retains a one-fifth, representative cross-section of the artifacts. The division of the artifacts, however, is largely dependent on the state's commitment to retain artifacts that are historically significant, that are well-suited to public display, and that are unique or unrepresented in the state's collection.\textsuperscript{33}

Four broad areas of the territorial sea have been set aside by order of the Governor and Cabinet as archaeological reserves. In those areas, no salvage contracts will be granted. Reserve areas are set aside exclusively for research by properly qualified institutions. Neither the criteria for establishment of reserve areas nor the basis for the designation of the current reserves has been established by statute or rule.

\textsuperscript{29} Salvage of a shipwreck site also requires a use agreement from the Department of Natural Resources and a permit from the Department of Environmental Regulation.

\textsuperscript{30} FLA. ADMIN. CODE r. 1A-31.0035(2) (1987).

\textsuperscript{31} Id. R. 1A-31.0065(1).

\textsuperscript{32} Id. r. 1A-31.009.

\textsuperscript{33} In \textit{Cobb Coin I}, Florida's salvage requirements were held to be inconsistent with federal maritime principles and thus preempted by federal admiralty law. 525 F. Supp. 186 (S.D. Fla. 1981). However, a more recent case from the Eleventh Circuit upheld Florida's statutory scheme, finding it not inconsistent with federal maritime law. Jupiter Wreck, Inc. v. The Unidentified, Wrecked and Abandoned Sailing Vessel, 691 F. Supp. 1377, 1385 (S.D. Fla. 1988).

More than thirty cases involving salvage of shipwrecks in Florida’s territorial seas are still pending in federal courts. Two cases involve shipwrecks located within archaeological reserves. Although the current provisions of Florida law would appear to be an allowable exercise of state management authority under the Shipwreck Act, cases filed prior to the Act are not affected by its passage.
Figure 14. Florida's Archaeological Reserves

Archaeological Reserves are areas of state waters that have been set aside exclusively for research. No contracts will be granted by the state for salvage within the designated areas.
Chapter 1A-32 of the Florida Administrative Code sets out criteria for archaeological research permits. Institutions which permanently employ professional archaeological staff who meet standards set out by the Division are considered accredited and need not obtain a permit for each project on state lands. However, accredited institutions must notify the Division of projects prior to initiation; the Division reserves fifteen days to approve or disapprove the project. Other institutions must apply for a research permit for every project.

The first underwater archaeological park, Urca de Lima Underwater Archaeological Preserve, opened in September 1987 near Fort Pierce Inlet. The site is marked by a buoy and sunken plaque setting out regulations for divers. State archaeologists hope the site will furnish educational as well as recreational opportunities for divers. A second underwater park at the site of the San Pedro shipwreck in the Florida Keys was opened in April 1989.

Establishing an underwater park requires (1) a lease or management agreement with the Division by the Board of Trustees, (2) a buoy for marking the site and providing mooring so that anchors do not damage the site, (3) an underwater plaque or trail markers, (4) a brochure, and 5) public cooperation in not defacing the site. Enforcement of regulations to protect a site is virtually impossible without the involvement and cooperation of local diving groups. This participation will be fostered in the development of future parks by designating sites based on the interests of diving groups, local governments, and the public.

Public participation in archaeological research is encouraged by the Division. Currently two private groups, the Paleontological and Archaeological Research Team of Florida and the Marine Archaeological Divers Association, participate in state underwater archaeological research. Interpretive museum displays, traveling exhibits of collections, and publication of research comprise the public education element of the Division’s efforts. Working with dive shops and diving organizations in the establishment of underwater archaeological parks will also greatly increase public educational and recreational opportunities in the future.

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NOTES

1. How does the United States’ extension of a twelve mile territorial sea affect state claims?

2. In a more recent case, Marx v. Government of Guam, 866 F.2d 294 (9th Cir. 1989), Marx claimed rights to two historic shipwrecks in the territorial waters of Guam. In the context of whether Guam could establish a “colorable claim” to the wrecks, the court considered the effect of the Abandoned Shipwreck Act:
The *Treasure Salvors* plurality, albeit by negative implication, implied that if state officials had a "colorable basis on which to retain possession" of shipwrecked artifacts, a federal court would not have jurisdiction to resolve competing claims to the artifacts. . . . We assume that a colorable claim is required. We hold that such a claim will suffice. Therefore, if Guam has a colorable claim to the two shipwrecks, and has not consented to federal jurisdiction, the district court lacked jurisdiction to resolve the parties' claims to the wrecks and the case should be dismissed.

... . . .

Congress has granted Guam title and control over the submerged lands off Guam's coast. Congress modeled section 1705 after a similar statute giving coastal states control over lands within three miles of shore. Section 1311 is part of the Submerged Lands Act. Since this action was commenced, Congress enacted the Abandoned Shipwreck Act of 1987. Pub. L. 100-298, 102 Stat. 432 (1988). The 1987 Act granted the states and territories title to all shipwrecks embedded in the submerged lands of the state or territory. It also granted title to shipwrecks lying on those lands if they are deemed eligible for inclusion in the National Register of Historic Places. However, the Act specifically exempts legal proceedings brought prior to its enactment making its provisions inapplicable to the instant case.

Marx contends that the adoption of the 1987 Act demonstrates that the previously enacted 48 U.S.C. § 1705 did not convey to Guam title to shipwrecks on submerged lands. He argues that there would have been no need for the 1987 Act if section 1705 and the Submerged Lands Act had previously conveyed title and control to shipwrecks. We disagree. The legislative history of the 1987 Act indicates that Congress merely wanted to clarify the effect of the Submerged Lands Act and did not intend to express an opinion about preexisting law. H. Rep. No. 100-514 (II), 100th Cong., 2d Sess. 2-3, reprinted in 1988 U.S. Cong. & Admin. News 371. More importantly, the plain language of section 1705 conveys to Guam broad title and control over its submerged lands.

... . . .

In the *Cobb Coin* cases, Judge King made a frontal attack on the State of Florida's attempt to control the exploration and recovery of historical shipwrecks off the state's coast. . . . [O]ther courts which have considered the question have ruled that similar submerged lands acts do give states at least a colorable claim to wrecks within their boundaries. . . .

The First Circuit in *Maritime Underwater Surveys* held that Massachusetts had a colorable claim sufficient to deny the district court jurisdiction over a shipwreck one-quarter mile off its shore where its claim was based upon a Massachusetts statute asserting title over underwater archeological
resources, and upon ... the Submerged Lands Act. The court indicated that Massachusetts' claim to the shipwreck was "at least colorable." The Maritime Underwater Surveys case is directly on point. Guam's Underwater Historic Property Act is similar to the Massachusetts statute in Maritime Underwater Surveys. And the federal statute applicable to Guam is modeled after section 1311 of the Submerged Lands Act. See also Subaqueous, 577 F. Supp. 597, 608 (1983) (district court in Maryland held that state had a colorable claim of title to vessel shipwrecked off its shore; claim based on state statute and "the Submerged Lands Act of 1953 ... "). We hold that Guam has at least a colorable claim to the shipwrecks.

2. Final Abandoned Shipwreck Guidelines were published in December 1990, 55 Fed. Reg. 50116 (Dec. 4, 1990). The regulations contain ten sets of guidelines including assistance for state and federal agencies in establishing shipwreck management programs and underwater parks, funding shipwreck programs, and guidelines for surveying and identifying, documenting and evaluating, and interpreting wreck sites. The guidelines also address access to and recovery of shipwrecks. The regulations reiterate that the guidelines "are advisory and, therefore, nonbinding." Although states and agencies are free to adopt the guidelines "in their entirety, make changes to accommodate the diverse needs of each State or federal agency, reject parts as inapplicable, or use alternative approaches, ... it clear that ... Congress intends for State shipwreck management programs to be consistent with" the Act and the guidelines.

Guidelines for state shipwreck management programs include:

Guideline 1: Involve interest groups in shipwreck program development and management activities.
Guideline 2: Establish a shipwreck advisory board.
Guideline 3: Assign responsibility for State-owned shipwrecks to appropriate agencies.
Guideline 4: Establish regulations, policies, or procedures for the long-term management of State-owned shipwrecks.
Guideline 5: Provide adequate staff, facilities, and equipment.
Guideline 6: Cooperate and consult State and Federal agencies.
Guideline 7: Establish a consultation procedure to comment on State and Federal activities that may adversely affect State-owned shipwrecks.
Guideline 8: Use the National Register of Historic Places criteria.
Guideline 9: Use applicable standards and guidelines.
Guideline 10: Prosecute persons who willfully violate the State's shipwreck management program.
Guideline 11: Provide legal recourse for persons affected by the State's shipwreck management program.