

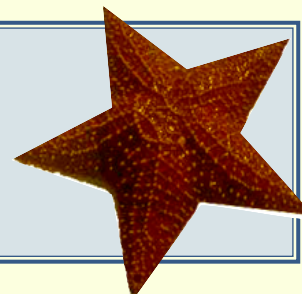




THE SEA GRANT LAW AND POLICY DIGEST is a bi-annual publication indexing the law review and other articles in the fields of ocean and coastal law and policy published within the previous six months. Its goal is to inform the Sea Grant community of recent research and facilitate access to those articles. The staff of the Digest can be reached at: the Sea Grant Law Center, Kinard Hall, Wing E - Room 256, P.O. Box 1848, University, MS 38677-1848, phone: (662) 915-7775, or via e-mail at sealaw@olemiss.edu .

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 I.

ADMIRALTY

Iraola, Roberto. "The Abandoned Shipwreck Act of 1987." 25 *Whittier Law Review* 787-820 (2004).

Iraola examines the history and enactment of the Abandoned Shipwreck Act of 1987 (ASA), the cases arising out of it, why the laws of salvage and of finds do not apply to shipwrecks falling under the ASA, the Eleventh Amendment, and admiralty *in rem* suits. He discusses the interpretations of "abandonment" and whether a shipwreck qualifies as embedded or suitable for listing in the National Register.

Ojukwu, Chudi Nelson. "Arrest and Detention of Ships and Other Property in Nigeria." 28 *The Maritime Lawyer* 249-269 (2004).

Ojukwu discusses admiralty law in Nigeria, the Admiralty Jurisdiction Decree No. 59 of 1991, the 1999 Nigerian Constitution, the International Convention Relating to the Arrest of Sea-Going Ships, and the English Administration of Justice Act. Since it was adopted in 1991, the Admiralty Jurisdiction Decree has almost completely replaced the English rules previously used in Nigeria.

 II.

AQUACULTURE

Buck, B.H. Bela Hieronymus, et. al. "Extensive Open Ocean Aquaculture Development Within Wind Farms in Germany: The Prospect of Offshore Co-management and Legal Constraints." 47 *Ocean & Coastal Management* 95-122 (2004).

Buck, et. al. focus on increased human activity that leads to conflicts between interests groups. One solution calls for stakeholder integration and the multifunctional use of space. Two examples are featured- offshore wind farms and open ocean aquaculture.

Cargill, Coral Leigh. "Regulation and Approval of Drugs and Pesticides Used in Canadian Salmon Culture." 32 *Coastal Management* 331-339 (2004).

Few drugs and pesticides are legally available to Canadian salmon farmers and veterinarians for treating diseased salmon, and the registration and approval process is intricate. Many different government departments are involved, making the approval process slow and expensive. To avoid the government red tape, some farmers are using unapproved drugs, which raise environmental, human, and animal safety concerns.

Paine, Whiton M. "Oyster Rockefeller: How the Erroneous Use of Restoration Costs Created Oyster Millionaires and Why the Louisiana Supreme Court Should Reverse on Appeal." 17 *Tulane Environmental Law Journal* 329-353 (2004).

Paine discusses the *Avenal v. State of Louisiana, Department of Natural Resources* case, in which a Louisiana jury awarded \$1.3 billion to local oyster farmers for oyster leases they claimed had been condemned by Louisiana during a coastal erosion restoration project. Paine advocates for the reversal of the holding and explains how fair market value is the correct standard to be used in damage calculations.

Price, Brian R., II. "Maine Aquaculture, Atlantic Salmon, and Inertia: What is the Future for Maine's Net Pen Salmon Industry?" 31 *Boston College Environmental Affairs Law Review* 683-721 (2004).



Price describes salmon aquaculture net pens in Maine as violations of the Clean Water Act (CWA) and the Endangered Species Act (ESA). He argues that CWA federal effluent guideline limits should be raised, because states use these as models to create their own regulations. The guidelines also leave the endangered Atlantic Salmon exposed, despite attempted protection under the ESA.



III.

CLIMATE CHANGE

Lewsey, Clement, et. al. "Assessing Climate Change Impacts on Coastal Infrastructure in the Eastern Caribbean." 28 *Marine Policy* 393-409 (2004).

Lewsey, et. al. examine the damage of urbanization, supporting infrastructure, and building in hazardous areas on delicate ecosystems in the Eastern Caribbean. Lewsey argues for reducing the dangers to coastal infrastructure, like land uses, and the consideration of climate change during development planning. Obstacles to the use of climate change data and risk assessment in state improvement plans are identified.

London, James B. "Implications of Climate Change on Small Island Developing States: Experience in the Caribbean Region." 47 *Journal of Environmental Planning and Management* 491-501 (2004).

London reviews international efforts, including a regional effort on the part of twelve Caribbean countries, to address the issue of global warming. For countries of the Caribbean and other small island developing states, vulnerabilities abound and will increase with accelerated global warming.



IV.

COASTAL ZONE MANAGEMENT

Buanes, Arild, et. al. "In Whose Interest? An Exploratory Analysis of Stakeholders in Norwegian Coastal Zone Planning." 47 *Ocean and Coastal Management* 207-223 (2004).

Buanes, et. al. discuss the results of a study of twenty-seven Norwegian cities and their coastal zone planning processes, focusing on stakeholder compositions and characteristics. Norway engages stakeholders in the coastal zone management planning process to ensure legitimacy.

Celliers, L., et. al. "A Strategic Assessment of Recreational Use Areas for Off-road Vehicles in the Coastal Zone of KwaZulu-Natal, South Africa." 47 *Ocean and Coastal Management* 123-140 (2004).

South African regulations were instituted in January, 2002, to prohibit the use of off-road vehicles in the coastal zone of South Africa. Current regulations restrict the use of off-road vehicles to designated areas (RUAs). Celliers, et. al. tell how the siting strategy was developed.

Davis, Braxton C. "Regional Planning in the US Coastal Zone: a Comparative Analysis of 15 Special Area Plans." 47 *Ocean and Coastal Management* 79-94 (2004).

Regional planning for US coastal programs is discussed in a comparison of fifteen regional coastal plans. Davis posits that regional planning should be used more often in coastal management, and federal Special Area Management preparation guidelines



should be created to increase the use of regional planning through the Coastal Zone Management Act.

de la Torre-Castro, M., and P. Rönnbäck. "Links Between Humans and Seagrasses—an Example from Tropical East Africa." 47 *Ocean and Coastal Management* 361-387 (2004).

de la Torre-Castro and Rönnbäck examine ecosystem goods and services in a social-ecological system to show the connections between humans and seagrasses in Zanzibar's tropical East Coast economy. Many social-ecological links were found, and the use of a seascape management methodology to create and enhance social-ecological resilience is recommended.

Dietz, Thomas, et. al. "Making Computer Models Useful: An Exploration of Expectations by Experts and Local Officials." 32 *Coastal Management* 307-318 (2004).

Dietz, et. al. illustrate the concerns of town officials regarding nitrogen levels in local estuaries, and the impact computer models have had on their understanding and decisions regarding nitrogen loading. While officials support the models, they also want information about the impacts of changes on small geographic areas, like a plot of land where a house will be built. Current models cannot supply this data.

Gabr, Hisham S. "Perception of Urban Waterfront Aesthetics Along the Nile in Cairo, Egypt." 32 *Coastal Management* 155-171 (2004).

Gabr describes the designing of ecologically and culturally acceptable projects along the sensitive edge of the Nile River in Egypt. Changing recreational values and profit have motivated this construction, and Gabr finds that the public will embrace development of the riverbank only if it is environmentally friendly and maintains the public's physical and visual access to the Nile.

Hansom, J.D., et. al. "Shoreline Management Plans and Coastal Cells in Scotland." 32 *Coastal Management* 227-242 (2004).

Hansom, et. al. describe the coastal sediment cells in Scotland and suggest that shoreline management plans (SMPs) may not be appropriate for all areas of the coastline. The Scottish coast lacks the level of intracoastal sediment exchange required for coastal sediment cell integrity, so a cell-based strategy for coastal management should be avoided.

Kawabe, Midori. "The Evolution of Citizen Coastal Conservation Activities in Japan." 32 *Coastal Management* 389-404 (2004).

Kawabe presents new ways for citizens to assist in coastal conservation, using examples from Japan's citizen conservation movement.

Kriesel, Warren, et. al. "Financing Beach Improvements: Comparing Two Approaches on the Georgia Coast." 32 *Coastal Management* 433 - 447 (2004).

Kriesel, et. al. discuss Georgia's beach improvement projects at Jekyll Island, with regard to nourishment and retreat policies. Two financing methods, general revenue and user fees, are considered in the article.



Micallef, Anton, and Allan T. Williams. "Application of a Novel Approach to Beach Classification in the Maltese Islands." 47 *Ocean and Coastal Management* 225-242 (2004).

Micallef and Williams survey current beach classification systems, noticing a lack of information on methodologies. An innovative beach classification system is addressed, utilizing a Beach Registration practice to collect bathing-area-related statistics in four Maltese Islands bathing areas.

Midgley, Stephen, et. al. "Planning and Management of a Proposed Managed Realignment Project: Bothkennar, Forth Estuary, Scotland." 28 *Marine Policy* 429-435 (2004).

Local coastal partnerships voluntarily manage realignment schemes in the Forth Estuary. Midgley, et. al. discuss the processes needed to create the schemes, and conclude that the Forth Estuary Forum's scheme management facilitates the transfer of proposals to the community by a neutral body, and local coastal fora are the best groups to promote managed realignment schemes.

National Research Council. Ocean Studies Board. *A Geospatial Framework for the Coastal Zone: National Needs for Coastal Mapping and Charting* (2004).

This NRC Report proposes a national framework to explain and repair damage caused by natural and human forces in the coastal zone, using geospatial information. The report argues for a national effort to gather data, develop a method to combine topographic (onshore) and bathymetric (offshore) information, and to create a national digital database in which to store these records (*Report available from the Ocean Studies Board at www.nap.edu/books/0309091764/html/*).

Schmidt, Nancy, et. al. "Climate Variability and Estuarine Water Resources: A Case Study from Tampa Bay, Florida." 32 *Coastal Management* 101-116 (2004).

Schmidt, et. al. argue that short-term estuary monitoring programs often fail to capture the natural, long-term changes that shape the area, so the results produced from monitoring must be viewed with an eye toward the natural variability in the environment. The Tampa Bay, Florida area serves as an example.

Stojanovic, Tim, et. al. "Successful Integrated Coastal Management: Measuring it with Research and Contributing to Wise Practice." 47 *Ocean and Coastal Management* 273-298 (2004).

Major factors for successful integrated coastal management (ICM) systems are discussed, as are flaws in the evaluation factors. Stojanovic, et. al. list noteworthy factors to consider in evaluating an ICM.

Torell, Elin C., et. al. "Building Enabling Conditions for Integrated Coastal Management at the National Scale in Tanzania." 47 *Ocean and Coastal Management* 339-359 (2004).

Torell, et. al. explain how the Tanzania Coastal Management Partnership (TCMP) created enabling conditions to establish a national integrated coastal management (ICM)



program. TCMP formed a nested governance system by working with national and district government agencies, local ICM programs, scientists and non-governmental organizations (NGOs). Key management strategies used to generate enabling conditions for the national ICM program are described, including the results seen by early 2004.

Treby, Emma, and Michael J. Clark. "Refining a Practical Approach to Participatory Decision Making: An Example from Coastal Zone Management." 32 *Coastal Management* 353-372 (2004).

Participation by stakeholders in coastal zone management decisions is important, but it has thus far been focused on participation by experts. Treby and Clark argue for a new system, where experts and lay stakeholders are equal, to reap the full benefits of participatory coastal zone management.

Verheij, Eric, et. al. "Collaborative Coastal Management Improves Coral Reefs and Fisheries in Tanga, Tanzania." 47 *Ocean and Coastal Management* 309-320 (2004).

Verheij, et. al. discuss eight years of collaborative coastal management in Tanzania, which used a participatory approach to address declining fish catches, destructive fishing practices, and mangrove removal. Villagers monitored the impact of the management system on the coral reefs. Results show that dynamite fishing has dropped considerably.

Werner, G. Hennecke, et. al. "GIS-Based Coastal Behavior Modeling and Simulation of Potential Land and Property Loss: Implications of Sea-Level Rise at Collaroy/Narrabeen Beach, Sydney (Australia)." 32 *Coastal Management* 449-470 (2004).

The use of a Geographic Information System (GIS), readily available data, and two coastal behavior models (the Bruun-GIS Model and the Aggradation Model) offer a way for coastal managers and planners to determine the physical and economic impacts of sea-level rise on a spatial scale of less than 10 km. Collaroy/Narrabeen Beach in Australia is used as a demonstration of the system.



V.

CORAL REEFS

Lesser, Michael P., et. al. "Discovery of Symbiotic Nitrogen-Fixing Cyanobacteria in Corals." 305 *Science* 997-1000 (2004).

Lesser, et. al. discuss the fluorescent orange-red glow of the *Montastraea cavernosa* coral reefs in the Caribbean. The color is caused by phycoerythrin symbiotic cyanobacteria living in the corals, as is a nitrogen-fixing enzyme.

Little, Angela F. et. al. "Flexibility in Algal Endosymbioses Shapes Growth in Reef Corals." 304 *Science* 1492-1494 (2004).

Little, et. al. discuss the uptake of zooxanthellae by young corals during an infection as an adaptive trait. The symbiosis is both flexible and ever changing. The growth rates of coral holobionts are affected by the strain of zooxanthellae living within it.

Lord-Boring Christine, et. al. "Abandoned Vessels: Impacts to Coral Reefs, Seagrass, and Mangroves in the U.S. Caribbean and Pacific Territories with Implications for



Removal.” 38 *Marine Technology Society Journal* 26-35 (2004).

The 2002/2003 NOAA Abandoned Vessel Program (AVP) is examined, which surveyed 180 abandoned vessels in sensitive U.S. territories and Caribbean habitats. The study looked at the current and potential dangers to coral reef, seagrass, mangrove habitats, navigation, pollution, and public safety.



VI.

ECONOMICS

Brown, James. “An Account of the Dolphin-safe Tuna Issue in the UK.” 29 *Marine Policy* 39-46 (2005).

Since most UK canned tuna is really skipjack tuna, and thus not part of the dolphin bycatch problem, Brown argues that the dolphin-safe label UK tuna carries is a type of marketing ploy. This differs from the U.S., in that it is an attempt to keep tuna from becoming dolphin unfriendly, rather than a way to address existing environmental problems.

Flaaten, Ola, and Knut Heen. “Fishing Vessel Profitability and Local Economic Link Obligations—the Case of Norwegian Trawlers.” 28 *Marine Policy* 451-457 (2004).

Flaaten and Heen examine the effect of limited-entry licenses on the financial performance of Norwegian trawlers. Three groups of trawlers are compared in 1999, including vessels with local-link licenses duties that complied with those duties, vessels that had such duties but failed to comply, and vessels without local-link duties. The highest profits were found in the group without local-link duties.

Parsons, George R., and Joëlle Noailly. “A Value Capture Property Tax for Financing Beach Nourishment Projects: an Application to Delaware’s Ocean Beaches.” 47 *Ocean and Coastal Management* 49-61 (2004).

A value capture property tax is discussed for financing beach nourishment projects in Delaware. Parsons and Noailly argue their proposed tax is equitable since the tax burden and project benefits are equal, and some homeowners must pay to maintain beaches that increase the value of, and shield, their property.

Perez-Labajos, Carlos, and Beatriz Blanco. “Competitive Policies for Commercial Sea Ports in the EU.” 28 *Marine Policy* 553-556 (2004).

Perez-Labajos and Blanco discuss the global economy and sustainable growth, as they relate to international sea freight transport. Commercial sea ports in the European Union are using new competitive port policies to secure the loyalty of their sea freighter clients.

Trondsen, T. Torbjørn. “Toward Market Orientation: the Role of Auctioning Individual Seasonal Quotas (ISQ).” 28 *Marine Policy* 375-382 (2004).

Trondsen discusses fish auctions as a management tool for assigning quotas, and as a driving factor for certain fishery groups’ market-oriented value adding (MOVA), versus individually transferable quotas (ITQs). The method Trondsen describes involves the assignment of fishing rights to specified groups, the auction of leasing agreements (individual seasonal quota (ISQ) rights) to fishery businesses, and the benefits and detriments to ITQs.



VII. ECOSYSTEM MANAGEMENT

de la Mare, William K. "Marine Ecosystem-based Management as a Hierarchical Control System." 29 *Marine Policy* 57-68 (2005).

de la Mare discusses industrial control complex management systems as a guide to, and model for, marine ecosystem management. Hierarchical industrial control systems could overcome the conceptual difficulties associated with ecosystem management, while preserving a holistic approach to mitigate human impacts.

Henri, Kerstin, et. al. "Costs of Ecosystem Restoration on Islands in Seychelles." 47 *Ocean and Coastal Management* 409-428 (2004).

Henri, et. al. estimate the potential costs of restoring eleven Seychelles islands, including relocating threatened coastal birds and restoring other important coastal biodiversity. Native coastal woodlands and plateaus are last on the list for habitat conversion.

Vandermeulen, Herb, and Don Cobb. "Marine Environmental Quality: a Canadian History and Options for the Future." 47 *Ocean and Coastal Management* 243-256 (2004).

The history and future of Canadian federal interdepartmental co-operation in developing marine environmental quality (MEQ) concepts is discussed, as is the Canadian Oceans Act and ecosystem-based management.

Wang, Hanling. "An Evaluation of the Modular Approach to the Assessment and Management of Large Marine Ecosystems." 35 *Ocean Development & International Law* 267-286 (2004).

Wang discusses the modular management approach of large marine ecosystems (LMEs), the key elements and processes of the transboundary diagnostic analysis (TDA), the strategic action program (SAP), the national action plan (NAP), and common problems facing LMEs. Wang evaluates the modular approach for international ocean governance, and concludes that an integrated, ecosystem-based approach rectifies traditional, sectoral approach deficiencies (*abstract courtesy of Ocean Development & International Law*).



VIII. ENDANGERED SPECIES

Nowlin-Chantreau, Helen. "The Endangered Species Act and the Federal Energy Regulatory Commission: The Challenges in Saving the Pacific Northwest Salmon." 9 *Albany Law Environmental Outlook* 245-273 (2004).

Nowlin-Chantreau examines the ESA's impact on hydroelectric dam re-licensing decisions of the Federal Energy Regulatory Commission (FERC). Nowlin-Chantreau also discusses the threats causing the decline of the Columbia River Salmon, hydroelectric projects in the area and their impacts, the salmon and hydropower production legal structure, and dam decommissioning.



IX.

FISHERIES MANAGEMENT

Adrianto, Luky, et. al. "Assessing Local Sustainability of Fisheries System: a Multi-criteria Participatory Approach with the Case of Yoron Island, Kagoshima Prefecture, Japan." 29 *Marine Policy* 9-23 (2005).

Adrianto, et. al. recount a study which analyzed locally accepted indicators of fishery sustainability in the Yoron Island, Japan fishery. Security and fishing management were the most important factors to stakeholders.

Anferova, Elena, et. al. "Fish Quota Auctions in the Russian Far East: a Failed Experiment." 29 *Marine Policy* 47-56 (2005).

Anferova looks at three years of fish quotas by auction in the Russian far east. The auctions were held to divert some of the resource rent to the state budget and to increase the transparency of the quota allocation mechanism. The auctions provided a substantial income for the government, but also led to a decline in profits and a rise in debt for the industry, as well as a spike in illegal fishing.

Bradshaw, Matt, and Oliver Tully. "Use of Private Access Rights in Fisheries: Effective Management Through Public Transferability?" 28 *Marine Policy* 411-418 (2004).

Bradshaw and Tully discuss the access rights of Ireland's crustacean and mollusk fisheries. The current Irish fisheries limited entry initiative is examined, and the authors conclude that fishing licenses should not be transferable.

Edwards, Steven F., et. al. "Portfolio Management of Wild Fish Stocks." 49 *Ecological Economics* 317-329.

Edwards, et. al. report that managing fish stocks in terms of a portfolio of economic assets is likely to significantly increase benefits for society relative to single-species approaches.

Fallon, Liza D., and Lorne K. Kriwoken. "International Influence of an Australian Nongovernment Organization in the Protection of Patagonian Toothfish." 35 *Ocean Development & International Law* 221-266 (2004).

Fallon and Kriwoken present a case study of The International Southern Oceans Longline Fisheries Information Clearing House (ISOFISH) and the influence this non-governmental organization coalition exerted on the international community, including the deep-sea fishing industry, governments, and Conservation of Antarctic Marine Living Resources (CCAMLR) members, in an effort to protect toothfish stocks and reduce the incidental mortality of endangered seabirds and other non-target marine species from longlining activities (*abstract courtesy of Ocean Development & International Law*).

Jentoft, Svein. "Fisheries Co-management as Empowerment." 29 *Marine Policy* 1-7 (2005).

Jentoft explains empowerment as a requirement and a target of fisheries co-management, arguing sustainable, co-managed fisheries require sound institutional design, participatory democracy, and capacity building.



Kalikoski, Daniela C., and Theresa (Terre) Satterfield. "On Crafting a Fisheries Co-management Arrangement in the Estuary of Patos Lagoon (Brazil): Opportunities and Challenges Faced through Implementation." 28 *Marine Policy* 503-522 (2004).

Kalikoski and Satterfield analyze a fisheries co-management regime in Brazil. The Forum of the Patos Lagoon, a collaborative partnership among communities, governmental and non-governmental organizations, was established to move fisheries management toward a negotiation-style decision process.

Martin-Smith, Keith M., et. al. "Collaborative Development of Management Options for an Artisanal Fishery for Seahorses in the Central Philippines." 47 *Ocean and Coastal Management* 165-193 (2004).

Management options for a Philippines-based artesian seahorse fishery are presented, based on input from many interested groups. Increasing seahorse stocks, maintaining income for fishers, and ensuring long-term sustainability are the fishery's management objectives. Martin-Smith, et. al. recommend a minimum size requirement of 10 centimeters and more no-take Marine Protected Areas.

McBeath, Jerry. "Management of the Commons for Biodiversity: Lessons from the North Pacific." 28 *Marine Policy* 523-539 (2004).

McBeath examines five aspects of the competition between fisheries and the protection of the endangered species. Sections of the National Environmental Policy Act, the Marine Mammal Protection Act, the Endangered Species Act, and the Magnuson-Stevens Act are compared and contrasted.

Ochiewo, Jacob. "Changing Fisheries Practices and their Socioeconomic Implications in South Coast Kenya." 47 *Ocean and Coastal Management* 389-408 (2004).

Ochiewo describes a Kenyan study to ascertain the factors that impact fish catches as well as the local fishing practices, changes, and their socioeconomic impacts. Results show that changing fishing practices in Kenya have caused over-harvesting of coral reef fish.

Pradhan, Naresh C., and PingSun Leung. "Modeling Entry, Stay, and Exit Decisions of the Longline Fishers in Hawaii." 28 *Marine Policy* 311-324 (2004).

Pradhan and Leung discuss a behavioral study of Hawaii's longline fishers, regarding their entry, stay and exit decisions. Results show that these decisions are greatly associated with the level of potential earnings, crowding, the number of resources, and other factors.

Ram-Bidesi, Vina, and Martin Tsamenyi. "Implications of the Tuna Management Regime for Domestic Industry Development in the Pacific Island States." 28 *Marine Policy* 383-392 (2004).

This article identifies the key management issues arising from the Convention on Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) that are likely to have major impacts on the domestic tuna industry development in the Pacific Islands region.



Randall, Jeffrey K. "Improving Compliance in U.S. Federal Fisheries: An Enforcement Agency Perspective." 35 *Ocean Development & International Law* 287-317 (2004).

Randall identifies several measures for increasing the effectiveness of U.S. federal fisheries enforcement. Implementing these measures into the United States Coast Guard's fisheries law enforcement program will make the Agency's enforcement efforts more effective, potentially increasing the level of compliance in federal fisheries (*abstract courtesy of Ocean Development & International Law*).

Satria, Arif, and Yoshiaki Matsuda. "Decentralization of Fisheries Management in Indonesia." 28 *Marine Policy* 437-450 (2004).

Satria and Matsuda explain why decentralization is often viewed as an alternative, better form of fisheries management. The enactment of Indonesia's UU 22/1999 (the Local Autonomy Law) is discussed, as is the effectiveness of community-based, sustainable management systems for marine resources. Bottom-up planning like this seems to increase the local fishers' sense of protection over the resources and participation.

Wiber, Melanie, et. al. "Participatory Research Supporting Community-based Fishery Management." 28 *Marine Policy* 459-468 (2004).

Wiber, et. al. offer conclusions on a undertaking to bring researchers together with aboriginal and non-aboriginal fishers to modify social science methods used by community-based fisher groups in the Bay of Fundy and the Scotian Shelf, Canada. The interests of fishers include practical livelihood concerns, social, economic and political issues, and ethical values that guide policy development and implementation.

Zeller, Dirk, et. al. "On Losing and Recovering Fisheries and Marine Science Data." 29 *Marine Policy* 69-73 (2005).

Zeller, et. al. discuss the data recovery of the Guinean Trawling Survey, conducted in the 1960s off West Africa, which only cost 0.2% of the original survey's expenses. Research institutions and funding agencies should produce digital data, available to the global public, as part of their projects.



X.

INTERNATIONAL TREATIES

Duff, John A. "A Note on the United States and the Law of the Sea: Looking Back and Moving Forward." 35 *Ocean Development & International Law* 195-219 (2004).

Duff examines the U.S. ratification/accession effort regarding the United Nations Convention on the Law of the Sea. In light of the United States' decade-long refrain from accession, the question "why now?" is posited. The answer may lie in the global commercial, political, defense, and strategic reasons approaching a critical mass necessary to overcome longstanding objections (*abstract courtesy of Ocean Development & International Law*).

Hassan, Daud. "International Conventions Relating to Land-Based Sources of Marine Pollution Control: Applications and Shortcomings." 16 *Georgetown International Environmental Law Review* 657-677 (2004).

Hassan discusses the Geneva Convention on the Law of the Sea, the Convention on the



Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention), and the United Nations Convention on the Law of the Sea (UNCLOS), as they relate to the administration of natural resources. He argues for the use of precautionary polluter pay and cleaner production to reduce toxic discharges into marine and coastal waters.

Hyvättinen, Heli, and Mikael Hildén. “Environmental Policies and Marine Engines—Effects on the Development and Adoption of Innovations.” 28 *Marine Policy* 491-502 (2004).

Hyvättinen and Hildén discuss the major influence of environmental policy interventions on reducing the emissions of marine engines through technology. The role of a MARPOL emissions rule is examined.

Schwarte, Christoph. “Environmental Concerns in the Adjudication of the International Tribunal for the Law of the Sea.” 16 *Georgetown International Environmental Law Review* 421-439 (2004).

Schwarte examines the environmental aspects of cases heard by the International Tribunal for the Law of the Sea (ITLOS). He explains how the tribunal’s holdings in these cases protect the oceans. A popular topic discussed is the detention of shipping vessels by one state, and attempts by the owners and the Flag State to get the ship back.

Sheehy, Benedict. “International Marine Environment Law: a Case Study in the Wider Caribbean Region.” 16 *Georgetown International Environmental Law Review* 441-472 (2004).

Sheehy discusses the UN Environment Programme, the Regional Seas Programme the Mediterranean Sea’s Barcelona Convention, the Caribbean’s Cartagena Convention, MARPOL 73/78, and the International Convention for the Prevention of Pollution from Ships. Sheehy compares the Conventions and includes a list of major Caribbean tanker spills.

Tsuru, Yasuko. “Rethinking the Principle of Abstention: the North Pacific and Beyond.” 28 *Marine Policy* 541-552 (2004).

Tsuru discusses the principle of abstention as part of the International North Pacific Fishery Convention of 1952, and the precautionary approach of the 1995 Straddling Stocks Agreement. Both agreements place restrictions on high seas fishing, which depend on regional fishery organizations like the WCPFC to decide the degree of restrictions. The principle of abstention cannot solve the complex problems facing current ocean fishery resources.

Wright, Erica. “Applying the Third U.N. Convention on the Law of the Sea to Living Marine Resources: Comparing the Approaches of the United States and South Africa to Highly Migratory Species Management.” 32 *Georgia Journal of International and Comparative Law* 891-919 (2004).

Wright examines the approaches used by the United States and South Africa to comply with UNCLOS III rules on highly migratory species management. Background is



given on the UNCLOS III, other international agreements, and statutes passed by these two nations. Suggestions are provided on how each country could improve its laws further to meet the highly migratory species goals of UNCLOS III.

**XI.****MARINE PROTECTED AREAS**

Craig, Matthew, et. al. "The Nearshore Fish Assemblage of the Scripps Coastal Reserve, San Diego, California." 32 *Coastal Management* 341-351 (2004).

Marine reserves are a necessary tool in managing coastal resources. Craig, et. al. look at the baseline regional faunal assemblages data used in developing appropriate management strategies for the Scripps Coast Reserve.

Davis, K. L. F., et. al. "Surveillance and Poaching on Inshore Reefs of the Great Barrier Reef Marine Park." 32 *Coastal Management* 373-387 (2004).

Davis, et. al. studied government surveillance and illegal fishing in Australia's Great Barrier Reef (GBR) Marine Park in 2000/2001. The Park is heralded as a model for marine resource administration, with its use of zoning to protect animals throughout the Park. Results showed that increased surveillance decreased illegal fishing, which was present despite the zoning.

Hilborn, Ray, et. al. "When Can Marine Reserves Improve Fisheries Management?" 47 *Ocean and Coastal Management* 197-205 (2004).

The potential benefits of marine reserves for multi-species fisheries are examined, as well as the lack of assistance they provide to highly mobile, single species fisheries.

Kamukuru, Albogast T., et. al. "Evaluating a Marine Protected Area in a Developing Country: Mafia Island Marine Park, Tanzania." 47 *Ocean and Coastal Management* 321-337 (2004).

Kamukuru, et. al. assess MPA performance in Mafia Island Marine Park (MIMP), Tanzania by comparing the blackspot snapper's density and size in MIMP to nearby intensively fished areas (IFA). The benefits of the MIMP showed that the snapper was found four times more than in IFAs, its biomass was six to ten times higher, and the MIMP snappers were 37% larger, on average, than the IFA's snappers. The study shows that MPAs make a major impact on fishery and habitat conservation management.

da Silva, P. P. Patricia. "From Common Property to Co-management: Lessons from Brazil's First Maritime Extractive Reserve." 28 *Marine Policy* 419-428 (2004).

Pinto da Silva discusses Brazil's first open-water Marine Extractive Reserve (MER) and the obstacles it faces. These include the ingrained social attitude of locals against collective action, weak local resource management systems, and the lack of input from fishers.

Sloan, N. A. "Northern Abalone: Using an Invertebrate to Focus Marine Conservation Ideas and Values." 32 *Coastal Management* 129-143 (2004).

Sloan examines how culture, commerce, and conservation can be used to develop a strong role for northern abalone in preparations for a future Haida Gwaii marine con-

servation area in British Columbia, Canada. These aspects are detailed, as are the approaching public consultations for the conservation area.

XII. MARITIME LAW

Charvet, Kathleen K., and Heather A. Waterman. "Recent Developments in Maritime Law." 28 *The Maritime Lawyer* 375 (2004).

Charvet and Waterman discuss the maritime law impacts of three U.S. Supreme Court holdings regarding statutory preemption (*Sprietsma v. Mercury Marine*), state sovereign immunity (*Federal Maritime Commission v. South Carolina State Ports Authority*), and recoverable damages caused by a fear of contracting cancer (*Norfolk & Western Railway Co. v. Ayers*).

Fitzgerald, Edward A. "California Coastal Commission v. Norton: A Coastal State Victory in the Seaweed Rebellion." 22 *UCLA Journal of Environmental Law and Policy* 155-235 (2004).

Fitzgerald discusses California's use of the Coastal Zone Management Act (CZMA) to control Outer Continental Shelf (OCS) energy development. Previous California-Federal Government disagreements and the Ninth Circuit's *California Coastal Commission v. Norton* decision are examined. Fitzgerald concludes that the Ninth Circuit was correct in holding that California had the right to suspend thirty-six OCS leases, subject to its state consistency review.

XIII. OCEAN GOVERNANCE

Rutherford, R. J., et. al. "Integrated Ocean Management and the Collaborative Planning Process: the Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." 29 *Marine Policy* 75-83 (2005).

Rutherford, et. al. explain the Eastern Scotian Shelf Integrated Management (ESSIM) Initiative, a collaborative process among interested groups to develop and implement an integrated ocean management plan for the eastern Scotian Shelf off Nova Scotia. The Fisheries and Oceans Canada are participating, as are various stakeholders. Also discussed are the 1997 Oceans Act, integrated management plans and their requirements, an ocean use appraisal, and ocean management.

XIV. OCEAN OBSERVING SYSTEMS

Bowen, Andrew D., et. al. "Exploring the Deepest Depths: Preliminary Design of a Novel Light-Tethered Hybrid ROV for Global Science in Extreme Environments." 38 *Marine Technology Society Journal* 92-101 (2004).

Bowen, et. al. describe the building plans for an underwater vehicle, called the hybrid remotely operated vehicle (HROV). The HROV can aid scientists in their research on the deepest sea floor, 11,000 meters down, using sonar and cameras to map the ocean's bottom. When areas of interest are found, the HROV will become a remotely operated vehicle (ROV), able to take high quality pictures and remove samples.

Chave, Alan D., et. al. "Cabled Ocean Observatory Systems." 38 *Marine Technology Society Journal* 30-43 (2004).



Chave, et. al. examine what drives cabled ocean observatory design. Commercial submarine telecommunication technologies are reviewed, and various studies are compared.

Cowles, Tim, and Mike Prince. "Renewal of the Academic Research Fleet." 38 *Marine Technology Society Journal* 55-62 (2004).

Over half of the existing UNOLS scientific fleet used by oceanographers will be retired by 2015, which adds to the pressure of the ever-growing ocean observance field. The Federal Oceanographic Facilities Committee's 2001 Fleet Renewal Plan is discussed, as is the lack of funding for the Plan.

Daly, Kendra L., et. al. "Chemical and Biological Sensors for Time-Series Research: Current Status and New Directions." 38 *Marine Technology Society Journal* 121-143 (2004).

The authors examine the status of current chemical and biological ocean sensors, which are required for time-series observations and interactive experiments on remote platforms. They conclude that few chemical or biological sensors are capable of long-term deployment, partly due to biofouling.

Frye, Daniel, et. al. "Deepwater Mooring Designs for Ocean Observatory Science." 38 *Marine Technology Society Journal* 7-20 (2004).

The construction of deep sea ocean observatories and the current development stage of mooring systems that deliver power and data to underwater instrumentation are examined. Frye, et. al. argue that more needs to be done to overcome the technological hurdles facing future moored ocean observatories.

Howe, Bruce M., and James H. Miller. "Acoustic Sensing for Ocean Research." 38 *Marine Technology Society Journal* 144-154 (2004).

Howe and Miller recount how acoustics can be used by ocean observatories for efficient and cost-effective study of the seas. Receivers could be attached to a stationary object or set adrift, relaying data on ocean circulation patterns, temperature, marine mammals, seismic T-phases, and human impacts.

Kaiser, Mark J., and Allan G. Pulsipher. "The Potential Value of Improved Ocean Observation Systems in the Gulf of Mexico." 28 *Marine Policy* 469-489 (2004).

Kaiser and Pulsipher describe the current ocean observation systems in the Gulf of Mexico, and explain the possible economic benefits from integrating regional systems. Benefits may include better ocean/weather forecasting, energy exploration, environmental monitoring, and royalty payments.

Paduan, Jeffrey D., et. al. "A National Coastal Ocean Surface Current Mapping System for the United States." 38 *Marine Technology Society Journal* 102-108 (2004).

Paduan, et. al. discuss an ocean current mapping system for the U.S. continental shelf using high frequency (HF) radar backscatter instruments. HF radar systems could map ocean surface currents up to 200 km from shore.



Roemmich, Dean, et. al. "Autonomous Profiling Floats: Workhorse for Broad-scale Ocean Observations." 38 *Marine Technology Society Journal* 21-29 (2004).

The importance of autonomous profiling floats to oceanography is examined. A wide-ranging ocean monitoring system could be built from floats to gain a better understand of the ocean's role in the climate change.

Rudnick, Daniel L., et. al. "Underwater Gliders for Ocean Research." 38 *Marine Technology Society Journal* 73-84 (2004).

The University of Washington's "Seaglider", the Scripps Institution's "Spray", and Webb Research's "Slocum" gliders are examined. Glider test results prove the vehicles to be important in future underwater spatial resolution research.

Schwartz, Philip R. "Future Directions in Ocean Remote Sensing." 38 *Marine Technology Society Journal* 109-120 (2004).

Schwartz makes predictions about the future of ocean remote sensing, including the evolution of sensor technologies, the emphasis on coastal remote sensing to aid commerce, and natural resources overuse. Ocean observation by aircraft, geosynchronous satellite systems for LIDAR, passive microwave, hyperspectral sensors, and commercial imaging satellites is also discussed.

Sibenac, Mark, et. al. "Autonomous Underwater Vehicles for Ocean Research: Current Needs and State of the Art Technologies." 38 *Marine Technology Society Journal* 63-72 (2004).

Sibenac, et. al. tell the history of AUVs in science, and describe the varied uses of the capable vehicles. Lessons learned by AUV users are offered to aid future applications.

St. Arnaud, Bill, et. al. "An Integrated Approach to Ocean Observatory Data Acquisition/Management and Infrastructure Control Using Web Services." 38 *Marine Technology Society Journal* 155-163 (2004).

St. Arnaud, et. al. examine the combination of instrument, data, and observatory control processes as a global software standard for ocean observatory functions. This will increase the scientific impact of ocean observatories, while decreasing their operating costs.



XV.

OFFSHORE INSTALLATIONS

Austin, James A., Jr. "The Integrated Ocean Drilling Program: Utilizing New Drilling Platforms for Ocean Research." 38 *Marine Technology Society Journal* 44-54 (2004).

Austin examines the Integrated Ocean Drilling Program (IODP), which began in 2003. Drilling vessels and supplies from the U.S., Japan, and a group of European nations are studying seismic zones, the sub-seafloor biosphere, gas hydrates, climate changes, and continental break-up. Centralized management of the program is advocated to ensure efficient, international cooperation.

**XVI. OFFSHORE WIND FARMS**

Kaplan, Carolyn S. "Congress, the Courts, and the Army Corps: Siting the First Offshore Windfarm in the United States." 31 *Boston College Environmental Affairs Law Review* 177-219 (2004).

Kaplan examines the U.S. wind power debate, its use overseas, technological advances in the field, and federal/state renewable power plans. Kaplan compares land-based and offshore wind power collection, including descriptions of the Cape Wind project and other large U.S. offshore wind farm proposals.

Martin, Guy R., and Odin A. Smith. "The World's Largest Wind Energy Facility in Nantucket Sound? Deficiencies in the Current Regulatory Process for Offshore Wind Energy Development." 31 *Boston College Environmental Affairs Law Review* 285-323 (2004).

Martin and Smith examine the shortcomings of the Rivers and Harbors Act, section 10, regarding navigability permits. The authors advocate a broad federal plan to protect sensitive waters and communities, while creating alternative energy.

Russell, Rusty. "Neither Out Far Nor in Deep: The Prospects for Utility-Scale Wind Power in the Coastal Zone." 31 *Boston College Environmental Affairs Law Review* 221-260 (2004).

Russell examines the coming revolution of large, offshore wind farms. He discusses the ability of the Coastal Zone Management Act of 1972 (CZMA) to handle the obstacles and prospects of wind farms, and concludes that the current form of the CZMA will do more harm than good to renewable energy development.

Santora, Christine, et. al. "Managing Offshore Wind Developments in the United States: Legal, Environmental and Social Considerations using a Case Study in Nantucket Sound." 47 *Ocean & Coastal Management* 141-164 (2004).

Santora, et. al. discuss the legal and regulatory issues that are associated with offshore wind farms. In addition, the authors look at the unresolved environmental, social and planning issues that must be addressed before wide-scale development occurs in US waters.

Watson, Greg, and Fara Courtney. "Nantucket Sound Offshore Wind Stakeholder Process." 31 *Boston College Environmental Affairs Law Review* 263-284 (2004).

Watson and Courtney discuss the Cape Wind Associates project, in terms of its size (one of the world's largest wind farms) the project's challenge to the existing Outer Continental Shelf regulatory structure, and its position near large coastal populations. While impartial information from stakeholders may be an asset in gaining acceptance for renewable energy projects like Cape Wind, the lack of a regulatory scheme and aesthetic worries continue to hinder progress on the project.

**XVII. OIL AND GAS DEVELOPMENT**

Kaiser, Mark J., and Dmitry V. Mesyanzhinov. "A Note on Idle Oil and Gas Platforms (Idle Iron) in the Gulf of Mexico." 35 *Ocean Development & International Law* 365-377 (2004).

Kaiser and Mesyanzhinov examine the number of idle oil and gas platforms (known as "idle iron") in the Gulf of Mexico and describe their geographic distribution and ownership. Recently, the Minerals Management Service has begun to encourage operators to remove idle iron from the Gulf (*abstract courtesy of Ocean Development & International Law*).

Keyuan, Zou. "China's Governance over Offshore Oil and Gas Development and Management." 35 *Ocean Development & International Law* 339-364 (2004).

Keyuan attempts to assess and analyze China's national policy and relevant laws and regulations governing offshore oil and gas development and their effectiveness. In addition, the prospect for joint development in disputed sea areas adjacent to China is discussed (*abstract courtesy of Ocean Development & International Law*).

**XVIII. POLLUTION**

Albertson, Paul. "Potentially Polluting Wrecks Warrant Further Dialog." 38 *Marine Technology Society Journal* 15-16 (2004).

Albertson describes several sunken, fuel-laden vessels, the potential devastation they harbor, and the efforts and expenses for their cleanup. The International Maritime Organization's draft Wreck Removal Convention is discussed, as is the *S.S. Jacob Luckenbach*, which sank in 1953 and has cost \$19 million to pump out 85,000 gallons of leaking oil.

Basta, Daniel J., and David M. Kennedy. "The Need for a Proactive Approach to Underwater Threats." 38 *Marine Technology Society Journal* 9-11 (2004).

Basta and Kennedy suggest a proactive approach to the problem of underwater dumpsites, abandoned pipelines, and sunken vessels that contain fuel or hazardous cargo. More than 12,400 ships with potentially environment-damaging cargo lie in U.S. coastal waters. NOAA is offered as the best agency to head cleanup/mitigation/removal efforts, and the agency's expertise in this area is discussed.

Buckingham, Richard T. "The Pollution Threat Posed by Sunken Naval Wrecks: A Realistic Perspective and a Responsible Approach." 38 *Marine Technology Society Journal* 17-20 (2004).

Buckingham recounts the 1944 sinking of the *USS Mississinewa*, its 2001 oil leak, and 2003 removal of 1.8 million gallons of oil. He describes the possible amount and size of potentially dangerous sunken Navy ships and the lack of consensus as to who is responsible for them. The use of remotely operated lightering system (ROLS) in sunken wrecks is examined.



Girin, Michel. "European Experience in Response to Potentially Polluting Shipwrecks." 38 *Marine Technology Society Journal* 21-25 (2004).

Girin examines how France developed a response strategy to cope with fuel-bearing shipwrecks. The *Prestige* wreck and subsequent oil recovery, the need for risk assessments, and the power of consumers to affect response standards are discussed.

Leifer, Ira, and Ken Wilson. "Quantified Marine Oil Emissions with a Video-Monitored, Oil Seep-Tent." 38 *Marine Technology Society Journal* 44-53 (2004).

Leifer and Wilson describe an oil capture tent that was developed and used to calculate oil emissions from various locations off Summerland Beach, California. The oil was recorded by video in sample collection jars.

Leintz, Rebecca E. "Is FIFRA Enough Regulation?: Failure to Obtain a NPDES Permit for Pesticide Applications May Violate the Clean Water Act." 79 *Chicago-Kent Law Review* 317-341 (2004).

Leintz examines the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Clean Water Act (CWA) in light of the outbreak of the West Nile Virus and subsequent mosquito pesticide spraying. Many cities reacted to the outbreak by dumping large amounts of pesticide near waterways, without a permit and in violation of the CWA. A four-step plan is presented for deciding whether pesticide application will require a CWA permit.

Lindsay, John A., and Robert Aguirre. "Global Offshore Hazardous Materials Sites GIS." 38 *Marine Technology Society Journal* 36-43 (2004).

Lindsay and Aguirre recount the history of hazardous materials dumped or lost at sea between 1945 and 1970. A geographic information system (GIS) project is described, which is documenting the locations of almost 350 Global Offshore Hazardous Materials Sites (GOHMS).

Moffatt, Craig. "Methodologies for Removing Heavy Oil as Used on the SS *Jacob Luckenbach* and Joint International Testing Programs." 38 *Marine Technology Society Journal* 64-71 (2004).

In 1953, the 468-foot long, oil-laden SS *Jacob Luckenbach* sank 17 miles west of the Golden Gate Bridge in California. In 2002, the *Luckenbach* was named as the source of several oil spills along the California coast. Moffett chronicles the oil recovery from the shipwreck, and describes new methods of oil off-loading.

Overfield, Michael L. "Resources and UnderSea Threats (RUST) Database: An Assessment Tool for Identifying and Evaluating Submerged Hazards within the National Marine Sanctuaries." 38 *Marine Technology Society Journal* 72-77 (2004).

The Resources and UnderSea Threats (RUST) database was originally created to help sanctuary resource protection managers, but the danger of oil spills and other chemical discharges from sunken sources has altered its purpose. Overfield explains the RUST database's development, structure, and data analysis methods.



Symons, Lisa, and Marc K. Hodges. "Undersea Pollution Threats and Trajectory Modeling." 38 *Marine Technology Society Journal* 78-82 (2004).

The Resources and Undersea Threats (RUST) database lists potential underwater pollution threats, while the Trajectory Analysis Planner (TAP) is a spill response and planning application system which surveys seasonal climatology to forecast potential trajectories. Symons and Hodges advocate the use of TAP modeling with the RUST database to aid marine resource managers in their planning decisions and development of coastal Area Contingency Plans.

Witte, J. Arnold. "Wreck Survey, Oil Detection and Removal to Protect the Coastal Zone and the Marine Environment." 38 *Marine Technology Society Journal* 12-14 (2004).

Witte documents the history of salvage efforts in U.S. waters, and comments on how metal ship hulls corrode upon submersion.



XIX.

RECREATION AND TOURISM

Bergstrom, John C., et. al. "Estuary Management and Recreational Fishing Benefits." 32 *Coastal Management* 417-432 (2004).

Bergstrom offers a travel behavior model to estimate the recreational fishing benefits gained through estuary restoration and protection. Resource management agencies should consider the changes in freshwater flows into an estuary, and its effect on game fish populations, when assessing activities that influence coastal estuaries, fish numbers, and catch rates.

Coleman, Felicia C., et. al. "The Impact of United States Recreational Fisheries on Marine Fish Populations." 305 *Science* 1958-1960 (2004).

Coleman evaluates the effects of recreational fishing on fish populations nationwide, populations of concern (overfished or experiencing overfishing) and on particular regions. The Gulf of Mexico is one particular region examined, since recreational landings account for 64% of catches from populations of concern.

Gorzelany, Jay F. "Evaluation of Boater Compliance with Manatee Speed Zones along the Gulf Coast of Florida." 32 *Coastal Management* 215-226 (2004).

Gorzelany reviews a series of boater compliance studies that were performed between 1995 and 1998 in order to assess the effectiveness of existing speed zones designed to protect manatees in two Florida counties.



XX.

SCIENTIFIC RESEARCH

National Research Council. Ocean Studies Board. Elements of a Science Plan for the North Pacific Research Board (2004).

This report suggests a set of guidelines for the North Pacific Research Board (NPRB) in developing a scientific plan for administering and distributing its research funds. The NPRB researches the North Pacific Ocean, Bering Sea, and Arctic Ocean. The guidelines are based upon interviews with resource-based coastal communities and comparisons with other successful science plans (*Report available from the Ocean Studies Board at www.nap.edu/books/0309091446/html/*).



Walden, Barrie B., and Robert S. Brown. "A Replacement for the *Alvin* Submersible." 38 *Marine Technology Society Journal* 85-91 (2004).

Walden and Brown chronicle the design of a new manned deep sea explorer, created by the National Deep Submergence Facility (NDSF) that will replace *Alvin*. The replacement will be able to dive down to 6,500 meters, with more battery capacity and less use of disposable weights and hazardous materials. If funding is approved for the project, the vehicle could be ready in 2008.



XXI. SECURITY

Karpinsky, Colleen C. "A WHALE OF A TALE: The Sea of Controversy Surrounding The Marine Mammal Protection Act and the U.S. Navy's Proposed Use of the SURTASS-LFA Sonar System." 12 *Penn State Environmental Law Review* 389-417 (2004).

Karpinsky discusses *National Resources Defense Council v. Evans*, a case involving the U.S. Navy's use of SURTASS-LFA sonar, its impact on the U.S. environment and national security, the Marine Mammal Protection Act, the National Environmental Protection Act, and the Endangered Species Act. Karpinsky explains how U.S. environmental laws are deficient to handle U.S. Navy policies regarding the use of sonar, and offers suggestions for improving current environmental laws.

Truban, Erin. "Military Exemptions from Environmental Regulations: Unwarranted Special Treatment or Necessary Relief?" 15 *Villanova Environmental Law Journal* 139-171 (2004).

Truban examines the Department of Defense's exemptions from U.S. environmental regulations. Background is given on the 1918 Migratory Bird Treaty Act (MBTA), the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Stump Act), and the 2003 *Center for Biological Diversity v. England* decision that exempted military personnel from the MBTA.



XXII. SHIPPING

Llácer, Francisco J. Montero. "Panamanian Maritime Sector Management." 28 *Marine Policy* 283-359 (2004).

Nations are careful when they choose a management system for their important maritime interests, partly due to the controversy of advantages versus disadvantages of the various systems. Llácer explores Panama's strengths, including its strategic and historical location, the Canal, the ship register, and successful proposals to unify maritime policies.

Mitroussi, K. "The Role of Organisational Characteristics of Ship Owning Firms in the Use of Third Party Ship Management." 28 *Marine Policy* 325-333 (2004).

Mitroussi explains third party ship management, the separation of ownership and management, and a theoretical model to calculate why ship owner firms sometimes hire independent management. The article focuses on how the company size, type, and age come into play, based on studies conducted in Greece and the UK.

Tzannatos, Ernestos S. "Technical Reliability of the Greek Coastal Passenger Fleet." 29 *Marine Policy* 85-92 (2005).

Tzannatos studied the reliability of the Greek coastal passenger fleet from 1996–2002, and explains the influence of various factors upon reliability. Tzannatos concludes the Greeks have been making steady progress in reliability, while taking on increasing transport work.

XXIII. TAKINGS

Balanon, Paul. "Oil Pollution Act of 1990's Double Hull Requirement Collides with the Takings Clause: *Maritrans v. United States*." 28 *The Maritime Lawyer* 555-574 (2004).

Balanon discusses the Exxon Valdez incident, the Oil Pollution Act of 1990 (OPA 90), and the impact of OPA's double hull rule on oil tankers. Balanon examines the *Maritrans* case in which Maritrans, a large oil transport company, sued the United States in 1996, claiming that the double hull rule acted as a taking without just compensation.

XXIV. UNDERWATER CULTURAL HERITAGE

Russell, Matthew A., et. al. "Science for Stewardship: Multidisciplinary Research on *USS Arizona*." 38 *Marine Technology Society Journal* 54-63 (2004).

The National Park Service and the *USS Arizona* Memorial are researching the nature and rate of decay on the sunken *USS Arizona* in Pearl Harbor, Hawaii. Russell, et. al. examine the plan to minimize environmental damage from the ship's fuel leaks, while preserving the underwater gravesite. The *USS Arizona* Preservation Project will serve as an example of the proper techniques involved in preserving and managing shipwreck sites, while limiting the pollution they produce.

XXV. WATER RESOURCES

National Research Council. Ocean Studies Board. U.S. Army Corps of Engineers Water Resources Planning: A New Opportunity for Service (2004).

This report assesses the U.S. Army Corps of Engineers' methods of peer review, planning, river basin and coastal systems development, and resource administration. A new planning board is recommended to make the Corps more effective at national water management, the integration of river engineering works and new development investments, and to create more efficient decision making procedures (*Report available from the Ocean Studies Board at www.nap.edu/catalog/10975.html*).

XXVI. WETLANDS

Browand, Nathaniel. "Shifting the Boundary between the Sections 402 and 404 Permitting Programs by Expanding the Definition of Fill Material." 31 *Boston College Environmental Affairs Law Review* 617-647 (2004).

Browand argues that the Army Corps and Environmental Protection Agency (EPA) want to expand the scope of the Clean Water Act's section 404 permitting program too far. Section 404's background is discussed, as are the definition of fill material, the mountaintop mining discharge of material into nearby streams, and problems in the regulatory system.



Cantrell, Jennifer DeButts. "For the Bird: The Statutory Limits of the Army Corps of Engineers' Authority Over Intrastate Waters After SWANCC." 77 *Southern California Law Review* 1353-1381 (2004).

Cantrell examines intrastate waters, the Army Corps' jurisdiction over them after the SWANCC decision, and the Corps' possible interstate commerce authority over isolated waters. Cantrell argues that the definitions of "navigable waters" and "waters of the United States" are unclear, even after SWANCC, concluding that the Corps' rules over intrastate waters used by nonresidents, fish and shellfish farmers, and interstate companies will likely be struck down.

Colby, Jeremy A. "SWANCC: Full of Sound and Fury, Signifying Nothing... Much?" 37 *John Marshall Law Review* 1017-1071 (2004).

Colby examines the Clean Water Act (CWA) as it was applied in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* and *United States v. Riverside Bayview Homes, Inc.* He catalogs the resulting split decisions after SWANCC, and the recent decisions that have thrust SWANCC's narrow interpretation into the majority. Colby argues for Congress to pass the Clean Water Authority Restoration Act of 2003 ("CWARA"), which would return the CWA back to its pre-SWANCC position.

Harty, Christopher. "Planning Strategies for Mangrove and Saltmarsh Changes in Southeast Australia." 32 *Coastal Management* 405-415 (2004).

Australia's estuarine habitats are changing as the number of saltmarshes decrease and mangrove populations increase. Causes include urbanization, increased population pressure, more rainfall, increased nutrients, the re-colonization of previously cleared areas by mangroves, engineering works that alter tidal patterns, sea-level rise, and the subsidence of intertidal flats. Harty offers planning strategies to decrease the harm from these threats and ensure the sustainable management of mangrove and saltmarsh wetlands.

Hsieh, Hwey-Lian, et. al. "Strategic Planning for a Wetlands Conservation Greenway along the West Coast of Taiwan." 47 *Ocean and Coastal Management* 257-272 (2004).

Hsieh, et. al. explain how the filling, misuse, and pollution of Taiwan's wetlands have damaged coastal ecosystems and the local public welfare. A strategic plan of conservation, restoration, and properly utilization of the wetlands of Taiwan is offered. Wetlands protected areas, ecological parks (for sustainable use), and restoration areas are planned along the west coast of Taiwan.

Malinoski, Robert. "The Phosphorous Standard and Everglades Restoration: Will This Standard Lower Phosphorous in the Everglades or is the Proposed Standard a Hollow Promise?" 12 *University of Miami Business Law Review* 35-58 (2004).

Phosphorous enters the Everglades from introduced salt water, which causes unwanted algae and vegetation to take root. Malinoski argues that the phosphorus standard, adopt-



ed by the Florida Department of Environmental Protection (FDEP), is not improving the degraded Everglades. Suggestions are offered on improving the phosphorus standard.



XXVII. WHALING

Heazle, Michael. "Scientific uncertainty and the International Whaling Commission: an Alternative Perspective on the Use of Science in Policy Making." 28 *Marine Policy* 361-374 (2004).

Heazle argues that policy makers in the Whaling Commission give scientific advice only a certain amount of weight due to its epistemology problems and its inability to provide certainty. While science has its place in the Commission, Heazle argues it is as a utility, rather than a provider of truth or accuracy about the "real" world.

Morgera, Elisa. "Whale Sanctuaries: An Evolving Concept within the International Whaling Commission." 35 *Ocean Development & International Law* 319-338 (2004).

Morgera analyzes the practice of the International Whaling Commission (IWC) up to 2003 in establishing and regulating international whale sanctuaries, in order to ascertain whether an evolution has taken place in the conservation approach involved. The results lead to a corpus of legal documents showing an evolution from the mere prohibition of commercial catches to a more comprehensive protection through international whale sanctuary has taken place (*abstract courtesy of Ocean Development & International Law*).