

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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- Alberta Law Review
- •ARIZONA JOURNAL OF INTERNATIONAL AND COMPARATIVE LAW
- California Law Review
- CALIFORNIA WESTERN INTERNATIONAL LAW JOURNAL
- Capital University Law Review
- CATHOLIC UNIVERSITY LAW REVIEW
- COASTAL MANAGEMENT
- COLORADO JOURNAL OF INTERNATIONAL ENVIRONMENTAL LAW AND POLICY
- ECOLOGY LAW QUARTERLY
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- JOURNAL OF MARITIME LAW AND COMMERCE
- •LIMNOLOGY AND OCEANOGRAPHY
- MARINE POLICY
- THE MARITIME LAWYER (RETITLED TULANE MARITIME LAW JOURNAL IN 1987)
- MISSOURI ENVIRONMENTAL LAW AND POLICY REVIEW
- Nature
- New England Law Review
- •New York University Environmental Law Journal
- New Zealand Law Review
- •North Carolina Law Review
- OCEAN AND COASTAL MANAGEMENT
- OCEAN DEVELOPMENT AND INTERNATIONAL LAW
- PACE ENVIRONMENTAL LAW REVIEW
- PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES
- Queen's Law Journal
- SEATTLE UNIVERSITY LAW REVIEW
- SOUTHEASTERN ENVIRONMENTAL LAW JOURNAL
- SOUTHWESTERN UNIVERSITY LAW REVIEW
- •STANFORD ENVIRONMENTAL LAW JOURNAL
- SUFFOLK UNIVERSITY LAW REVIEW
- Tulane Environmental Law Journal
- •Tulane Law Review
- United States Mexico Law Journal
- •University of Colorado Law Review
- •VIRGINIA ENVIRONMENTAL LAW JOURNAL
- WIDENER LAW SYMPOSIUM JOURNAL
- WILLIAM AND MARY ENVIRONMENTAL LAW AND POLICY REVIEW

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Bonner, Patrick. "Admiralty Law Institute: Confused Seas: Admiralty Law in the Wake of Terrorism: Insurance and Liability Issues Relating to an Oil Spill Caused by Terrorism." 77 Tulane Law Review 1157-1181 (2003).

The repercussions of September 11th have been felt in the marine insurance field, especially with regard to insurance for losses caused by terrorism. In recent legislation, the United States has embraced international concepts like no-fault liability, liability caps, and a larger role of private insurance. Bonner examines the impacts of these new laws on oil spills caused by terrorist attacks.

Clyne, Robert G. "Admiralty Law Institute: Confused Seas: Admiralty Law in the Wake of Terrorism: Terrorism and Port/Cargo Security: Developments and Implications for Marine Cargo Recoveries." 77 Tulane Law Review 1183-1222 (2003).

Clyne reviews the history of terrorism from a maritime perspective and surveys the legislation and various initiatives, relevant to carriage of goods by sea, enacted since September 11th. Clyne also explores the impact of these new laws and regulations on maritime cargo litigation.

Gruendel, Robert J., and Angelique M. Crain. "Admiralty Law Institute: Confused Seas: Admiralty Law in the Wake of Terrorism: The Maritime Contract and Admiralty Jurisdiction: Recent Developments Help Clarify an Inherently Confused Landscape." 77 Tulane Law Review 1235-1263 (2003).

One of the most challenged areas in maritime law is the extent of admiralty jurisdiction over contracts. Gruendel and Crain discuss the admiralty jurisdiction of federal courts, examine the categories of contracts which clearly fall within or outside the courts' jurisdiction, and analyze recent contract cases exploring jurisdictional boundaries.

Hodges, Susan. Case Note. "Seaworthiness: A New Calculus Factors in Environmental Friendliness: Mobil Shipping & Transportation Co. v. Wonsild Liquid Carriers, Ltd., 190 F.3d 64 (2d Cir. 1999)." 34 Journal of Maritime Law and Commerce 497-509 (2003).

Hodges examines a recent decision by the United States District Court for the Southern District of New York which introduced a new criterion for the assessment of seaworthiness.

Parrish, Robert B. "Admiralty Law Institute: Confused Seas: Admiralty Law in the Wake of Terrorism: Preemption, Remedies, and Criminal Liability: Environmental Issues and the Ramifications of *Huron Portland Cement Co. v. City of Detroit.*" 77 *Tulane Law Review* 1265-1293 (2003).

Maritime transportation of oil and hazardous substances is regulated by one of the most comprehensive schemes in federal law. States, however, are also permitted to regulate maritime transportation with regard to pollution in the absence of a direct conflict with federal regulations. Starting with *Huron Portland Cement Co.*, Parrish traces

states' exercise of police power in the area of pollution control and examines attempts to extend state regulation to vessel operations.

Robertson, David W., and Michael F. Sturley. "The Admiralty Extension Act Solution." 34 Journal of Maritime Law and Commerce 209-308 (2003).

In the past, admiralty practitioners had good guidelines for determining jurisdiction in admiralty tort cases and identifying governing law in maritime cases. Through a series of Supreme Court cases, those guidelines were lost. Robinson and Sturley discuss the operation of the former guidelines and propose a new interpretation of the 1949 Admiralty Extension Act as a partial solution to problems that have arisen as a result of the loss of those guidelines.

Robertson, David W., and Michael F. Sturley. "Recent Developments in Admiralty and Maritime Law at the National Level and in the Fifth and Eleventh Circuits." 27 The Maritime Lawyer 495-591 (2003).

Robertson and Sturley survey the recent developments in admiralty and maritime law, focusing on the national level and the Fifth and Eleventh Circuits. A wide range of topics are covered including state governmental immunity, OSHA, preemption, the rights of seamen, the primary duty doctrine, the status of non-vessel-operating common carriers, salvage, collisions, and punitive damages.

Sanger, Ladd, and Vickie S. Brandt. "Flying and Crashing on the Wings of Fortuosity: The Case for Applying Admiralty Jurisdiction to Aviation Accidents over Navigable Waters." 68 *Journal of Air Law and Commerce* 283-338 (2003).

For years, federal courts have struggled with whether airline crashes over navigable waters give rise to torts recognizable under maritime law. Sanger and Brandt provide a brief introduction to admiralty law, discuss key cases in aviation litigation, and analyze the application of maritime law to aviation litigation.

Schoenbaum, Thomas J., and Jessica C. Langston. "Admiralty Law Institute: Confused Seas: Admiralty Law in the Wake of Terrorism: An All Hands Evolution: Port Security in the Wake of September 11th." 77 Tulane Law Review 1333-1370 (2003).

Since September 11th, many experts fear that the U.S. shipping industry will be the next terrorist target. Schoenbaum and Langston survey recent international, national, state, and local initiatives to combat terrorism and maintain open and efficient ports.

AQUACULTURE

II.

Alonso-Pérez, Fernano, et. al. "Land Cover Changes and Impact of Shrimp Aquaculture on the Landscape in the Ceuta Coastal Lagoon System, Sinaloa, Mexico." 46 Ocean and Coastal Management 583-600 (2003).

Alonso-Pérez and fellow authors assessed changes in natural cover and land use within the Ceuta coastal lagoon system using mutlitemporal analysis of Landsat imagery and examine the effects of the establishment of a shrimp aquaculture industry. The study revealed that the shrimp industry has changed the coastal landscape of the area in less than fifteen years.

Firestone, Jeremy, and Robert Barber. "Fish as Pollutants: Limitations of and Crosscurrents in Law, Science, Management, and Policy." 78 Washington Law Review 693-756 (2003).

A federal court recently ruled that non-native Atlantic salmon "escapees" from aquaculture facilities are pollutants within the meaning of the Clean Water Act. Firestone and Barber examine, primarily in the context of Atlantic salmon mariculture operations, whether fish are and should be treated as pollutants. Firestone and Barber also consider the policy implications of such a regime.

Pérez, O.M., T. C. Telfer, and L. G. Ross. "Use of GIS-Based Models for Integrating and Developing Marine Fish Cages within the Tourism Industry in Tenerife (Canary Islands)." 31 Coastal Management 355-366 (2003).

Site selection is a key factor in the success and sustainablity of an aquaculture operation. Pérez, Telfer, and Ross used GIS and related technology to develop a spatial database to locate the most suitable areas in Tenerife for cage culture development in coexistence with tourism.

Romero, Bridget B. Case Note. "Is There a Need to Regulate Mussel Harvesting? The Ninth Circuit Declares No Pollution, No Problem!: Association to Protect Hammersley, Eld, and Totten Inlets v. Taylor Resources, Inc." 10 Missouri Environmental Law and Policy Review 158-178 (2003).

After reviewing the recent holding by the Ninth Circuit that mussel shells and feces are not pollutants and mussel harvesting rafts are not point sources under the Clean Water Act, Romero examines the issue of whether fish/shellfish byproducts may constitute pollutants when discharged from aquaculture facilities, primarily focusing on Missouri's aquaculture facilities.

VanderZwaag, David, Gloria Chao, and Mark Covan. "Canadian Aquaculture and the Principles of Sustainable Development: Gauging the Law and Policy Tides and Charting a Course - Part II." 28 Queen's Law Journal 529-580 (2003).

VanderZwaag, Chao, and Covan examine the extent to which the Canadian regulatory framework for aquaculture embraces the four principles of sustainability: integration, precaution, environmental impact assessment, and public participation. Part I, published in the Fall 2002 issue of *Queen's Law Journal*, covered the aquaculture law and policies of the federal government and the province of British Columbia. Part II contains a survey of the Atlantic provinces and an evaluation of overall trends.

COASTAL MANAGEMENT

III.

Barnhizer, Daniel B, "Givings Recapture: Funding Public Acquisition of Private Property Interests on the Coasts." 27 Harvard Environmental Law Review 295-375 (2003).

Government "givings" are governmental actions which increase the value of private property. Coastal floodplain development has increased significantly during the last

thirty years, driven in part by federal, state, and local floodplain management policies which subsidize the cost of living in floodplains. Barnhizer examines the issue of government givings within floodplains and suggests changes to federal floodplain management to facilitate the recapture of these givings to fund public acquisition of redevelopment rights.

Davis, Braxton C. "Inventory, Classification, and Analysis of Special Management Areas Associated with U.S. Coastal Programs." 31 Coastal Management 339-354 (2003).

Over sixty types of special management areas have been documented under U.S. coastal management programs. This diversity lead to the development of a classification scheme to allow comparisons and analyses across programs. Davis suggests that the requirements and incentives for special area designations under the Coastal Zone Management Act failed to standardize or influence area-based management systems associated with state coastal programs. In addition, the lack of a clear pattern between programs with respect to special area policies indicates a limited commitment to this aspect of coastal management.

Diamond, Nancy K., Lesley Squillante, and Lynne Z. Hale. "Cross Currents: Navigating Gender and Population Linkages for Integrated Coastal Management." 27 *Marine Policy* 325- 331 (2003).

Diamond, Squillante, and Hale argue that too little cooperative work takes place between integrated coastal management, gender, and population organizations. An action agenda is proposed for governments, researchers, and programs to improve these linkages, build new partnerships, and attract new funding sources.

Douven, W., J. Burman, and W. Kiswara. "Spatial Information for Coastal Zone Management: The Example of the Banten Bay Seagrass Ecosystem, Indonesia." 46 Ocean and Coastal Management 615-634 (2003).

Douven, Burrman, and Kiswara seek to demonstrate the benefits of geo-information technology to integrated coastal zone management. The use of spatial databases and GIS in the policy analysis phase of coastal management is highlighted with a case study of seagrass beds in Indonesia.

Eleveld, Marieke A., Wolfram B. H. Schrimpf, and Ardy G. Siegert. "User Requirements and Information Definition for a Virtual Coastal and Marine Data Warehouse." 46 Ocean and Coastal Management 487-505 (2003).

The European Community supports the development of CoastBase, a European Virtual Coastal and Marine Data Warehouse, to improve data and information exchange. Eleveld, Schrimpf, and Siegert define the relevant and obtainable data and information within CoastBase and discuss the results of a study of user requirements.

Foster, Elizabeth G. and Marcus Haward. "Integrated Management Councils: A Conceptual Model for Ocean Policy Conflict Management in Australia." 46 Ocean and Coastal Management 547-563 (2003).

Several Australian coastal and marine policy initiatives identify the need to improve sectoral and jurisdictional integration, including Australia's Ocean Policy. Foster and Haward review these initiatives and those in other countries, specifically Canada, and propose Integrated Management Councils as the next step in integrated and adaptive management.

Haiqing Li. "Management of Coastal Mega-Cities - A New Challenge in the 21st Century." 27 Marine Policy 333-337 (2003).

Haiging Li addresses the issues of coastal mega-cities and discusses the importance of coastal mega-cities in integrated coastal management. Country practices are also summarized and the outcome of an IOC-SOA international workshop on coastal megacities is detailed.

Kay, Robert, et. al. "Management Cybernetics: A New Institutional Framework for Coastal Management." 31 Coastal Management 213-227 (2003).

"Dimensional thinking" allows the visualization of institutional structure, assists with the assessment of the effectiveness of institution-stakeholder relationships, and redesign. Coastal management programs were originally a single dimension with programs delivered in isolation. Today most have evolved to a second dimension, management of programs through coordinating bodies and plans. Kay and co-authors developed a visualization tool drawn from management cybernetics to illustrate a future third dimension of institutional arrangements and illustrate its potential application.

Krause, Gesche, and Marion Glaser. "Co-evolving Geomorphical and Socio-economic Dynamics in a Coastal Fishing Village of the Bragança Region (Pará, North Brazil)." 46 Ocean and Coastal Management 859-874 (2003).

A number of socio-economic problems in the coastal fishing villages of the Bragança Region are caused by unpredictable erosion patterns. The different land use patterns developed by the different social groups influence local coastal morphodynamics. Krause and Glaser use the hydrodynamic signature and the socio-economic organization of the coastal communities to determine the state of the coastal system and develop policy actions.

McKenna, John, et. al. "Obsolete Maps and Coastal Management: Case Studies from Northwest Ireland." 31 Coastal Management 229-246 (2003).

Rapid changes at dynamic coastal sites can render legally authoritative maps obsolete, aggravating coastal management problems. To illustrate this issue, McKenna and fellow authors examine two case studies from County Donegal in Northwest Ireland, one involving a century-old map and the other rapid coastal erosion, and offer suggestions to mitigate these problems.

Pérez-Sánchez, Eunice, and James F. Muir. "Fishermen Perception on Resources Management and Aquaculture Development in the Mecoacan Estuary, Tabasco, Mexico." 46 Ocean and Coastal Management 681-700 (2003).

Pérez-Sánchez and Muir studied the perceptions of Mecoacan fishing communities

regarding the management of coastal resources and their awareness of the potential impacts of coastal aquaculture.

Randall, Martin M. "Coastal Development Run Amuck: A Policy of Retreat May Be the Only Hope." 18 Journal of Environmental Law and Litigation 145-185 (2003).

More than fifty-three percent of the U.S. population lives in coastal areas. Randall discusses the various factors that have promoted or restrained coastal development in the last twenty years, including the National Flood Insurance Program and the Coastal Barrier Resources Act. Randall also examines the obstacles to the adoption of a public policy of retreat from the coasts.

Rogers, Robert L. III. "Turning River Water into Gold: Why Oyster Harvesters Should Not Be Permitted to Cash in on Changes in Salinity Caused by the Caernarvon Water Diversion Project." 22 Virginia Environmental Law Journal 53-80 (2003).

The Caernarvon Water Diversion Project is an ambition project to preserve thousands of miles of coastal wetlands in Louisiana by diverting water and sediment from the Mississippi River to marshlands. This diversion, however, will change the salinity of surrounding waters, raising concerns that fishermen, oyster harvesters, and others with property interests will succeed in suits for damages cause to traditional harvesting grounds. Rogers examines the litigation surrounding the Caernarvon Water Diversion Project with a particular focus on the claims filed by oyster harvesters.

Tagliani, P. R. A., et. al. "Integrated Coastal Zone Management in the Patos Lagoon Estuary: Perspectives in Context of [a] Developing Country." 46 Ocean and Coastal Management 807-822 (2003).

The Patos Lagoon Estuary is located on the southern Brazilian coast and a variety of economic sectors in nearby cities, such as shrimp fisheries and tourism, rely heavily on the estuary. Tagliani and co-authors describe a recent initiative to implement an integrated coastal zone management program for the estuary.

UNESCO, A Reference Guide on the Use of Indicators for Integrated Coastal Management - ICAM Dossier 1, IOC Manuals and Guides No. 45 (2003).

International Coastal Management guidelines developed by international organizations underscore the importance of indicators to monitor environmental changes, assess trends, and gauge effectiveness. Building on a background paper prepared for an international workshop in 2002, UNESCO presents a literature review on the use of coastal indicators at the global, regional, national, and local level. (*Available from UNESCO at* http://ioc.unesco.org/icam/files/Dossier.pdf).

West, Mary Beth. "Improving Science Applications to Coastal Management." 27 Marine Policy 291-293 (2003).

West discusses the draft International Plan of Action to Improve Status and Trends

Reporting, the Global Ocean Observing System, and the "Geographic Information for Sustainable Development" initiative. West also considers the role of science in the responsible stewardship of the world's oceans.

IV. CORAL REEFS

Leichter, James J., Hannah L. Stewart, and Steven L. Miller. "Episodic Nutrient Transport to Florida Coral Reefs." 48 Limnology and Oceanography 1394-1407 (2003).

Leichter, Stewart, and Miller studied the changes in nutrient fluxes associated with a high frequency form of upwelling in the Florida Keys caused by internal tidal bores. The study revealed that there is a rather large offshore nutrient pump. Naturally-occurring nitrogen and phosphorus are delivered to the coral reefs via upwellings. These "nitrogen deliveries" can occur several times a day and deliver twenty to forty times more nitrogen and phosphorus to the outer coral reefs in Florida than sewage and storm water runoff.

V. DAM REMOVAL

The H. John Heinz III Center for Science, Economics and the Environment. Dam Removal Research: Status and Prospects (William L. Graf ed., 2003)

In 1999, the Heinz Center convened a panel of experts to identify potential outcomes of small dam removal and connect scientific research to the decision-making process. The panel's work was detailed in a 2002 Center report, *Dam Removal: Science and Decision Making*. The panel recommended that a technical conference or workshop on the scientific aspects of dam removal be held to improve interdisciplinary communication. The Dam Removal Research Workshop was held in October 2002. *Dam Removal Research: Status and Prospects* includes the papers presented during the workshop and a summary of the workshop discussions. (*Available from the Heinz Center at* http://www.heinzctr.org/).

Wegner, David L. "Snake River Dam Breaching: River and Salmon Politics in the George W. Bush Administration." 33 Golden Gate University Law Review 419-445 (2003).

The U.S. Army Corps of Engineers operates four dams on the lower Snake River, a major tributary of the Columbia River. Wegner examines the present state of salmon affairs in the Snake River, discusses the administrative and legislative history of the river, outlines some reasons for the salmon decline, and proposes actions to move beyond the bureaucratic stalemate.

DUNE MANAGEMENT

Rodgers, Spencer, and David Nash. North Carolina Sea Grant. The Dune Book (2003).

In this new publication from North Carolina Sea Grant, Rodgers and Nash present guidelines and best management practices for dune management along developed shorelines in North Carolina. Rodgers and Spencer begin by describing the benefits of sand dunes and dune vegetation, how the beach works, and the various types of beach erosion. *The Dune Book* provides detailed information on the best dune grasses for the

North Carolina coast, along with planting and fertilizing tips. The chapter on Best Management Practices for dune building addresses such issues as fencing, access, beach scraping, and permitting. (Available from North Carolina Sea Grant at http://www.ncseagrant.org/files/dune booklet.pdf).

VII. ECONOMICS

Delgado, Christopher L., Nikolas Wada, Mark W. Rosegrant, Siet Meijer, and Mahfuzuddin Ahmed. Fish to 2020: Supply and Demand in Changing Global Markets (2003).

Delgado and fellow authors examine the future of world fisheries based on economics, rather than environmental factors. Through computer modeling of global supply and demand, the authors project the likely changes in fisheries over the next twenty years. The impact of changes in the fisheries sector on growth, poverty reduction, and environmental sustainability in developing countries is also examined. (*Available from the International Food Policy Research Institute at* http://www.ifpri.org).

Lal, Padma. "Economic Valuation of Mangroves and Decision-Making in the Pacific." 46 Ocean and Coastal Management 823-844 (2003).

Lal examines the role of economic valuation in mangrove conservation and the efficient use of resources.

Whitehead, John C., Timothy C. Haab, and George R. Parsons. "Economic Effects of Pfiesteria." 46 Ocean and Coastal Management 845-858 (2003).

Whitehead, Haab, and Parsons examine the effects of information about *Pfiesteria* on consumer risk perceptions, seafood demand, and willingness to pay for a mandatory seafood inspection program. Survey results indicate that a fish kill announcement increases the perceived risks of seafood and decreases the demand for seafood.

VIII. ECOSYSTEM MANAGEMENT

Hammer, Monica, Cecilia M. Holmlund, and Maria Åqvist Almlöv. "Social-Ecological Feedback Links for Ecosystem Management: A Case Study of Fisheries in the Central Baltic Sea Archipelago." 46 Ocean and Coastal Management 527-545 (2003).

The Central Baltic Sea Archipelago has undergone a transition from a region relying mainly on a mixture of local natural resources to one dominated by the recreational demands on nearby urban areas. This transition has altered user patterns of fish resources. Hammer, Holmlund, and Almlöv examine, applying an ecosystem management perspective, the implications of changing social-economic feedback links for sustainable coastal management in this region.

Suman, Daniel. "Can You Eat a Mangrove?: Balancing Conservation and Development in the Management of Mangrove Ecosystems in Cuba." 16 *Tulane Environmental Law Journal* 619- 652 (2003).

Mangroves are found along approximately seventy percent of Cuba's coastline. Suman examines the mangrove-related legislation in Cuba and the management strategies of

Cuban authorities. Some of Cuba's accomplishments in natural resource law and policy are highlighted, as well as obstacles to effective mangrove ecosystem management.



ENDANGERED SPECIES

Brennan, Michael J., et. al. "The Endangered Species Act: Thirty Years of Politics, Money, and Science: Square Pegs and Round Holes: Application of the 'Best Scientific Data Available' Standard in the Endangered Species Act." 16 *Tulane Environmental Law Journal* 387-444 (2003).

Although agencies are required to use the "best scientific data available" when making decisions under the Endangered Species Act (ESA), Congress failed to provide guidance on when data meets this standard. Brennan and co-authors discuss the role of scientific evidence in ESA implementation, judicial attempts to apply the "best scientific data available" standard, and recent legislative attempts to modify the standard.

Doremus, Holly, and A. Dan Tarlock. "Fish, Farms, and the Clash of Cultures in the Klamath Basin." 30 Ecology Law Quarterly 279-350 (2003).

The Endangered Species Act is often considered a catalyst, with the ability to convince states and local populations to adjust to societal support for environmental protection. Doremus and Tarlock examine this catalyst strategy in the context of the events in the Klamath Basin during 2001, explore possible alternatives, and discuss lessons learned.

Patlis, Jason M. "The Endangered Species Act: Thirty Years of Politics, Money, and Science: Riders on the Storm, or Navigating the Crosswinds of Appropriations and Administration of the Endangered Species Act: A Play in Five Acts." 16 *Tulane Environmental Law Journal* 257- 329 (2003).

Today, Endangered Species Act listing decisions are driving solely by litigation and the system's survival depends on an obscure, bipartisan congressional rider. After providing a primer on the legislative process, Patlis examines how financially-challenged agencies, like the Fish and Wildlife Service, are dealing with growing numbers of congressionally and judicially imposed mandates.

Perron, Brian J. "Just Another Goldfish Down the Toilet?: The Fate of Pacific Salmon after *Alsea Valley* and the De Facto Rescission of the 4(D) Rule." 33 *Environmental Law* 547-594 (2003).

On September 10, 2001, an Oregon federal judge in *Alsea Valley Alliance v. Evans* set aside NMFS's 1998 listing of Oregon coast coho salmon for failure to consider hatchery fish. As a result, almost all other Pacific salmon and steelhead listings, as well as the 4(D) rule, are currently in doubt. Perron examines the 4(D) rule, the *Alsea Valley* decision, and the likely aftermath of the decision, which the Bush Administration decided not to appeal.

Sorice, Michael G., C. Scott Shafer, and David Scott. "Managing Endangered Species within the Use/Preservation Paradox: Understanding and Defining Harassment of the West Indian Manatee (*Trichechus manatus*)." 31 Coastal Management 319-338 (2003).

The interactions between tourists and the endangered West Indian manatees in Crystal River, Florida, where tourists can swim with the animals, raises the issue of harassment, which is prohibited by law. Sorice, Shafer, and Scott examine how the construct of harassment is defined and applied to manatee encounters. A management framework is recommend to establish best management practices.

X. FISHERIES MANAGEMENT

Bagley, Paul R. "Don't Forget About the Fishermen: In the Battle Over Fisheries Conservation and Management a Conservation Ethic Has Trumped Economic Concerns of the Community." 36 Suffolk University Law Review 765-786 (2003).

In recent challenges to federal fishery regulations, fishermen have argued that the National Marine Fisheries Service (NMFS) improperly evaluated the economic impacts of the regulations on their communities. Bagley argues the NMFS and courts have favored conservation over economic concerns and suggests an alternative definition of "fishing community" which reflects the various fishing-related industries present in a fishing community.

Brisman, Avi. "A Less Tragic Commons?: Using Harvester and Processor Quotas to Address Crab Overfishing." 26 Seattle University Law Review 929-978 (2003).

The North Pacific Fishery Management Council recently decided to replace the existing License Limitation Program with a program that would assign individual fishing quotas to harvesters and individual processing quotas (IPQ) to processors. Brisman examines the legal issues surrounding IPQs and the costs and benefits of crab rationalization.

Eagle, Josh, and Barton H. Thompson, Jr. "Answering Lord Perry's Question: Dissecting Regulatory Overfishing." 46 Ocean and Coastal Management 649-679 (2003).

Eagle and Thompson discuss the potential sources for regulatory overfishing, defined as overfishing in individual fisheries. Case studies of two federally managed, overfished fisheries in the United States are examined and several suggestions are offered to improve fisheries management and the overall management process.

Ebbin, Syma A. "Swimming Upstream: Institutional Dimensions of Asymmetrical Problems in Two Salmon Management Regimes." 27 Marine Policy 441-448 (2003).

Ebbin examines the institutional dimensions of asymmetrical resource-based problems, drawing results from case studies in Alaska and Washington involving Pacific salmon management.

Eggert, Håkan, and Anders Ellegård. "Fishery Control and Regulation Compliance: A Case for Co-management in Swedish Commercial Fisheries." 27 Marine Policy 525-533 (2003).

Eggert and Ellegård present the results of a survey of regulatory compliance and the attitudes of Swedish commercial fishermen to control and restrictions.

Gable, F. J. "A Practice-Based Coupling of the Precautionary Principle to the Large Marine Ecosystem Fisheries Management Concept with a Policy Orientation: The Northeast United States Continental Shelf as a Case Example." 31 Coastal Management 435-456 (2003).

Gable examines the interdisciplinary sustainable aspects of fisheries as part of ocean management. Gable discusses the human-caused impacts and their roles as modifiers of living marine resources and the management and ecological aspects of fish stock populations as part of a large marine ecosystem. An interdisciplinary policy orientation paradigm for the sustainability of marine life is suggested.

Gray, Tim, and Jenny Hatchard. "The 2002 Reform of the Common Fisheries Policy's System of Governance - Rhetoric or Reality?" 27 Marine Policy 545-554 (2003).

The European Union's 2002 Reform of the Common Fisheries Policy (CFP) was supposed to overhaul the failing European fisheries system. Also in 2002, the European Commission undertook a reappraisal of the CFP to improve the CFP's governance system through increased stakeholder participation, transparency, and accountability. Gray and Hatchard conclude that this attempt to improve governance was more rhetorical than real.

Grynberg, Roman. "WTO Fisheries Subsidies Negotiations: Implications for Fisheries Access Arrangements and Sustainable Management." 27 Marine Policy 499-511 (2003).

Grynberg examines the WTO negotiations on fisheries subsidies and their impact on coastal developing countries. Grynberg also suggests issues which coastal developing nations should incorporate into their negotiating positions and explores management strategies for the new subsidies.

Hernandez, Alvaro, and Willett Kempton. "Changes in Fisheries Management in Mexico: Effects of Increasing Scientific Input and Public Participation." 46 Ocean and Coastal Management 507-526 (2003).

In 1995, faced with fisheries management problems, over-capitalization, monopolies, and social conflicts caused by a national policy of promoting accelerated fishing effort, Mexican officials began implementing structural changes in management, science, and enforcement institutions. Hernandez and Kempton analyze the changing roles of these institutions during the 1990's, with particular attention to the introduction of science-based categorization of fisheries status and public participation.

Islam, Md. Shahidul. "Perspectives of the Coastal and Marine Fisheries of the Bay of Bengal, Bangladesh." 46 Ocean and Coastal Management 763-796 (2003).

The Bay of Bengal is one of the most highly productive areas in the world, but one of the most poorly studied. Islam details the coastal and marine fisheries of the Bay of Bengal, contributing to the available information base and identifying future management and research needs.

Kirke, Brian. "Enhancing Fish Stocks with Wave-Powered Artificial Upwelling." 46 Ocean and Coastal Management 901-915 (2003).

Kirke argues that fisheries productivity can be enhanced by mimicking natural upwellings through the mechanical pumping of nutrient-rich deep ocean water to the surface. Kirke proposes a demonstration project involving the use of a simple wave-powered pump and explores possible solutions to the problems of dilution and the plunging of dense, nutrient-rich deep ocean water.

Kitts, Andrew W., and Steven F. Edwards. "Cooperatives in U.S. Fisheries: Realizing the Potential of the Fishermen's Collective Marketing Act." 27 Marine Policy 357-366 (2003).

The success of recent quota-based harvesting techniques highlight the potential for extensive cooperative arrangements under the Fishermen's Collective Marketing Act of 1934. Kitts and Edwards argue that with fisheries increasingly managed by quotas and limited access, fishery cooperatives will be in a better position to share harvest capacity, reduce cost, and negotiate prices.

McGaw, Richard. "Aboriginal Fisheries Policy in Atlantic Canada." 27 Marine Policy 417-424 (2003).

Following a 1999 Canadian Supreme Court ruling that the aboriginals of Atlantic Canada had a right to maintain a livelihood through fishing, Canada implemented a plan to provide the aboriginals with access to the fishery. McGaw reviews the implementation of this plan.

Mikalsen, Knut H., and Svein Jentoft. "Limits to Participation? On the History, Structure, and Reform of Norwegian Fisheries Management." 27 Marine Policy 397-407 (2003).

The ultimate authority in Norwegian fisheries management lies with the central government, although there is an element of power sharing through corporatist arrangements. Mikalsen and Jentoft examine the history of Norwegian fisheries management and explore the challenges surrounding institutional reform.

Montero Llàcer, Francisco J. "Open Registers: Past, Present, and Future." 27 Marine Policy 513-523 (2003).

For centuries, states have registered their vessels under flags of other states to overcome restrictions and increase profits. Montero Llàcer explores the open register system and proposes specific actions to eradicate substandard registers.

Nichols, Lindsay J. "The NMFS's National Standard Guidelines: Why Judicial Deference May Be Inevitable." 91 California Law Review 1375-1416 (2003).

In a recent opinion, the U.S. Supreme Court held that an agency's interpretation of a statute is entitled to deference only if the interpretation was pursuant to congressionally delegated authority. Nichols examines the impact of this decision on judicial defer-

ence to agency guidelines and other documents, focusing specifically on the National Standard Guidelines promulgated by the National Marine Fisheries Service.

Nielsen, Jesper Raakjær. "An Analytical Framework for Studying: Compliance and Legitimacy in Fisheries Management." 27 Marine Policy 425-432 (2003).

Nielsen develops an analytical framework, based on hypotheses from economic and sociological theories, for analyzing compliance and legitimacy in fisheries management.

Nielsen, Jesper Raakjær, and Christoph Mathiesen. "Important Factors Influencing Rule Compliance in Fisheries: Lessons From Denmark." 27 Marine Policy 409-416 (2003).

Nielsen and Mathiesen present the results of a study of the acceptance of Danish fishers of imposed fisheries regulations and their respect for the management system. Three Danish fisheries were surveyed: the Baltic Sea cod fishery, the Kattegat demersal and *Nephrops* fishery, and the North Sea fishery for non-human consumption species.

Noble, Tim. "Co-operating in Fisheries Management: Trials and Tribulations in Scotland." 27 Marine Policy 433-439 (2003).

Under the U.K. Sea Fisheries (Shellfish) Act of 1967, the Minister may devolve inshore fisheries management to local cooperative groups. Shetland fishermen in Scotland successfully applied for devolution in 1999, but an 2001 application by Orkney fishermen failed. Nobel examines the circumstances of the Orkney failure and speculates on the future of this policy.

Reid, Christopher, et. al. "An Analysis of Fishing Capacity in the Western and Central Pacific Ocean Tuna Fishery and Management Implications." 27 Marine Policy 449-469 (2003).

Recently, concerns have arisen regarding an increase in catch capacity of the purse seine fishery in the Western and Central Pacific Ocean due to an increase in the catch of canning grade tuna. Reid and co-authors used data envelopment analysis to assess the current technical efficiency of the purse seine fleet and its catch capacity and examine the implications of limiting days at sea.

Santora, Christine. "Management of Turtle Bycatch: Can Endangered Species Be Protected While Minimizing Socioeconomic Impacts?" 31 Coastal Management 423-434 (2003).

Santora analyzed turtle-bycatch management issues in a small-scale gillnet fishery targeting flounder in Pamlico Sound, North Carolina to determine the feasibility of achieving dual objectives: protection of sea turtles and minimization of social and economic impacts. Santora also discusses the possibility of implementing solutions reflecting multiple values while operating under the Endangered Species Act.

Standal, Dag. "Fishing the Last Frontier - Controversies in the Regulation of Shrimp Trawling in the High Arctic." 27 Marine Policy 375-388 (2003).

Shrimp trawling fisheries in the Norwegian Exclusive Economic Zone and in the Fisheries Protection Zone around Svalbard are not regulated through total allowable catch quotas or vessel restrictions. In recent years, fishery managers have suggested quotas to address the massive increase in catch capacity. Standal examines the forces behind the increase in catch capacity and whether the existing system, with its lack of quotas, is sufficient to manage the increase.

Sutinen, Jon G., and Robert J. Johnston. "Angling Management Organizations: Integrating the Recreational Sector into Fishery Management." 27 Marine Policy 471-487 (2003).

Sutinen and Johnston examine methods to reduce conflicts and improve the value and sustainability of marine recreational fisheries. One approach to fully integrate the recreational sector into fisheries management proposed by Sutinen and Johnston involves the use of angling management organizations, community-based organizations designed to strengthen resource stewardship, alleviate management conflicts, and produce greater long-term net economic benefits.

Surís-Regueiro, Juan C., Manuel M. Varela-Lafuente, and Carlos Iglesias-Malvido. "Effectiveness of the Structural Fisheries Policy in the European Union." 27 Marine Policy 535-544 (2003).

Surís-Regueiro, Varela-Lafuente, and Iglesias-Malvido analyze the effectiveness of the community structural policy in the fisheries sector of the European Union. The relative level of compliance with objectives, such as the reduction of fleets, was compared with the mechanisms which have been implemented to achieve those objectives.

Trondsen, Torbjorn, Kjetil Helstad, and James A. Young. "Market-oriented Regional Fisheries Management - An Analysis of Four Fish Regions in the North Atlantic." 46 Ocean and Coastal Management 917-941 (2003).

Trondsen, Helstad, and Young analyzed exchange methods and ex-vessel prices in four North Atlantic Regions, including Iceland, Norway, and Scotland, to determine the influence of exchange methods on ex-vessel prices. The authors explore the implication of their findings on regional resource and coastal management.

Ward, Trevor, and Eddie Hegerl. Marine Protected Areas in Ecosystem-Based Management of Fisheries (2003).

Ward and Hegerl, in a report prepared for the Australian Department of Environment and Heritage, argue that MPAs can be designed to achieve a "double payoff" – benefits to both fisheries and conservation. Successful dual-objective MPAs require strong cooperation between conservation and fisheries agencies, analysis and documentation of the costs and benefits, and stakeholder involvement. Ward and Hegerl discuss the use of marine reserves in fisheries management and identify mechanisms for the identification and implementation of dual-objective MPAs. (*Available from the ADEH at* http://www.deh.gov.au/coasts/mpa/wpc/fisheries.html).

Whitmarsh, David, et. al. "The Economic Sustainability of Artisanal Fisheries: the Case of the Trawl Ban in the Gulf of Castellammare, NW Sicily." 27 Marine Policy 489-497 (2003).

The trawl ban in the Gulf of Castellammare includes a designated fishing area from which non-artisanal vessel are excluded. Whitmarsh and co-authors examine the economic sustainability of the artisanal fishery operating within the protected area, the potential consequences of lifting the trawl ban, and the fishermen's attitudes towards the ban.

XI. INTERNATIONAL TREATIES

Kunich, John Charles. "World Heritage in Danger in the Hot Spots." 78 Indiana Law Journal 619-658 (2003).

No comprehensive, enforceable legal mechanism, domestic or international, exists to protect global biodiversity. Kunich evaluates the potential of the World Heritage Convention to become an effective tool to safeguard global hot spots.

Kwiatkowsk, Barbara. "The Southern Bluefin Tuna Arbitral Tribunal Did Get It Right: A Commentary and Reply to the Article by David A. Colson and Dr. Peggy Hoyle." 34 Ocean Development and International Law 369-395 (2003).

This contribution is a reply to and a commentary on the article by David A. Colson and Dr. Peggy Hoyle, "Satisfying the Procedural Prerequisites to the Compulsory Dispute Settlement Mechanisms of the 1982 Law of the Sea Convention: Did the Southern Bluefin Tuna Tribunal Get It Right?" 34(1) Ocean Development & International Law 59-82 (2003). Colson and Hoyle took the view that Southern Bluefin Tuna Tribunal did not reach the correct answer. Kwiatkowsk's survey of the Southern Bluefin Tuna and the Mox Plant cases, in light of the doctrine of procedural and substantive parallelism between the umbrella UN Law of the Sea Convention and its numerous implementing special treaties covered by Articles 281-282, leads her to conclude that the Southern Bluefin Tuna Arbitral Tribunal did get it right. (Abstract courtesy of Ocean Development and International Law).

Talitman, Dorit, Alon Tal, and Shmuel Brenner. "The Devil is in the Details: Increasing International Law's Influence on Domestic Environmental Performance – The Case of Israel and the Mediterranean Sea." 11 New York University Environmental Law Journal 414-478 (2003).

The Convention for the Protection of the Mediterranean Sea Against Pollution (the "Barcelona Convention") was adopted in 1976. Israel was an enthusiastic participant in the negotiations, at a time when the nation was generally isolated from the international community due to the political climate in the Middle East. Talitman, Tal, and Brenner evaluate Israel's marine pollution enforcement system within the context of its ratification of the Barcelona Convention and its protocol on land-based sources.

Verhaag, Melissa A. "It is Not Too Late: The Need for a Comprehensive International Treaty to Protect the Arctic Environment." 15 Georgetown International Environmental Law Review 555-579 (2003).

Despite the impact of pollution on the Arctic environment and indigenous populations, no international treaty protects the Arctic and its natural resources. Several international treaties address aspects of the Arctic, such as the U.N. Convention on the Law of the Sea and the London Dumping Convention. Verhaag discusses the most significant environmental problems in the Arctic and explores the development of a treaty system similar to the Antarctic Treaty System.

Walker, George K., and John E. Noyes. "General Introduction: Definitions for the 1982 Law of the Sea Convention - Part II." 33 California Western International Law Journal 191-324 (2003).

In 2001, the American Branch of the International Law Association Law of the Sea Committee undertook a study of undefined terms in the 1982 U.N. Convention on the Law of the Sea. The Committee also studied terms the International Hydrographic Organization (IHO) had collected and defined in its Consolidated Glossary. After a brief introduction to the Committee's methodology, Walker and Noyes reprint the 2003 Revised Tentative Draft of Analysis and the IHO definitions. Walker and Noyes conclude with a summary of the Analysis and comment on possible future work of the Committee.

XII. INVASIVE AND NON-INDIGENOUS SPECIES

Bax, Nicholas, et. al. "Marine Invasive Alien Species: A Threat to Global Biodiversity." 27 Marine Policy 313-323 (2003).

Invasive species threaten biodiversity, human health, and marine industries. Bax and co-authors argue that a systematic approach to marine invasive species is required to target the most effective management actions and that regional cooperation is essential to effective management.

National Research Council. Ocean Studies Board. Non-Native Oysters in the Chesapeake Bay (2003).

Is the introduction of a non-native oyster, *Crassostrea ariakensis*, into Chesapeake Bay a means of reviving the failing oyster industry or a recipe for disaster? At the request of the Chesapeake Bay Commission, the NRC examined the costs and benefits of the introduction of *C. ariakensis* either as an infertile triploid or as a reproductive diploid. The NRC concludes that Virginia's plan to release the non-native should be delayed until more information is gathered on the environmental risks. (*Available from the Ocean Studies Board at http://www7.nationalacademies.org/osb/).*

Peoples, Lori H. "A Call for Uniform Regulation of Intentional Introduction of Non-indigenous Species: The Suminoe Oyster." 81 North Carolina Law Review 2433-2450 (2003).

Despite the risks associated with the introduction of non-indigenous species, no regulatory framework currently exists in North Carolina to allow individuals to object to a particular introduction. Peoples examines current initiatives to introduce the Suminoe oysters on the Atlantic coast, potential conflicts between neighboring states, and possible legal challenges to halt intentional introductions. Because legal challenges are unlikely to succeed, Peoples recommends the implementation of federal guidelines.

U.S. General Accounting Office, Invasive Species: State and Other Nonfederal Perspectives on Challenges to Managing the Problem, GAO-03-1089R (2003).

In 2003, the GAO conducted a survey of state agencies involved in invasive species efforts and the Invasive Species Advisory Committee. The survey focused on state perspectives in the following areas: (1) gaps in, or problems with, federal legislation, (2) barriers to management, (3) effective leadership structures, and (4) integration of federal aquatic and terrestrial invasive species legislation. This report presents the results of that survey. (*Available from GAO at* http://www.gao.gov/).

XIII. MARINE GENETIC RESOURCES

McLaughlin, Richard J. "Foreign Access to Shared Marine Genetic Materials: Management Options for a Quasi-Fugacious Resource." 34 Ocean Development and International Law 297- 348 (2003).

Marine genetic resources are increasingly being targeted as a source of drugs and other biotechnological uses. Many of these resources are located in tropical coral reef areas within the jurisdictional control of one or more developing nations. Unlike traditional marine living resources, genetic resources are not exploited for their properties as physical substances, but as sources of information. The current international regulatory regime governing access to marine genetic resources is the traditional rule of capture, which provides that ownership of natural resources coming from a common source of supply is recognized once it has been reduced to dominion and control. McLaughlin contends that the rule of capture coupled with exclusive access agreements and strong global intellectual property protections create a legal environment that is inequitable, economically and biologically inefficient, and ripe for international discord. This contribution advocates an alternative regulatory model that is similar, in many respects, to the more cooperative approaches used to manage transboundary fugacious resources such as liquid oil and gas, international water resources, and migratory wildlife. (Abstract courtesy of Ocean Development and International Law)

MARINE PROTECTED AREAS

XIV.

Clifton, Julian. "Prospects for Co-management in Indonesia's Marine Protected Areas." 27 Marine Policy 389-395 (2003).

Clifton presents a case study of newly designated Indonesian Marine Protected Areas to explore the institutional and cultural barriers which hinder effective resource management and highlight the need for collaborative approaches. Clifton also examines the impact of Indonesia's recent constitutional reforms.

Gladstone, William, Fareed Krupp, and Mohammed Younis. "Development and Management of a Network of Marine Protected Areas in the Red Sea and Gulf of Aden Region." 46 Ocean and Coastal Management 741-761 (2003).

Regional networks of marine protected areas have the potential to conserve representative samples of global biodiversity and migratory species. Gladstone, Krupp, and Younis discuss current and proposed regional MPA networks and describe the creation of a MPA network in the Red Sea and Gulf of Aden region.

Himes, Amber H. "Small-Scale Sicilian Fisheries: Opinions of Artisanal Fishers and Sociocultural Effects in Two MPA Case Studies." 31 Coastal Management 389-408 (2003).

Himes presents the results of a comparative study of the management regimes of the Gulf of Castellammare Fishery Reserve and the Egadi Island Marine Reserve in Sicily, Italy. Himes argues that a social science evaluation scheme is missing from the management of these sites and throughout the Mediterranean. Himes collected data on the impact of the reserves on artisanal fishers, the extent of the fishers' knowledge of regulations, their opinions on management, and demographics. The results indicate that artisanal fishers are not well informed of the regulations and feel alienated from the management process.

Owen, Dave. "The Disappointing History of the National Marine Sanctuaries Act." 11 New York University Environmental Law Journal 711-757 (2003).

Congress enacted the National Marine Sanctuaries Act over thirty years ago with the high expectations that it would provide for the comprehensive management of the U.S. oceans. Owen traces the history of the Act, analyzes the National Marine Sanctuary Program through successive administrations, and discusses lessons learned. Owen concludes that Congress delegated the responsibility of administering the sanctuaries program to an understaffed agency, NOAA, without providing the agency with the necessary tools for success.

XV. MARITIME BOUNDARIES

Jarvis, Robert M. Case Note. "Territorial Waters: Florida's Eastern Coastal Boundary is Greater of the Edge of the Gulf Stream or Three Geographic Miles: Benson v. Norwegian Cruise Line Ltd." 34 Journal of Maritime Law and Commerce 351-361 (2003).

Florida defines its eastern coastal boundary as "the edge of the Gulf Stream or a distance of three geographic miles whichever is the greater distance." In 2003, a state appellate court in Miami became the first court to squarely interpret the eastern coastal boundary provision, holding that a cruise ship 11.7 nautical miles off the coast of Florida was in state waters. Jarvis provides an in-depth analysis of this case.

Li Jinming and Li Dexia. "The Dotted Line on the Chinese Map of the South China Sea: A Note." 34 Ocean Development and International Law 287-295 (2003).

In 1947, the then-Chinese government produced The Location Map of the South China Sea Islands (Nanhai zhudao weizhi tu, in Chinese). A discontinuous dotted line was on

this map. Li Jinming and Li Dexia look at both the history of the creation of the dotted line and the opinions that have been expressed concerning the juridical status of the dotted line. Special attention is given to the historic title assertion. (*Abstract courtesy of Ocean Development and International Law*).

Valencia, M. J. "Validity of Malaysia's Baselines and Territorial Sea Claim in the Northern Malacca Strait." 27 Marine Policy 367-373 (2003).

A recent suit in the High Court of Singapore raised questions of the validity of Malaysia's baseline and territorial sea claims. Valencia argues that Malaysia's claims are invalid for a number of reasons, including breaches of the 1958 Geneva Convention and the Vienna Law of Treaties Convention, use of baselines not in conformance with the U.N. Convention on the Law of the Sea, and restrictions on the rights of third-party states.

XVI.

MARITIME LAW

Andrewartha, Jane, and Kate Borrowdale. "English Maritime Law Update: 2002." 34 *Journal of Maritime Law and Commerce* 413-449 (2003).

Andrewartha and Borrowdale survey the English maritime law developments in 2002. Topics covered include forum, warranties, law of mistake, limitation of liability, exclusion clauses, marine insurance, Hague/Hague Visby rules, anti-suit injunctions, constructive total loss, arbitration clauses, notices of readiness and laytime, arbitration, indemnity clauses, award of interest, charter parties, economic loss, and new insurance clauses.

Derrington, Sarah, and Michael White. "Australian Maritime Law Update: 2002." 34 *Journal of Maritime Law and Commerce* 363-389 (2003).

Derrington and White survey the developments in Australian maritime law during 2002. Topics covered include the *M/V Volga*; Timor Sea offshore oil and gas; the "children overboard" incident; maritime cases involving admiralty jurisdiction, carriage of goods, salvage, conflicts of law applicable to maritime torts, and marine pollution; and legislative developments.

Griggs, Patrick. "Obstacles to the Uniformity of Maritime Law: The Nicholas J. Healy Lecture." 34 Journal of Maritime Law and Commerce 191-208 (2003).

Patrick Griggs, President of the Comite Maritime International (CMI), delivered the sixth biennial Nicholas J. Healy lecture on maritime law at New York University School of Law on October 29, 2002. Griggs discusses CMI, the various maritime conventions, the obstacles to uniformity including over-elaboration, politics, and high thresholds.

Hatley, Pamela Jo. "Developments in the Swedish Maritime Law: 2001-2002." 27 The Maritime Lawyer 593-611 (2003).

Hatley surveys the developments in Swedish maritime law during 2001-2002. Topics covered include vessels, carriage, navigable waters, water pollution, maritime traffic, salvage, general and particular average, and insurance.

Myburgh, Paul. "Shipping Law." 2003 New Zealand Law Review 287-302 (2003).

Myburgh surveys developments in New Zealand shipping law. Topics covered include the groundings of the *Jody F. Millennium* and the *Tai Ping*; port companies and market power; foreign fishing crews and forfeiture; health and safety; re-arrest and security; arresting aircraft and wrongful arrest; carriage of goods and the Gold Clause trap; and surveys and negligence.

Papavizas, Constantine G., and Lawrence I. Kiern. "2001-2002 U.S. Maritime Legislative Developments." 34 Journal of Maritime Law and Commerce 451-478 (2003).

Papvizas and Kiern survey the maritime legislative actions of the 107th Congress, including security, preservation and promotion of the U.S.-flag fleet, the Jones Act, the environment, taxes, and financing.

Southcott, Richard F., and Kimberley A. Walsh. "Canadian Maritime Law Update: 2002." 34 Journal of Maritime Law and Commerce 391-412 (2003).

Southcott and Walsh survey the developments in Canadian maritime law during 2002. Topics covered include the Canada Shipping Reform Act, the Immigration and Refugee Protection Act, jurisdiction, conflict of laws, carriage of goods, liens and priorities, marine insurance, pilotage, and arbitration.

Wan Izatul Asthma Wan Talaat, "Causa Proxima Non Remota Spectatur: The Doctrine of Causation in the Law of Marine Insurance." 34 Journal of Maritime Law and Commerce 479- 496 (2003).

The doctrine of proximate cause plays a significant role in marine insurance litigation. Wan Izatul Asthma Wan Talaat traces the historical development of the proximate cause doctrine and its application to marine insurance.

XVII. NEPA

Goldfarb, Deirdre. "NEPA: Application in the Territorial Seas, the Exclusive Economic Zone, the Global Commons, and Beyond." 32 Southwestern University Law Review 735-760 (2003).

The Bush Administration recently referred the National Environmental Policy Act to the Council on Environmental Quality for review and has proposed numerous changes to the Act, including an exemption for U.S.-controlled ocean waters. Goldfarb examines NEPA's applicability to the oceans.

XVIII. OCEAN OBSERVING SYSTEMS

Malone, Thomas C. "The Coastal Module of the Global Ocean Observing System (GOOS): An Assessment of Current Capabilities to Detect Change." 27 Marine Policy 295-302 (2003).

Malone addresses the challenge of producing scientifically credible quantitative assessments of the status of coastal marine and estuarine ecosystems and the current capacity to provide the data required. Malone concludes that a coastal module of GOOS is

needed to achieve safe and efficient marine operations and the goals of international agreements.

National Research Council. Ocean Studies Board. Enabling Ocean Research in the 21st Century: Implementation of a Network of Ocean Observatories (2003).

In 2002, the National Science Foundation (NSF) commissioned a NRC study to address issues related to the implementation of a seafloor observatory network. NRC provides advice on the design, construction, operation, and maintenance of such a network, examines the impacts of a observatory network on the underwater research fleet and current underwater vehicle assets, and examines the potential role of a NSF seafloor network in international ocean observing systems currently under development. (*Available from the Ocean Studies Board at* http://www7.nationalacademies.org/osb/).

XIX. OCEAN GOVERNANCE

XX.

Hinds, Lennox. "Ocean Governance and the Implementation Gap." 27 Marine Policy 349-356 (2003).

U.N. organizations, such as UNESCO, enact various conventions and agreements for implementation by the U.N. and their member states. In general, these instruments are only partially implemented. Hinds examines the institutional structure and policymaking processes of U.N. bodies, nations, and regional indigenous organizations to identify reasons for this implementation gap.

OFFSHORE INSTALLATIONS

Hamzah, B. A. "International Rules on Decommissioning of Offshore Installations: Some Observations." 27 Marine Policy 339-348 (2003).

Hamzah examines the global and regional instruments which attempt to regulate the decommissioning of offshore installations. Hamzah concludes that oil-producing countries need to enact comprehensive national legislation on decommissioning.

Kaiser, Mark J., and Allan G. Pulsipher. "The Cost of Explosive Severance Operations in the Gulf of Mexico." 46 Ocean and Coastal Management 701-740 (2003).

Kaiser and Pulsipher estimate the cost of explosive severance operations associated with decommissioning offshore structures in the Gulf of Mexico. The expected size and potential value of the explosive severance market is also estimated.

XXI. OIL AND GAS DEVELOPMENT

Hudec, Al, and Van Penick. "British Columbia Offshore Oil and Gas Law." 41 Alberta Law Review 101-157 (2003).

Hudec and Penick examine the debate surrounding a possible lifting of a thirty-five year moratorium on offshore oil and gas development in British Columbia. Hudec and Penick detail the history of west coast oil and gas activity, discuss the technical and environmental issues, and explore alternative regulatory regimes which could be implemented to govern future development.



POLLUTION

Brill, Lauren. "A Bug's Life: Perspectives on Biocriteria, Its Validity Under the Clean Water Act, and the Implementation of a Uniform National Program." 31 Capital University Law Review 627-657 (2003).

Biocriteria, an accumulation of biological assessment and biological criteria, is effective in determining the stressors for non-attainment of a designation use under the Clean Water Act (CWA). Although biocriteria is not always able to determine the source of the stressor, EPA supports its use by states for the assessment of permit conditions and outcomes. Brill examines the validity of a mandatory biocriteria program under the CWA.

Freeze, Mark E., Rolf R. von Oppenfeld, and Eric L. Hiser. "South Carolina Release Prevention, Reporting, and Liability: A Primer on the Legal Requirements Imposed to Avoid and, if Necessary, to Respond to 'Environmental Accidents." 11 Southeastern Environmental Law Journal 221-400 (2003).

Freeze, von Oppenfeld, and Hiser discuss the release prevention, reporting requirements, and associated liability for oil and hazardous substance spills in South Carolina. With regard to liability, the discussion centers around liability for failure to prepare and maintain a required pollution prevention plan, failure to report a spill, and for the actual spill.

Krümmel, E. M., et. al. "Aquatic Ecology: Delivery of Pollutants By Spawning Salmon." 425 *Nature* 255-256 (2003).

Krümmel and fellow authors argue that migrating sockeye salmon may act as vectors of persistent industrial pollutants like polychlorinated biphenyls (PCBs), which they acquire from the ocean and release into natal spawning streams and lakes upon death. The accumulation of toxic chemicals is significant if the density of salmon returning to a particular area is high.

Massoud, M. A., M. D. Scrimshaw, and J. N. Lester. "Qualitative Assessment of the Effectiveness of the Mediterranean Action Plan: Wastewater Management in the Mediterranean Region." 46 Ocean and Coastal Management 875-899 (2003).

Land-based pollutants pose the greatest threat to the Mediterranean environment and public health. Massoud, Scrimshaw, and Lester assess the effectiveness of the Mediterranean Action Plan and the land-based sources protocol to the Barcelona Convention in regard to the wastewater management of Mediterranean countries.

May, Peter J. "Marine Facilities and Water Quality: Regulatory Versus Voluntary Approaches." 31 Coastal Management 297-317 (2003).

May examines the influence of regulatory and voluntary approaches on the willingness of marine facilities to address water quality concerns. May's research revealed that while regulatory approaches are not always necessary, voluntary approaches do not always provide sufficient motivation. Regulators, therefore, need to consider a mix of

approaches, including increased levels of funding and assistance and the stronger involvement of trade associations.

Spolidoro, Laurina M. "Area Contingency Plans: Is the Coastal Zone Management Act on a Collision Course with Unfettered Oil Spill Response?" 27 William & Mary Environmental Law and Policy Review 755-793 (2003).

Oil spill response in the United States is often a coordinated effort which starts during the development of National, Regional, and Area Contingency Plans and state coastal zone management plans. Conflicts can arise, however, if states fail to use these informal mechanisms and attempt to assert substantive control over federal activities through the formal mechanisms of the Coastal Zone Management Act. Spolidoro examines the issue of whether and when Area Contingency Plan are subject to the requirement of a formal federal consistency determination.



RECREATION AND TOURISM

Gabe, Todd M., and Diane Hite. "The Effects of Boating Safety Regulations." 31 Coastal Management 247-254 (2003).

Gabe and Hite examine the effects of boater education programs and water patrol officers on the prevention of recreational boating accidents. The results suggest that a uniform policy of 1 ½ officers to 1,000 boaters would prevent between 2,229 and 2,318 accidents in 44 states.

Heckel, Gisela, Ileana Espejel, and David W. Fisher. "Issue Definition and Planning for Whalewatching Management Strategies in Ensenada, Mexico." 31 Coastal Management 277- 296 (2003).

The growth in whalewatching in Baja California Sur during the last ten years lead to the adoption of a Mexican whalewatching law. However, research conducted in the Ensenada area reveals that the law is insufficient as boats continue to influence the behavior of migrating gray whales. Heckel, Espejel, and Fisher propose a management planning process to adapt the Mexican regulations to the Ensenada area, promote adherence to the law, and improve on-board tourist services.

Lindeman, Kenyon C., et. al. "Sustainable Coastal Tourism in Cuba: Roles of Environmental Assessments, Certification Programs, and Protection Fees." 16 *Tulane Environmental Law Journal* 591-618 (2003).

Lindeman and fellow authors discuss the attributes of Cuban tourism and focus on several regulatory and market-based tools for sustainable development, such as environmental impact assessments and environmental protection fees, which are relevant to Cuba and other developing nations.

Lück, Michael. "Education on Marine Mammal Tours as Agent for Conservation – But do Tourists Want to Be Educated?" 46 Ocean and Coastal Management 943-956 (2003).

Lück examines the issue of whether tourists want to be educated while on vacation by surveying participants of swim-with-dolphin tours in New Zealand.

Whittle, Daniel J., Kenyon C. Lindeman, James T. B. Tripp. "International Tourism and the Protection of Cuba's Coastal and Marine Environments." 16 *Tulane Environmental Law Journal* 533-589 (2003).

As many of Cuba's coastal and marine resources are in good condition, the nation has the opportunity to develop a profitable tourism industry. However, if economic recovery is prolonged the temptation to sacrifice long-term sustainability for short-term gain will be great. Whittle, Lindeman, and Tripp examine Cuba's efforts to develop international tourism as a mechanism for economic growth and the economic, legal, and political challenges to sustainable tourism development.

World Health Organization. Guidelines for Safe Recreational Water Environments, Volume 1: Coastal and Fresh Waters (2003).

To reduce the public health and safety risks associated with recreational use of coastal and fresh waters, the World Health Organization (WHO) issued guidelines to provide a framework for environmental assessment and local decision-making and to serve as a basis for international and national responses. The WHO discusses the impact of recreational water use on public health, methods for control and monitoring, and available preventive measures. Guidelines are provided for drowning, exposure to the elements, exposure to physical and chemical agents, water quality, contamination of beach sand, algae, and dangerous aquatic organisms. (Available from the World Health Organization at http://www.who.int/water_sanitation_health/bathing/srwe1/en/).

XXIV.

REGIONAL MANAGEMENT

Getches, David H. "Water Management in the United States and the Fate of the Colorado River Delta in Mexico." 11 *United States - Mexico Law Journal* 107-113 (2003).

Getches discusses the history of water management in the Colorado River Delta, current issues, and recent efforts by the two nations to address the Delta's environmental problems.

LeMense Huff, Julia. "Using the Tools We Have: An Integrated Approach to Protect the Sea of Okhotsk." 20 Pace Environmental Law Review 693-729 (2003).

The Sea of Okhotsk, home to North Pacific right whales, bowhead whales, spotted seals, North Pacific gray whales, salmon, halibut, flounder, herring, and numerous other species, is threatened by overfishing, pollution, and oil and gas exploration. LeMense Huff examines the impacts of increased oil and gas development on the Sea of Okhotsk and sets forth an ambition proposal to protect the fragile sea and its resources.

Oliounine, I. "Leadership Seminar on Caspian Sea and its Deltas Region Sustainable Development and Regional Security, 27-30 May 2003, Astrakhan, Russian Federation." 46 Ocean and Coastal Management 797-806 (2003).

The Leadership Seminar on Caspian Sea and its Deltas Region Sustainable Development and Regional Security was sponsored by the International Ocean Institute during May

27-30, 2003. Oliounine presents the resolutions and conclusions adopted by the participants. The proceedings of the IOI's Seminar are planned for publication in late 2003.

Thao, Nguyen Hong. "The 2002 Declaration on the Conduct of Parties in the South China Sea: A Note." 34 Ocean Development and International Law 279-285 (2003).

In November 2002, the ASEAN states and the People's Republic of China agreed upon a Declaration on the Conduct of Parties in the South China Sea. This note, a follow-up to the author's article, "Vietnam and the Code of Conduct for the South China Sea" (Ocean Development & International Law, Vol. 32, pp. 105-130 (2000)), briefly describes the contents and importance of the 2002 Declaration. (Abstract courtesy of Ocean Development and International Law).

Verner, Rudy E. "Short Term Solutions, Interim Surplus Guidelines, and the Future of the Colorado River Delta." 14 Colorado Journal of International Environmental Law and Policy 241-271 (2003).

During the past ten years, interest in the Colorado River Delta has risen dramatically and the Delta is beginning to show signs of recovery. Continued recovery, however, may require the adoption of a minute to the 1944 Treaty between the U.S. and Mexico expressly dedicating water to delta conservation. Verner examines the history of agreements between the U.S. and Mexico related to the Colorado River, the viability of an ecological minute, and the new Interim Surplus Guidelines.



SCIENTIFIC RESEARCH

Diamond, Amy. "Identification and Assessment of Scleractinians at Tarou Point, Dominica, West Indies." 31 Coastal Management 409-421 (2003).

Tarou Point, on the west coast of Dominica, is a volcanic outcrop covered with coral assemblages. Traditionally used by artisanal fishers, Tarou Point is a growing recreational diving destination, increasing the pressures on the marine environment. Diamond surveyed four sections of Tarou Point for scleractinians species richness and frequency distribution analyses to serve as a baseline for future monitoring of the coral assemblages and benthic habitat and facilitate enforcement.

National Research Council. Ocean Studies Board. Exploration of the Seas: Voyage into the Unknown (2003).

The Committee on the Exploration of the Seas was established to respond to a Congressional request for an examination of the feasibility and value of an ocean exploration program. *Exploration of the Seas* details the importance of the oceans, the increasing pace of exploration, and the need for expanded international cooperation and effective education and outreach. The Committee also identifies priority areas and examines existing plans to advance ocean exploration.

Pickrill, Richard A., and Brian J. Todd. "The Multiple Roles of Acoustic Mapping in Integrated Ocean Management, Canadian Atlantic Continental Margin." 46 Ocean and Coastal Management 601-614 (2003).

More data is needed to support the sustainable development of offshore resources. With multibeam mapping technology and traditional geoscience survey techniques, images of the sea floor can now be produced in high resolution. Pickrill and Todd demonstrate the application of high-resolution sea floor mapping techniques to develop data bases and maps for the management of offshore resources.

XXVI. SECURITY

Firestone, Jeremy, and James Corbett. "Combating Terrorism in the Environmental Trenches: Responding to Terrorism: Maritime Transportation: A Third Way for Port and Environmental Security." 9 Widener Law Symposium Journal 419-437 (2003).

Vessels engaged in international trade are in a sense "stateless," but the vessels are subject to the regulatory regime of the "flag state" – the state with whom the vessel is registered – and the port state. Firestone and Corbett suggest a third way, increasing the focus on international cooperation, to address environmental and security concerns.

Song, Yann-Huei. "The Overall Situation in the South China Sea in the New Millennium: Before and After the September 11 Terrorist Attacks." 34 Ocean Development and International Law 229-277 (2003).

Song reviews the overall situation in the South China Sea (SCS) between 2000 and June 2002. A number of important new developments and policy events have occurred during this period, including: the expansion of India's military presence from the Indian Ocean into the SCS; the efforts taken by Japan to promote cooperation in the SCS to deal with maritime security issues; the increase of military exercises conducted by both the claimants and nonclaimants in the SCS; the improvement of diplomatic relationships among the claimants, in particular, between China and the member states of ASEAN; the election of George W. Bush as U.S. President; the EP-3 incident and the September 11 terrorist attacks. These developments and events have the potential to affect peace and stability in the SCS. The changing security configuration of the SCS and possible responses of the claimants to the new strategic framework after the September 11 terrorist attacks, as well as their implications for managing potential conflicts in the SCS, are discussed. (*Abstract courtesy of Ocean Development and International Law*).

Stuhltrager, James M. "Combating Terrorism in the Environmental Trenches: Responding to Terrorism: Oil Pollution and Environmental Terrorism - an Overview of the Potential Legal Response in the United States." 9 Widener Law Symposium Journal 401-418 (2003).

The threat of oil pollution as a weapon of environmental terrorism is, unfortunately, a real one. Stuhltrager examines the vulnerability of the oil transportation system and the potential environmental and economic impacts of a spill. Stuhltrager also explores possible legal responses to a potential terrorist threat involving oil.

XXVII. SHORELINE MANAGEMENT

Conway, Tenley M., and Karl F. Nordstrom. "Characteristics of Topography and Vegetation at Boundaries Between the Beach and Dune on Residential Shorefront

Lots in Two Municipalities in New Jersey, USA." 46 Ocean and Coastal Management 635-648 (2003).

Conway and Nordstrom examine the natural and cultural characteristics at seaward boundaries of residential lots to identify ways in which these boundaries can function more naturally. The study indicates that intensely developed coastlines can retain their natural characteristics if residents allow ecological boundaries to replace cultural boundaries. Several management techniques, such as elevation of boardwalks and restriction of sand-trapping fences, are suggested.

Daniel, Edsel B., and Mark D. Abkowitz. "Development of Beach Analysis Tools for Caribbean Small Islands." 31 Coastal Management 255-275 (2003).

Beach erosion in the Caribbean poses a serious risk to tourist facilities, threatening the economic well-being of the islands. UNESCO's Coast and Beach Stability in the Caribbean Project has provided most Caribbean small islands the opportunity to monitor their beaches and integrate their data to develop a beach analysis and management system. Daniel and Abkowitz present the result of the first phase of this project, which included the development of integration tools, estimation of long-term beach erosion and sand volume change trends, identification of erosion-sensitive beaches, and mapping of beach erosion hazards.

Myatt, L. B., M. D. Scrimshaw, and J. N. Lester. "Public Perceptions and Attitudes Towards a Forthcoming Managed Realignment Scheme: Freiston Shore, Lincolnshire, UK." 46 Ocean and Coastal Management 565-582 (2003).

Managed realignment is a flood defense strategy that can provide economic and environmental benefits even in light of potential climate change. Public perceptions towards this approach, however, are often less than favorable. Myatt, Scrimshaw, and Lester attempt to detect the drivers of public perception of managed realignment and suggest that local residents will be more receptive of a fully established scheme than during its inception or construction.

Shivlani, Manoj P., David Letson, and Melissa Theis. "Visitor Preference for Public Beach Amenities and Beach Restoration in South Florida." 31 Coastal Management 367-385 (2003).

Coastal erosion is a chronic problem in South Florida and beach restoration is expensive. Shivlani, Letson, and Theis examine visitor willingness-to-pay for beach nourishment at three South Florida beaches.

U.S. Army Corps of Engineers. National Shoreline Management Study. The Corps of Engineers and Shore Protection: History, Projects, Costs (2003).

This report details the shore protection programs of the U.S. Army Corps of Engineers during the 20th century. Since the Corps' first project in 1950, the agency has completed seventy-one Congressionally authorized shore protection projects at a total cost of \$1,215,161. An additional ten projects are under construction and seventy are in the planning stages. A written and schematic chronology is used to examine the history of these

projects, authorization bills, major storms, and project costs. (*Available from the Corps at* http://www.iwr.usace.army.mil/NSMS/National%20Shoreline%20Study.pdf).



Houck, Oliver. "Thinking About Tomorrow: Cuba's 'Alternative Model' for Sustainable Development." 16 Tulane Environmental Law Journal 521-532 (2003).

In spite of Cuba's numerous problems, the island nation made the environment a priority. Houck discusses the rise of Cuban environmental law and policy and reflects on whether these policies are sustainable.

XXIX. TAKINGS

Echeverria, John D., and Julie Lurman. "The Endangered Species Act: Thirty Years of Politics, Money, and Science: "Perfectly Astounding" Public Rights: Wildlife Protection and the Takings Clause." 16 *Tulane Environmental Law Journal* 331-385 (2003).

Echeverria and Lurman examine whether federal and state regulations to protect endangered species result in the taking of private property in violation of the Fifth Amendment. Echeverria and Lurman argue that the public ownership doctrine, a common law doctrine of public ownership of wildlife, would act as a bar to takings claims.

Parobek, Cori S. Student Note. "Of Farmers' Takes and Fishes' Takings: Fifth Amendment Compensation Claims When the Endangered Species Act and Western Water Rights Collide." 27 Harvard Environmental Law Review 177-225 (2003).

In *Tulare Lake Basin Water Storage District v. United States*, the Court of Federal Claims ruled that California irrigators were owed compensation when federal environmental regulation, specifically the Endangered Species Act (ESA), interfered with their water rights. Parobek explores the ramifications of the *Tulare Lake* decision and the interplay between western water rights, the ESA, and the Fifth Amendment takings clause.

XXX. UNDERWATER CULTURAL HERITAGE

Forrest, Craig J. S. "Has the Application of Salvage Law to Underwater Cultural Heritage Become a Thing of the Past." 34 *Journal of Maritime Law and Commerce* 309-350 (2003).

Forrest discusses the application of salvage law to underwater cultural heritage with particular emphasis on the contextual background, including the historical development of the contentious relationship between marine salvage law and underwater archaeology. Forrest also analyzes the salvage law provisions of the new UNESCO Convention on the Protection of Underwater Heritage and questions their utility in providing a rigorous protective regime.

XXXI. WETLANDS

Bae, David M. "Palazzolo's One-Two Punch to the Wetlands Takings Doctrine: Are Massachusetts Wetlands at Risk?" 37 New England Law Review 781-813 (2003).

Bae explores the future of Massachusetts wetland regulation in light of the Supreme Court's holding in *Palazzolo v. Rhode Island*, a regulatory takings case.

DiMauro, Danielle. Case Note. "The Migratory Bird Rule and Constitutional Avoidance in *Solid Waste Agency*: The Court Ducks a Challenge to the Federal Commerce Power." 74 *University of Colorado Law Review* 795-836 (2003).

DiMauro examines an unique aspect of the Supreme Court's decision in *Solid Waste Agency of North Cook County v. U.S. Army Corps of Engineers*, the Supreme Court's avoidance of the commerce clause. After providing a brief summary of modern commerce clause jurisdiction, DiMauro discusses the commerce clause question avoided by the court and its possible motives for doing so.

Duke, Joshua M. "Managing Isolated Wetlands After Solid Waste and Tahoe: The Case of Delaware." 18 Journal of Land Use and Environmental Law 355-376 (2003).

Duke, using Delaware as an example, examines the future of isolated wetlands regulation in light of decisions of the U.S. Supreme Court in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers and Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency.

Edwards, Dustin J. "Wetland Mitigation Banking: Is the Current System Beyond Repair?" 16 Tulane Environmental Law Journal 445-469 (2003).

Edwards examines the issue of whether the current U.S. wetland trading system adequately mitigates wetland losses. Edwards discusses the origins of wetland mitigation, the trading market, and the current wetland valuation scheme in the New Orleans District. Edwards offers suggestions to resolve inadequacies in the trading market and examines legal avenues to compel the U.S. Army Corps of Engineers to improve valuation methods and monitoring of mitigation banks.

Gardner, Royal C. "Rehabilitating Nature: A Comparative Review of Legal Mechanisms That Encourage Wetland Restoration Efforts." 52 Catholic University Law Review 573-620 (2003).

Gardner examines the legal mechanisms around the globe to encourage wetland restoration activities. An overview of international law is followed by a survey of non-regulatory programs offering incentives. Gardner also explores domestic regulatory programs and non-cash incentives outside the traditional, permit-based regulatory programs. The survey reveals that the most successful programs contain the following elements: (1) an education component and public participation, (2) clearly state goals and objectives, and (3) monitoring and enforcement capabilities.

Kruchek, Beth L. Student Note. "Extending Wetlands Protection Under the Ramsar Treaty's Wise Use Obligation." 20 Arizona Journal of International and Comparative Law 409-442 (2003).

Under the Ramsar Convention, the United States has a duty to promote the protection of wetlands within its borders. U.S. compliance with the Convention is hindered, however, by the regulatory uncertainty surrounding the definition of "wetland." Kruchek examines the wetlands debate from the perspective of the U.S. participation in the Ramsar Convention.

Ostergren, John D. "SWANCC in Duck Country: Will Court-Ordered Devolution Fill the Prairie Potholes." 22 Stanford Environmental Law Journal 381-443 (2003).

Ostergren examines the impact of *SWANCC* on the Prairie Pothole Region (PPR), spanning western Minnesota and the Dakotas, where wetlands are small and isolated from navigable waters. Ostergren concludes that widespread wetlands losses will not occur in the PPR, as many of the wetland-damaging activities in the area were not clearly regulated before *SWANCC*.

XXXII. WHALING

Gillespie, Alexander. "The Search for a New Compliance Mechanism Within the International Whaling Commission." 34 Ocean Development and International Law 349-367 (2003).

The final area of work that needs to be completed by the International Whaling Commission (IWC) before the moratorium on commercial whaling may be lifted is the Revised Management Scheme (RMS). The key issue stalling conclusion of the RMS is the failure to agree on the details of a suitable inspection, observation, and compliance regime. Gillespie looks at the negotiations respecting the development of a suitable inspection, observation, and compliance regime. (Abstract courtesy of Ocean Development and International Law).

Harris, A.W. "Making the Case for Collective Rights: Indigenous Claims to Stocks of Marine Living Resources." 15 Georgetown International Environmental Law Review 379-428 (2003).

Harris argues that the efforts to maintain aboriginal subsistence quotas by states which are parties to the International Whaling Commission are consistent with international legal regimes for the protection of indigenous rights. Harris discusses the efforts of the Inupiat and the Makah to re-establish their right to a limited harvest of whales under an "aboriginal subsistence quota." Harris concludes with an examination of the requirements under U.S. law to consider the environmental impacts of whaling permits and the development of tribal whaling plans.

Springer, A.M., et. al. "Sequential Megafaunal Collapse in the North Pacific Ocean: An Ongoing Legacy of Industrial Whaling?" 100 *Proceedings of the National Academy of Sciences* 12223-12228 (2003).

Environmental change and competition with commercial fisheries may not have been solely responsible for the collapse of seals, sea lions, and sea otters populations in the North Pacific Ocean and Bering Sea. Springer and fellow authors argued that increased predation by killer whales following World War II may also have contributed to the crash. As industrial whaling decreased the traditional prey of the killer whales, they were forced to fish down the food chain for smaller marine mammals.