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- VERMONT LAW REVIEW
- WAKE FOREST LAW REVIEW
- WEST-NORTHWEST JOURNAL OF ENVIRONMENTAL LAW AND POLICY
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I. ALTERNATIVE ENERGY


Bandza discusses the upswing in the amount of wind power that was produced in the United States during 2006. Bandza compares and contrasts the histories of wind power and energy policy in Denmark, Germany, and the United States to show how future legislative decisions could further increase the production of wind energy. The author concludes that advance-production based payments in wind energy and renewable portfolio standards will help ward off the stagnation of the production of wind energy.


Bell explains that since wind energy sources are gaining momentum, it is only natural that controversy will surround the proliferation of wind energy. Bell examines whether the placement of a wind turbine would be allowed on top of a protected mountain ridge and concludes that the answer would lie in whether the turbine qualifies as a “tall building” under statutory law.


The growth of the wind energy industry has raised questions about how to design regulatory regimes to address the environmental concerns the industry generates. Eberhardt describes how states play an important role in the siting of offshore wind energy projects and provides a theoretical basis for dividing regulatory authority over the different environmental impacts potentially caused by such projects. The article analyzes some of the regulatory issues and provides policy recommendations to implement the divided regulatory authority between the state and federal governments.

II. AQUACULTURE


The article begins by examining the problem of salmon escaping from aquaculture facilities in North America. Barry and VanderZwaag look at the law and policy for preventing these types of escapes, focusing on global and regional agreements. The authors look at how the United States and Canada seek to prevent these escapes and suggest future courses of action.

In the interests of increasing fish production globally, alleviating global poverty, and fostering income generation, marine aquaculture has seen worldwide expansion over the past few decades. However, this expansion has been matched by growing concerns over its environmental impacts. The authors utilize comparative legal analysis to explore the legal systems of governance for the environmental performance of marine aquaculture in four case study countries. Two are members of the European Community (Scotland, as part of the United Kingdom, and Greece), one is a recent accession country (Slovenia), and the fourth is closely linked to the European Community albeit geographically and legally disparate (Israel). (Abstract courtesy of Ocean Development and International Law).


Aquaculture is utilized for many reasons: to stock public waters for sport and commercial fishing, to save an endangered species, or to harvest a crop. Lee and Connelly discuss the increase in demand of fish and shellfish in diets and the sustainability of seafood. They describe the Best Aquaculture Practices (BAP) program and how it will be expanded.


Sumaila and co-authors describe the potential economic contribution of sablefish farming in British Columbia (BC). The objective is to answer two important questions regarding how net benefits to BC from the sablefish sector would be affected in two scenarios: (1) if BC and the rest of the world engage in sablefish farming and (2) if BC bans sablefish farming and the rest of the world does not.

II. CLIMATE CHANGE


Worried about the persistent sea-level rise along California’s coastline over the past century, Moser and Tribbia look into the perceptions of local coastal managers in California on the subjects of the current inundation-related risks, the additional risks from climate change, and their vulnerability to the growing coastal problems. Through the use of surveys, the authors explain the challenges which coastal managers are currently experiencing, as well as the obstacles they must overcome. The paper draws the conclusion that California is inadequately preparing for the impacts from climate change.

Muir argues that climate change science must become pertinent to ocean scientists, and likewise, ocean science must become pertinent to climate change scientists. She discusses the outcomes of the Third Global Conference of Oceans, Coasts, and Islands and the effectiveness of the Arctic Climate Impact Assessment Scientific Report of 2004. Muir further provides an example of the climate change impact on the Canadian Beaufort Sea.


A method of reducing carbon dioxide emissions into the atmosphere is to capture and store the emissions in another domain – this is known as carbon capture and storage (CCS). Once the carbon dioxide is captured, it is transported and stored in either offshore or onshore sources. Purdy focuses on offshore storage, where carbon dioxide is piped into sub-seabed geological formations and stored for long periods of time. He discusses the legal questions regarding CCS, the driving factors behind CCS, the marine laws regarding CCS, and the London Convention and its 1996 Protocol.


Does the provision for forest sinks under the Kyoto Protocol pose a risk or an opportunity for biodiversity? Sagemuller examines whether the international climate change legal regime sufficiently protects or promotes biodiversity. Sagemuller argues that a more integrated approach to climate change mitigation could be beneficial for climate protection and biodiversity conservation.

**IV. COASTAL HAZARDS**


Adler discusses policy analysis that may be used by agencies and legislatures to mitigate the impacts of earthquakes, floods, hurricanes, and other natural hazards. He asks whether governmental bodies should adopt the types of policy-analytic and risk assessment techniques commonly used in the area of environmental hazards. Adler makes the case that some features of environmental policy analysis may be justifiable, but only if they sufficiently reduce decision costs or bureaucratic error or shirking. He specifies that these types of policy analysis should not, however, automatically be adopted by agencies and legislatures.


Since 1997, the National Tsunami Hazard Mitigation Program (NTHMP) has been used in the U.S. to reduce tsunami hazards. After the December 26, 2004 tsunami in
Sumatra, the devastating power of a tsunami has been thrust into the public awareness. The NTHMP has created a network of hazard assessment, warning guidance, and mitigation activities to help make coastal communities more resilient to the threat of tsunamis. Bernard and Titov focus on ways to produce accurate and reliable tsunami forecasts to further aid coastal communities.


The destruction of the communications infrastructure was a major obstacle to emergency response efforts after Hurricane Katrina came ashore. Clark explores the volunteer response efforts made by some of the U.S. communications technology industry. He details the technologies that were used and the part they played in restoring the communication lifelines during the recovery effort. Clark also provides recommendations that would ensure flexible solutions are in place for future disaster response operations to facilitate speedy re-establishment of the communications infrastructure. This paper is applicable to accidents and acts of terrorism as well as other natural disasters.


Assessing the role of the United States Army Corps of Engineers’ individual wetlands permitting process, Connolly suggests changes in the Corps’ practices and procedures because of its failure during and after Hurricane Katrina. She focuses on the public interest review, its history and parameters, and concludes with suggestions for improvement.


The Southeast Coastal Ocean Observing Regional Association (SECOORA) is quickly becoming an association capable of effectively overseeing the development of a comprehensive coastal ocean observing program for the Southeast U.S. Currently, strategies are being developed to productively integrate existing legacy assets with the wide spectrum of current and potential stakeholders. After the 2005 hurricane season, governmental ability to respond to such massive disasters has proven inadequate. SECOORA aids governmental units by providing a regional coordination and planning mechanism by which coastal inundation forecasting and mitigation efforts can be initiated and addressed.


Ebersole discusses the value of a community approach to determining coastal storm hazards through the use of field measurements, data analysis, and modeling. The authors discuss research data gathered by the Interagency Performance Evaluation Task
Force (IPET), regarding performance of the hurricane protection system in Southeast Louisiana in response to Hurricane Katrina. The paper presents the pros and cons of open-source, community-based software for coastal storm surge and wave predictions.


Kousky and coauthors discuss coercive takings in the face of natural disaster. The article examines how government use of private property shortly before and during natural disasters may help reduce losses. The authors propose a policy tool to realize the available net benefits of such takings: options contracts for contingent takings. The article explains how these options contracts would operate and outlines the benefits, such as improving disaster response by guaranteeing a flow of needed supplies or reducing potential damages by diverting floodwaters to low-value lands. The authors suggest that obstacles to forming the option contracts can be overcome.


Laska and Morrow discuss social science research on natural disasters. The article documents how the social processes and structures that place human populations at risk allow natural hazards like hurricanes to become disasters. Hurricane Katrina’s effects on New Orleans, as well as the city’s political and economic history are closely examined in the article. Laska and Morrow cite evidence of how social vulnerability influenced outcomes at various stages of the Katrina disaster. They conclude by discussing how the goal of creating disaster resilient communities is impossible without first addressing the basic issues of inequality and social injustice.


In 2000, the National Ocean Research Leadership Council established Ocean US with the goal of creating, implementing, and improving an integrated ocean observing system (IOOS). Among the highest priorities for the phased development of IOOS is improving capabilities to predict, manage, and mitigate effects of coastal inundation by oceanic natural disasters. The program looks at the needs of three groups of IOOS users: real-time responders, post event re-builders, and long-term planners. The program identifies priorities that will improve the accuracy and timeliness of forecast maps and periodically provide accurate, high resolution, timely assessments of susceptibility to coastal inundation.

Who should decide whether and how to mitigate the damages caused by natural disasters? Through case studies, Nolon explores how federal and state framework laws of response and recovery can work together.


As evidenced by the devastating social, economic, and environmental impacts of recent hurricanes, the United States’ vulnerability to severe coastal storms has increased alongside the concentration of people and infrastructure on the nation’s coastlines. Puszkin-Chevlin, writing for researchers outside the realm of urban and regional planning, describes the challenges faced when policy objectives and stakeholder interests collide with planners’ and public officials’ attempts to increase coastal resilience through land development-based approaches. The paper covers typical approaches to hazard mitigation and the main land-use tools used in managing coastal development.


Simon notes that in previous decades ideas of risk were shaped by the work accident as a model of modern risk. Simon argues that in the wake of Hurricane Katrina and other disasters, American personal and governmental attitudes toward risk have changed. He asserts that the false images and reports of crimes post-Katrina are contributing to the “risk imaginary,” causing weakened support for broad measures of social risk spreading and fueling privatization, isolation, and heavy reliance on police and prisons as tools of government.


Sugarman looks at the role of tort law and private insurance in providing compensation for victims of natural disasters. He provides brief discussions of disaster prevention and the types of problems that are caused by disasters, examining in depth five possible roles of governments in aiding with individual victim compensation. The article also touches on the type and level of victim compensation that governments might provide.


Sunstein explains the Catastrophic Harm Precautionary Principle. She describes three factors that make up the principle’s foundation: the failure to appreciate the expected value of truly catastrophic losses; a recognition that political actors may engage in unjustifiable delay when the costs of precautions would be incurred immediately and when the benefits would not be enjoyed until the distant future; and an understanding of the distinction between risk and uncertainty. The article illustrates the application
of the principle to several problems, including climate change, the avian flu, genetic modification of food, protection of endangered species, and terrorism.


Verchick discusses risk and distributional factors of both the Hurricane Katrina disaster and climate change. Although the issues have differences, Verchick notes that both present challenges for policy makers concerned with managing risk and protecting the most vulnerable members of society. The article argues that the solutions offered for New Orleans are the same solutions for the international community when confronting global warming.

V. COASTAL MANAGEMENT


Tourism and fisheries comprise the economic backbone of the Galapagos Islands, Ecuador, and the Archipelago of San Andres, Colombia. Baine and co-authors discuss the state of fishery resources, the environment, and their dependant industries alongside development and user conflicts, which are supported by recent technical studies. The authors explain how local participation is essential to progress in marine resource management and zoning initiatives within the islands and how local stakeholders have been planning to manage both islands’ resources to include Biosphere Reserve designation of the San Andres Archipelago and the development of a Special Law for Galapagos.


Berkes and co-authors use three examples of the role of indigenous people in the Canadian North to address integrated coastal management and the status of ocean ecosystems. The article examines local knowledge and community-based monitoring to achieve an understanding of environmental change.


Boonzaier and Glavovic explore South Africa’s efforts to utilize the Sustainable Livelihoods approach to foster more people-centered, pro-poor integrated coastal management. The authors argue that, in building sustainable coastal communities, there is a need to strengthen state involvement and robust institutions, put more focus on education, awareness, and training, and initiate more research on coastal poverty. This article is the second in a series of two articles about coastal management in South Africa.

Informed decision making in integrated coastal and ocean management requires current and comprehensive spatial information. Canessa and co-authors review Canada’s development of a marine spatial information infrastructure over the past thirty years. The authors also compile coastal atlases and review the development of geographic information systems and remote data acquisition instruments as well as Web mapping portals.


Carrasco discusses backbarrier systems, which are critical natural resources located behind coastal barriers, and the different non-compatible activities that they entail. These activities have economic and social benefits. The article details a coastal management plan to manage the conflicting interests that attempts to increase knowledge of the environmental aspects of the systems and promote debate that could result in the establishment of local agreements in the broad activities in the backbarrier systems.


Frachisse and co-authors discuss the conflicting interests in the management of the coastline around Sabah. The public demands socio-economic growth and preservation while private and industry forces demand local protection, which can lead to reckless development. In an effort to resolve these conflicts, the article centers on the initiation of a management plan for the Sabah coastal region.


Guénette and Alder review seven Marine Protected Areas (MPAs) and two Integrated Management (IM) initiatives in Canada to illustrate that engaging stakeholders can have great benefits, such as building a consensus, creating momentum, and utilizing collective knowledge. There are drawbacks, however, especially for fisheries management. The authors acknowledge that time and resources are strained and gaining support and participation is often challenging.


Together with the federal oceans policy of Canada, the Oceans Act provides a strong basis for participatory governance and community-based management of ocean and coastal resources. Kearney and co-authors argue, however, that it fails to provide mechanisms for a strong role for communities in integrated coastal and ocean management. The authors present nine initiatives that could strengthen and develop community participation in integrated coastal and ocean management.

Ricketts and Harrison present an overview of the development of Integrated Coastal and Ocean Management in Canada and discuss Canada’s opportunity to become a global leader in the implementation of a multi-stakeholder management strategy for large ocean management areas. This article also serves as an introduction for a special issue of the *Coastal Management Journal*.


Thatje and co-authors examine international projects addressing Coastal Ecosystem Research and Management in the Southern Oscillation (ENSO) context and conclude that “Grey Literature” is one of the most important sources of natural science research and natural resource management in Latin America. Archiving both new and old original data and providing the public with easy access leads to a greater appreciation for man-made global environmental challenges.


Walmsley and co-authors discuss the Eastern Scotian Shelf Integrated Management Initiative (ESSIM) developed under the auspices of the Canada Oceans Act. The authors review objectives-based management and human use objectives internationally, including the social, economic, and institutional components of ocean management. Walmsley and co-authors also highlight challenges, objectives, and lessons learned in developing the Human Use Objectives Framework.


Wilburn and co-authors delve into applying the U.S. Sea Grant model of applied research, extension, and education to Latin American countries. Using Coastal Ecuador and the Gulf of Fonseca as case studies, the authors determine that the Sea Grant model provides a needed institutional structure that is currently lacking in Latin America. They also ascertain the model’s features would improve governance of marine and coastal resources.

### VI. COASTAL TECHNOLOGY


Gill and Aikman specifically focus on ways of improving models through data integration in the larger context of how models are applied and how they interplay with observations. The authors’ information comes from data in the U.S. Commission on Ocean Policy’s report, conceptual planning documents for various subsystems of the Ocean
US’s Integrated Ocean Observing System (IOOS) project, and various program planning documents from NOAA. Their focus is on current coastal modeling and data integration activities to link existing work to the IOOS construct and goals, its limitations, and areas that need improvement.


The Gulf of Mexico Coastal Ocean Observing System (GCOOS) is being developed as one of the regional coastal ocean observing systems under the U.S. Integrated Ocean Observing System (IOOS), which is a part of the Global Ocean Observing System (GOOS). Jochens and Worth give a detailed breakdown of the steps taken so far to get the GCOOS started. The paper concludes that new federal resources targeted to regional coastal ocean observing systems must be committed in order for GCOOS to evolve to its true potential.


In response to the inefficiency of older coastal inundation and flood models which looked at the marine atmosphere, coastal, ocean, estuary, harbor, and river water systems separately, Pietrafesa and co-authors propose a model system that incorporates all of these aspects into one model. If this system can be created it will advance the modernization of hydrologic services provided by NOAA and provide for more accurate and timely forecasts and climatology of coastal and estuary flooding. The goal of this proposal is to aid planners, emergency services, and communities in mitigating the impacts of coastal flooding.


Coastal regions of the United States are constantly changing in response to both natural processes and human activities. Stockdon and co-authors promote a sustained program of mapping coastal areas in order to establish baseline conditions, document change, and, in conjunction with models of physical processes, predict future behavior. Using new technology, rich data sets, which are critical to evaluating risk associated with coastal hazards, can be created. A mapping plan, like the one suggested above, will provide a wealth of information for studying the processes of physical change, for determining areas vulnerable to coastal hazards, and for protecting and managing our coastal communities and resources.

**VII. CORAL REEFS**

Ahmed and co-authors discuss the willingness to pay (WTP) values of the conservation of coral reefs in Bolinao, Philippines. The article discusses the implication of the low priority of the preservation of natural resources and the environment. The roles of advocacy, education, and awareness campaigns are discussed in efforts to create a higher WTP.


Rouphael and Hanafay examine how an alternative management framework in Marine Protected Areas could help limit the impact of scuba divers on coral assemblages. The article also looks at the current management frameworks and points out their weaknesses. It shows that the new approach is simpler and will result in earlier warnings of the deterioration of coral assemblages. As an added benefit, the new framework does not require that an absolute quantity of the coral assemblages be labeled as ecologically important. Finally, the “trigger criterion” would be updated to reflect events such as storms.


Sylvan notes that although coral reefs occupy less than one percent of the ocean floor, they contain 25 percent of all marine species. He argues that an international legal regime must be adapted to ensure their sustainable use. He puts forth the public trust doctrine, as well as other legal regimes, that may be successful in protecting the valuable reefs.

VIII. ECOSYSTEM MANAGEMENT


Colburn explains that although private property entrepreneurialism usually results in resistance to many state and federal environmental initiatives, it could actually help with habitat restoration. The article also considers the prospects for suburban local governance to become a driving force of ecosystemic habitat protection and restoration.


Delfino explains that as wetlands in California, Mexico, and other parts of the West have disappeared, the Salton Sea ecosystem has become an important habitat for hundreds of bird species and a critical part of the Pacific Flyway. She discusses the past and present condition of the sea, noting that measures have been made toward the restoration planning process to determine a preferred alternative for the restoration of the Salton Sea ecosystem and the protection of wildlife dependent on that ecosystem.

Fischman explains how three new final policies set forth by the U.S. Fish and Wildlife Service direct the conservation of the National Wildlife Refuge System. The article evaluates the legal status of the policies and concludes with suggestions for the next round of policymaking for the refuge system.


The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), which was negotiated by the Consultative Parties of the Antarctic Treaty 25 years ago, implements laws based on conservation principles. Gascón and Werner describe the importance of Antarctic krill and the structure of the ecosystem approach as formulated by CCAMLR. They further address the reasons behind the need of this management system, which include krill’s potential for becoming one of the world’s largest fisheries.


The United States is required by the 1944 Treaty to deliver water to Mexico. In accordance with the Treaty, the U.S. bypassed the saltiest waters to a mudflat. This mudflat eventually became a desert oasis, named the Cienega, and home to different varieties of vegetation and wildlife. The operation of the Yuma Desalting Plant would deprive Cienega of water and destroy the wetland ecosystem there. Gillon describes the development, concerns, and implications of Cienega and explores other avenues to satisfy the U.S.-Mexican agreement.


Ecosystem-based management (EBM) looks at the relationship among living and non-living resources, rather than individual issues. Hemphrill and Shillinger contend that there must be a move towards an EBM approach to oceans and fisheries management. They discuss the different approaches to ocean management, advance the EBM approach, and explain five steps to achieve an EBM approach.


There has been a shift in approaches to environmental policy and natural resources management: from a rule-based approach to a governance approach. Karkkainen argues
that parts of the governance approach are working and parts are not. To assist in the areas where the governance approach is not effective, he argues that there should be an integration of the rules and governance approach. Karkkainen uses the Great Lakes as an example of successful cooperative management.


Kwasniak presents a Canadian perspective on the freshwater ecosystem restoration taking place in the Columbia River Basin. She explains that, although the U.S. and Canada share the Columbia River Basin, they do not share the same position regarding the legal aspects of freshwater ecosystem restoration. To show the differences, she explores each country’s constitution and judicial interpretation of constitutional authority.


There are various external threats to the Glacier National Park. Sax and Keiter focus on whether ecologically rational management has been utilized to help this region. They develop three case studies to present the challenges and opportunities involved in promoting a more ecological approach to natural resource management.


Natural values include the Earth’s entire ecological community. Sienkiewicz argues that acts, mainly human economic acts, destroying natural values are an ethical problem and comprise public policy considerations and that punitive damages should be employed to protect natural values.


The Danube Delta in Romania and Ukraine and the Colorado River Delta in Mexico are strained aquatic ecosystems which face common problems. Tarlock compares and contrasts the ecological problems of the two deltas to determine whether the comparative study of river basin and management restoration is beneficial.

**IX. ENDANGERED SPECIES**

Which federal administrative agencies are subject to the requirements of section 7(a)(2) of the Endangered Species Act? Davison explains the section’s substantive and procedural requirements, analyzes judicial interpretation, and concludes that the *Defenders of Wildlife v. U.S. Environmental Protection Agency* (*Defenders of Wildlife II*) decision by the Ninth Circuit Court of Appeals should be overruled.


Grant and Kochan point out that there has been a minimal amount of research on geothermal resource utilization and depletion impacts on thermophile biodiversity. Thermophile species face a higher risk for possible extinction from geothermal resource utilization due to the fact that they may exist in only one location.


May and Porier state that, thanks to the Department of Defense (DOD), military installations may replace critical habitats of endangered and/or threatened species through the use of Integrated Natural Resource Managements Plans (INRMPS). The DOD believes that the plans provide “special management considerations or protection” needed to aid in the recovery or survival of listed species.


Miller and Payne, researchers with the U.S. Army Corps of Engineer Research and Development Center, examine the *Amblema neislerii*, an endangered mussel found in the Apalachicola River in Florida. Although the mussel is restricted to the Apalachicola River, the authors found that in certain areas near the shore the mussel is common-to-abundant and exhibits good evidence of recent recruitment. The authors support their conclusions with a literature review and recent surveys.


Moore hypothesizes that an increased level of cooperation among agencies such as the Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) could
produce heightened species and habitat conservation. He suggests that the Services’ formal consultation process leads to greater neglect of endangered or threatened species than would take place with informal consultations.

X. ENVIRONMENTAL LAW


Bluemel notes that while indigenous groups do participate in international governance, the justification for this participation is based on the benefits that the governance system receives, instead of the considerations that should be given to the impacts felt by these groups. He argues that no intrinsic participatory right should be granted on an inappropriate basis.


Boudreaux discusses the importance of revising and clarifying the statutory language in the Clean Water Act. This proposal is directly related to the Supreme Court decision in Rapanos v. United States, which struck down portion of the Act that protected wetlands and other waterways in the country.


The overlap of land use and environmental law is well established, but the interaction between the two is not. Callies demonstrates this by focusing on the interplay between the Endangered Species Act (ESA) and Hawaii’s Land Use Law.


Centner states that through the use of an anti-nuisance paradigm incorporating elements of the economy of nature, undeveloped land resources might be offered greater protection against market forces that fail to incorporate long-term economic and societal benefits offered by farmland, forests, and natural areas. He recognizes that the overriding purpose of the Undeveloped Lands Protection Act (ULPA) is to limit the circumstances under which farmlands, forests, and natural areas may be deemed a nuisance.

In the 1970s, Congress began to implement a cooperative framework of environmental law. Though it was mainly a federal initiative, the states had considerable leeway in their decisions. Glicksman discusses how environmental law has been transformed from a cooperative state and federal effort of environmental protection to one that restricts both governments from achieving that goal.


Grijalva explains that Indian tribes are governmental entities and therefore have a claim to natural resources, as well as public trust responsibilities to their citizens. He notes that the Supreme Court has held that tribes retain inherent sovereignty over non-tribal members’ activities that may have a detrimental impact on the tribe. Grijalva argues that through private citizen suits, tribes can serve both of those purposes.


Hopkins explores the Central America Free Trade Agreement’s (CAFTA) citizen submission process, noting that it requires consideration on the part of the Secretariat for submissions from “any non-governmental organization or person asserting that a Party is failing to effectively enforce its environmental law.” She explains that CAFTA’s citizen submission process is triggered when a submission alleges that a party has failed to effectively enforce its environmental laws.


Jacobsen discusses the ways that governments can handle emissions by increasing the use of zero-emissions energy sources or renewable energy sources. The article also discusses the ways in which the Clean Air Act can diminish the market value of the alternative energy sources. The author offers a solution based upon the use of emission trading programs.


Kristl explains that doing away with the requirement of a nexus and raising the mitigation percentage to 100 percent will unshackle Supplemental Environmental Projects (SEPs) and possibly yield the most environmental benefits. He also discusses the effects that occurred after the SEP policy was changed in 1995.


McDougall looks to Jamaica in order to examine the environmental protection problems that exist in developing nations. While environmental protection policies do exist in Jamaica, there is difficulty in enforcing these policies due to the nation’s limited financial budget and limited resources.

McKinney and Van De Wetering point out that courts encourage and sometimes require litigants to participate in alternative dispute resolution. They explain that by requiring some form of alternative dispute resolution in federal environmental law, states and native tribes would be able to achieve a more proficient resolution process.


Nolon asks whether we can reform land law to respond effectively to storm surges, raging fires, cascading slopes, and the other crises of our time. He recommends that each state should create an agency for land use planning and for preparing state and regional land use plans. He suggests that county planning agencies are capable of assisting and preparing such a comprehensive plan, assisting in the preparation of land use regulations, and participating in the formation of individual or joint administrative bodies.


Municipal governments are responsible for the most environmental damage today, which is caused by “nonpoint source” pollution. While federal attempts to regulate this pollution have hardly been effective, local governments have incorporated a valuable grassroots level of environmental policy. Nolon explains this method and argues for a change in state and federal policy to integrate local government efforts.


Nolon explains and evaluates the different components of the American legal system charged with the regulation of privately-owned land use in an effort to initiate a comparison of this system with international systems. Nolon contends that the challenge is to integrate the various governmental influences on private land use while preserving flexibility to address their interests.


Onzivu discusses the link between human health and environmental protection, especially in view of increasing public health threats and the current use of environmental
law. He argues that a critical examination of national health trends is required for international environmental law to protect health. He suggests a particularly close examination of domestic, legal, and institutional governance mechanisms for the environment and the protection of human health.

XI. FISHERIES MANAGEMENT


International fish farmers have begun to move their activities from land and coastal waters to the open oceans. An ocean fish ranching industry could be very beneficial to the United States, but the United States lacks a regulatory program. Babcock argues that the public trust doctrine should be utilized until the government develops a more suitable regulatory framework; however, this doctrine would have to be expanded before use. Babcock proposes two theories to advance this expansion.


In an effort to address concerns regarding regulation of international fisheries, the United Nations adopted the UN Fish Stocks Agreement (UNFSA). Together with similar agreements, the UNFSA has established international principles and standards for the regulation of ocean fisheries. Balton summarizes the outcome of the UNFSA Review Conference, in which State Parties to the UNFSA met to discuss its effectiveness, and considers the UNFSA’s prospects.


Barclay and Cartwright discuss the Western and Central Pacific Ocean (WCPO) tuna fishery as an important global food resource as well as an indispensable economic resource to many Pacific Island Countries (PICs). They suggest that the key to improving the fishery is allowing for its governance by PICs. The authors support their argument with knowledge gained from an interview study with stakeholders, as well as a survey of reports.


Some marine habitats are being destroyed by trawling. Bilsky examines the statutory mandate directing regional fishery management councils to protect essential fish habitat (EFH). He notes that with the help of conservation groups, efforts to combat trawling continue.

Blake, Andon, and Gary A. Cambell. “Conflict over Flying Fish: The Dispute between Trinidad & Tobago and Barbados.” 31 Marine Policy 327 – 335 (2007).

Blake and Cambell explain the ongoing conflict between Trinidad and Tobago and Barbados over the right to catch flying fish off the coast of Tobago and to determine
the best way of resolving the situation. The authors present the history of the conflict, as well as the current situation and possible outcomes. They conclude that a negotiated agreement between the two countries focusing on developing a limited access program, similar to Individual Transferable Quotas, would have the best result.

Brown and Farmer explore the new environmental management requirements under the Common Fisheries Policy in the European Union. These can be used in fleet management, as well as an environmental management instrument. The authors argue that licensing is a good tool that can be used for many different things, but it is not the solution to all environmental management challenges.

Christie and co-authors explore the reasons for the growing interest in ecosystem-based fisheries management (EBFM) and compare it with other similar management models. The authors concentrate on the challenges of the EBFM project in the tropical context by examining the Fisheries Improved for Sustainable Harvest (FISH), a tropical EBFM project in the Philippines. Their observation of the FISH project shows how legal and institutional conflicts occur between the projects and local governments. The article resolves that these problems will require increased monitoring, evaluation, and adaptation.

In this article, Douvere and co-authors examine the Belgian experience in implementing marine spatial planning (MSP). They conclude that a spatial approach to sea-use management is possible despite obstacles presented by the lack of a legal zoning framework. It is argued that a legal basis for MSP would provide a more strategic and integrated framework of ecosystem-based, sea-use management.

Gardner and co-authors examine the supply and demand of land-based jobs for people with seafaring experience and skills in the United Kingdom maritime economy. The paper also examines the effects and policy implications of a shortfall in the supply of British ships’ officers on the economy’s maritime skills base.

Gibbs critiques the use of individual transfer quotas (ITQs) as an output control to manage marine fisheries. He discusses the consequences of ITQ-managed fisheries and the obstacles created in allocating water-space for alternative uses.

Griggs and Lugten discuss the problem of illegal fishing. The authors develop a response to corporate structures hiding behind the veil in order to benefit from illegal behavior without responsibility.


Heazle and Butcher discuss how fish populations in Indonesian waters have been severely depleted over the past 40 years. The authors argue that the fragmented condition of the Indonesian state is a major component in this problem. Due to fragmentation, many of the different components of the government must raise their own revenues to operate. This has led to lax enforcement of fishery regulations by the Indonesian Navy and allowed Thai trawlers to illegally enter Indonesian waters and greatly contribute to the fisheries’ depletion. The authors further suggest that the Southeast Asia Fisheries Development Center advisory board could take over regulation of the fisheries and enforcement of the regulations. The authors conclude by exploring the obstacles facing a power shift.


Hilborn takes a different approach to defining objectives and success in fisheries. He examines the current trends of accepting objectives that value less disturbed ecosystems and accepting the allocation of fisheries through dedicated access to improve economic efficiency. In this paper, Hilborn also suggests that to achieve more congruent objectives with less conflict there should be increased use of dedicated access.


In recent years, the worldwide demand for seafood has increased substantially and brought substantial damage to marine ecosystems. In an effort to curb the depletion of the world’s fisheries, campaigns have been started to raise the awareness of consumers in North America and Europe. Jacquet and Pauly look at the successes and failures of the programs in affecting the seafood demand and developing a sustainable seafood supply. Though there are signs of success in some regions, the lack of support from the Asian market and the increase in the number of uncaring seafood companies are two of many problems the campaigns are facing. The authors also advocate for the need for indicators of campaign effectiveness.


Kitts and co-authors explore how social networks have assisted the Montauk Tilefish Association members in creating a management process to reduce the race to fish, improve safety at sea, and provide a more stable and fresh supply of fish to the market.
Loucks looks at why non-market institutions succeeded in preventing over-fishing in the Southern Gulf snow crab fishery, while market and government institutions failed. A general presumption of why this occurred is because the institutional environment in which economic behavior must be conducted for successful management of fisheries is highly complex. Loucks further states that the key for institutions to successfully resolve these dilemmas is to achieve credible commitment. She also discusses the many possible mechanisms that may be used.

Mikalsen and co-authors use the Norwegian system of fisheries management to explore the policy issues of involving civil society in governing fisheries. The article addresses the importance of utilizing the civil society, interactive governance, and the lessons that can be taken from the Norwegian experience.

Ovetz examines the impact of longline fishing on local food security, employment, cultural belief systems and traditions, revenue generation from marine tourism, and climate change. Ovetz maintains that when the effect of longline fishing on coastal fishing communities is combined with the impact of overfishing, policies must be expanded to promote sustainable fisheries and take into consideration issues of biodiversity.

The world’s continental shelves are being over-utilized, thereby seriously decreasing fisheries. Pauly discusses the history of fishing in the oceans, the effects on marine species diversity, how aquaculture is not an alternative to managing fisheries, and mitigation and restoration of fisheries. Pauly concludes that states must withdraw from part of the ocean in order to enable fisheries to rebuild and that extraction of marine resources must co-exist with restoration ecology in order for this to happen.

Perry and Sumaila examine the ways in which artisanal fishers and fishing communities in Ghana have developed strategies for managing the variability of sea surface temperature and pelagic fish landings on seasonal and inter-annual scales. The article also examines the strategies and their weaknesses and addresses the national government’s response to such shortages.

Pudden and VanderZwaag discuss the cooperative initiatives between Canada and the United States that address transboundary fisheries and coordinate management measures. The article explains how the bilateral Fisheries Enforcement Agreement helps battle illegal fishing. The authors note, however, that certain informal agreements do not fully live up to a sustainable development policy.


Raakjaer and co-authors describe the development of indicator-based frameworks for fisheries management that is being used in Vietnam. Vietnam is supporting its adaptive management plan with an institutional structure consisting of a multi-disciplinary advisory system. The article also identifies weaknesses in the system and recommends ways in which it can be improved.


Sanchirico and Wilen look at the economic aspects of the world’s fisheries, specifically examining their evolution in light of the jurisdiction extension codified by the Law of the Sea Convention in 1982. The article looks at the rights-based systems and the manner in which behavioral incentives are framed by governance institutions, comparing systems with aspects of open access incentives.


Schrank discusses how ineffective attempts at fine-tuning fisheries can be caused by scientific uncertainties and the omission of critical elements. The goal of fisheries management is to catch the maximum number of fish without endangering the future health of the fish stock. It has been documented that the science behind setting quotas on the number of fish allowed to be caught is so uncertain that the fine-tuning attempts have led to numerous crisis in fisheries. One solution discussed is to abandon these fine-tuning attempts and move to a serious reduction in the current numbers of fish allowed to be caught.


A new program in Chile delegates management responsibility to organizations of shellfishermen provided they team with professionally trained marine biologists. This Management Area system in Chile has four social benefits, the greatest being the new sense of awareness in fishermen as to the value of management of territorial use rights.

Standal addresses the international problem of overcapacity in the trawler fleet. The article reviews traditional methods of control such as quotas and licensing and discusses the content of the unit quota system, explaining how the results are dramatically different from the public goals of the system.


Subade examines the value of coral reefs by observing the Tubbataha Reefs UNESCO World Heritage Site. He concludes that the economic benefit and value of conserving the reefs greatly outweighs the conservation costs.


The international community has recognized the value of port State measures in combating illegal, unreported, and unregulated (IUU) fishing. Swan explains that the key role of the port State is realized in relation to relevant regional activity, information systems, and connections with other International Plan of Action (IPOA)-IUU tools. Swan also describes responses and suggests future steps for the FAO model scheme, which allowed for an international consensus on whether a binding instrument on port States should be developed.


Wagenaar and D’Haese discuss ways in which Yemen, one of the poorest countries in the world, could create jobs by developing its fisheries. The authors provide an overview of the institutional environment in which small-scale fishermen in Yemen operate, investigate the constraints these fishermen face, and discuss how co-operatives could aid in the fisheries’ development. Though they are of extreme importance, the fisheries still struggle with access to infrastructure, markets, and credit. Also, the two main regions of fisheries development, the Gulf of Aden and the Red Sea, are compared and the significant differences are identified.

XII. INTERNATIONAL TRADE


Green and Epps discuss how governments around the world use taxes to address environmental concerns. The article recognizes the World Trade Organization’s (WTO) rules have different evidentiary requirements in different situations. This may result in anomalies in how rules are applied. The authors argue that consistency is crucial in the applications of these rules in instruments and risk-related policy areas.

Wright and Muzzattie examine the case of an Australian ship on which almost 60,000 sheep were stranded at sea for three months in violation of the Western Australia Animal Welfare Act of 2002. The authors use the case to look at crimes that occur as a result of the global restructuring of agriculture and food systems. The authors argue that the “Ship of Death” case illustrates that the advance of transnational trade networks for agri-food globalization victimizes animals and constitutes a crime.

XIII. INVASIVE SPECIES

Ballasting is an action whereby ships can keep water in onboard tanks to assist in their voyages. This is a problem because ships take the water from one place and dump the water somewhere else, releasing exotic organisms and pathogens into the ocean. In response, there have been many efforts to control species introductions from ships’ ballast. Firestone and Corbett discuss one such effort—the International Convention for the Control and Management of Ships’ Ballast Water and Sediments 2004 (Ballast Water Convention or BWC).

XIV. LAW OF THE SEA

Salpin and Germani discuss the current set of laws governing research activities on biological resources outside of national jurisdiction. The article examines how the United Nations Convention on the Law of the Sea affects the patent process for such research results. The authors conclude that the guidelines on this research should be clarified to encourage researchers to continue to make beneficial discoveries and to ensure a fair sharing of the benefits of research results.


This article examines the relationship between the U.S.-led Proliferation Security Initiative (PSI) and the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Songs attempts to answer the questions of whether the PSI is legal or illegal under UNCLOS and whether U.S. accession to UNCLOS would enhance or create difficulties for the implementation of the PSI. Song concludes that U.S. accession to the
Convention would not affect adversely the implementation and effectiveness of the PSI. On the contrary, accession to UNCLOS could help increase U.S. credibility and leadership in dealing with the threat to international peace and security posed by weapons of mass destruction proliferation. Song also suggests that all the relevant information needs to be gathered and examined carefully in order to answer the question of whether a PSI interdiction action is legal under UNCLOS or not. (Abstract courtesy of Ocean Development and International Law).


Verlaan examines the relationship between marine scientific research (MSR) and the marine environment provisions (MEP) specified in the 1982 United Nations Convention on the Law of the Sea (UNCLOS). In order to reach a balance between the two provisions, Verlaan proposes international, science-driven guidelines.

XV. LIQUEFIED NATURAL GAS


Brooks highlights two areas in LNG terminal siting in which litigation is likely to occur and examines the impact of the Environmental Protection Agency on LNG-related litigation. He also discusses several methods of LNG terminal siting, along with the applicable statutes.


How should a decisionmaking process consider and balance local and regional interests when deciding where to locate a liquefied natural gas (LNG) terminal? Lebeck answers this question by examining the Federal Energy Regulatory Commission’s (FERC) public participation opportunities.


The Energy Policy Act of 2005 (EPAct) gave the federal government exclusive jurisdiction over the siting, construction, and operation of liquefied natural gas (LNG) terminals, but allowed the states to retain a limited role. Zimmerman argues that states should be given a central and more meaningful role in LNG development. To further his contention, Zimmerman analyzes California’s recent experiences in this process.
XVI. MARINE PROTECTED AREAS


Burgess and co-authors discuss the efforts of the countries in Eastern Africa to protect at least 10 percent of its marine protected areas by the year 2012. The authors argue that progress is being made, but they also see the need for more investment to be made in this area for goals to be fully realized.


The United States has pursued a policy of sustainable management of fisheries, but American fisheries are still being overexploited. More than likely the United States will respond by increasing the use of marine protected areas (MPAs) and marine reserves. President Bush, by way of the Antiquities Act, created the largest MPA in the world: the Hawaiian Islands Marine National Monument, which is a remote coral reef ecosystem. Craig discusses the variety of other legal ways that could have been utilized to protect the Northwestern Hawaiian Islands.


Davos reports results of an analysis of the conflicts that the zoning of marine protected areas might generate in the Galapagos and San Andres archipelagos due to stakeholders’ competing interests. The results will assist stakeholders in their efforts to develop cooperation strategies for managing conflicts. Davos suggests using similar priorities and solidarity of cohort groups as bargaining chips.


De Santo and Jones discuss the tensions within the European Union between the legal approaches to Member State controlled nature conservation and European Community controlled fisheries management. The authors focus on developments in offshore marine conservation in the North-East Atlantic, in light of the current legislative and political developments. By analyzing two major policies, the emergency closure of the Darwin Mounds area of cold-water corals and the UK pair-trawl ban, the authors show that the precautionary principle is a key factor in the tensions and is often overlooked.


The innovative Galapagos Marine Reserve co-management regime has been operating since 1999. A new methodology developed to evaluate the governance process and its
impact is applied to quantitative and qualitative data and further describes the analysis and derivative understanding. The results of this analysis help explain why the co-management regime performs strongly in some areas, yet not as well in others.


The Archipelago of San Andres, Old Providence, and Santa Catalina, Colombia, relies heavily on its coastal and marine resources. However, conflicts over resource use and threats to ecosystem health have developed. One of the main conflicts involves the native islanders’ traditional resource use alongside modern uses. This conflict is worsened by the marine management’s exclusion of native islanders from planning, by their failure to recognize their fishing rights and by their lack of respect. Acknowledging this problem, CORALINA, the local representative of Colombia’s National Environment System (SINA), has embraced an alternative approach. Mow highlights this approach through the planning process for the archipelago’s Seaflower Marine Protected Area (MPA).


Viteri and Chávez analyze the compliance behavior of artisanal fishermen in the Galápagos Marine Reserve. Their analysis explores the role of the reserve’s participatory management system as a crucial factor in decisions to violate regulations. The results also indicate that there are other factors to consider along with traditional enforcement tools in analyzing this behavior. Policy implications to improve compliance with fisheries regulations in the reserve are discussed.

**XVII. MARINE SECURITY**


Bahar, a Lieutenant in the U.S. Navy, uses his first-hand experience of capturing suspected pirates to construct a comprehensive legal and strategic theory for piracy. He outlines the legal status of pirates and their due process rights. The article also concludes that adequate international law exists to respond to the recurrence of piracy. Bahar also offers seven domestic reforms and two regional reforms that the United States could implement to achieve optimal deterrence.


Daniels notes that although the Coast Guard and Navy both share the responsibility of defending America from attack, it is imperative to apportion responsibilities to ensure
proper security and avoid the duplication of efforts. He addresses the legal and policy concerns behind allocating interdiction responsibilities between the Departments of Defense and Homeland Security with respect to maritime counterterrorism operations. The article also stresses the importance of interagency cooperation and suggests that the Coast Guard is the agency best equipped to handle incidents of maritime terrorism.


Florestal examines the Container Security Initiative (CSI) that was developed after September 11th to address security concerns in the maritime trade infrastructure. In the article, she analyzes CSI, arguing that the program may be detrimental to developing countries, U.S. security interests, and the multilateral trading systems. She also explores how the CSI fits into GATT and suggests more development friendly measures that will help with domestic security while protecting vulnerable members of the trade system.


Harrington discusses the threat of maritime terrorism on the Pacific Ocean. She suggests that the current application of the legal framework regarding the non-flag-state right of visit only proliferates existing weaknesses. She suggests that the ship-boarding procedures within the 2005 Draft Protocol to the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime navigation will help with maritime security. However, she argues that the international community should amend the United Nations Convention on the Law of the Sea, incorporating Article 3bis(1)(a) and Article 8bis(5)(e) of the 2005 Draft Protocol into Part VII of the Convention, which would create an exemption to restricted flag-state jurisdiction and control on the high seas.

XVIII. MARITIME BOUNDARIES


Boyes and co-authors give an example of a multiple-use zoning scheme approach to managing marine activities at a regional sea scale. The authors devised the zoning scheme by using existing legally permitted and permissible mechanisms within the Irish Sea. The article explores the weaknesses and strengths of the already existing planning and governance framework. In order to prove the superiority and flexibility of the new zoning scheme, the authors assessed the new scheme against the existing zoning methodology in several scenarios. Additionally, the authors provide a case study using the Irish Sea Pilot’s collated data on the presence of marine landscapes.

Diaz and her coauthors explore the classification of two “rocks” in the Western Pacific Ocean. The Japanese government contends that the two rocks are islands and are therefore entitled to their own exclusive economic zones, a prospect that would give Japan a vast area of exclusive economic control. The article explores the implications of Japan’s claims, while explaining how the United Nations Convention on the Law of the Sea affects these types of claims. The authors also review other scholarly work on the issue and offer solutions.


Morgera looks at marine protected areas located outside of national jurisdiction and the role of international organizations and processes in preserving marine biodiversity and fisheries. The article asks, in light of negotiations in the United Nations Convention on Biological Diversity (CDB) and the United Nations General Assembly, whether the role of the General Assembly was based on political grounds or the competence of the CDB in relation to the high seas.

XIX. OCEAN GOVERANCE


If the sovereignty issue can be shelved, solved, or resolved, the six claimant states of the South China Sea will have to establish a series of international regimes. This article lays out the following questions that need to be answered: Do all the claimants understand the concept of international regimes? Would the regimes be imposed? Would there be hegemon(s) in the South China Sea? If so, which country or multiple entities will be involved? What would be the outcome of having international regimes in the South China Sea? Can the experience elsewhere be applied to the South China Sea? (Abstract courtesy of Ocean Development and International Law).


Molenaar examines the scope and extent of port state jurisdiction in regard to marine pollution and marine capture fisheries and looks at such issues as access to port, conditions for entry into port, extraterritorial prescription, and in-port enforcement. One of the arguments put forward is that the justifiability of extraterritorial port state jurisdiction depends not only on an adequate jurisdictional basis, but also on the type of enforcement action taken. Port state jurisdiction is gradually moving from a voluntary basis regarding limited subject areas toward being comprehensive and mandatory through regional and global arrangements. The notion of a “responsible port state,” a
state committed to making the fullest possible use of its jurisdiction under international law in furtherance of not just its own rights and interests, but also those of the international community, could play a key role in optimizing the use of port state jurisdiction (balanced by appropriate safeguards) and achieving mandatory coverage through regional and global arrangements. (Abstract courtesy of Ocean Development and International Law).

Uggla, Ylva. “Environmental Protection and the Freedom of the High Seas: The Baltic Sea as a PSSA from a Swedish Perspective.” 31 Marine Policy 251 – 257 (2007). Uggla reviews the 2005 designation of the Baltic Sea, minus its Russian waters, as a particularly sensitive sea area (PSSA) by the International Maritime Organization (IMO). The IMO’s decision to designate Western European waters as a PSSA is a cause of intense debate within the organization and has caused repercussions for the process. Uggla, in studying this case, brings to light the conflicts between two fundamental principles, territorial sovereignty and freedom of the high seas—major conflicts which international law strives to balance. The review shows that the PSSA concept is constantly being changed as it is used in the real world.

Van Dyke, Jon M. “Legal Issues Related to Sovereignty over Dokdo and Its Maritime Boundary.” 38 Ocean Development and International Law 157 – 224 (2007). Van Dyke examines the historical events relevant to the claims of sovereignty by Japan and Korea over Dokdo, the legal doctrines that have been applied by international tribunals to other disputes over remote and uninhabited territories, and the principles governing maritime boundary delimitation that are relevant to the ocean space around Dokdo. The applicable decisions of the International Court of Justice and other tribunals are examined in detail. Among the topics addressed are the methods of acquiring sovereignty over territory, the relevance of contiguity to such claims, the requirements of effective protests, and the activities and omissions that constitute acquiescence. Attention is also given to the status of this matter as a “dispute” and how closure might be brought to it. (Abstract courtesy of Ocean Development and International Law).

XX. POLLUTION


Adler and Inbar discuss the environmental sensitivity of the Mediterranean coastline of Israel to marine oil spills. The study discusses the main sources of risk for maritime accidents. It also explores different ways that oil spills may affect the resources and ecosystems along Israel’s coastline. The authors conclude that the sensitivity of the Israeli coastline to oil spills could be considered moderate compared to other ecosystems.

Brusendorff discusses the evolution of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (the Helsinki Convention), as headed by the Helsinki Commission (HELCOM), as an example of successful regional cooperation for marine protection from all sources of pollution.


Environmental pollution has been the subject of much private and public litigation for years; however, claims for natural resource damages (NRD) have been few. Kanner and Ziegler explain the importance of NRD programs and evaluate the process of litigating NRD claims in the United States.


Nanda explains that many federal statutes, such as the 1977 Clean Water Act and the 1970 Clean Air Act (CAA), are related to the agricultural industry. However, Nanda recognizes that some of the emissions from that industry may remain unregulated. He cites the CAA as an example, noting that it does not regulate agricultural operations, since they are considered minor sources of air emissions.


The Galician coast has experienced significant damage due to several oil spills in that area. The 2002 Prestige oil spill affected a large area of the coastal area. Garcia and co-authors theorize that adopting a regulatory framework for damages that are directly related to the impact of the disaster. The authors further discuss the impact of commercial damages versus non-commercial damages and the different types of relief that people along the coastline will receive.


Nolon asks whether the regulation of storm water runoff and the ensuing environmental pollution are within the jurisdiction of the federal government, individual states, or even both. He also describes the federal system of storm water management and regulation.


Wietecki examines the Minnesota Environmental Rights Act (MERA). He notes that the Minnesota Supreme Court has allowed private individuals to bring suit under MERA to protect natural resources from conduct that has or is likely to pollute,
impair, or destroy them. By bringing such a suit, a citizen is entitled to recover the expenses, including legal fees, they incur in protecting the nation’s resources.

XXI. SHIPPING


Chiu discusses how the government of Taiwan has taken actions to liberalize the operations of their maritime-transport sector over the past ten years. The article concentrates on how the government authorities proposed and implemented the liberalization measures. It also discusses the process and reasons behind the formulation of the governmental policies, as well as the interaction between the domestic shipping operators and the government. Furthermore, the article gives a comprehensive review of the policy’s impact on domestic maritime transport operators.


De Lisi and Cattell discuss claims under the Maritime Commercial Instruments and Liens Act in which courts have held that the “no lien clause” of the Act placed a subcontractor’s right to sue outside the scope of the Public Vessels Act and the Suits in Admiralty Act. The authors examine the impact of those decisions on Admiralty Law, pointing to Bonanni Ship Supply, Inc. v. United States in the Eleventh Circuit as an illustration of how the clause should be interpreted.


Pasfield and Steiner discuss the current investigative and detention practices being used by the United States Coast Guard, the Environmental Protection Agency, and the Department of Justice. The article uses the experience of seamen on the M/V Irene EM who were detained for a pollution investigation, relating that extended detentions are not uncommon. The article also highlights the unintended consequences of those detentions and discusses steps that ship owners can take to prevent or minimize such investigations.


Climate change has reduced the extent and thickness of sea ice in the Arctic, making international shipping in the Northwest Passage a virtual certainty in the foreseeable future. Such future shipping raises the question of whether the Passage is or might become an international strait, with the consequent right of transit passage. Pharand examines the two possible legal bases for Canada’s claim that the waters of the Canadian Arctic Archipelago are internal waters: a historic title and straight baselines. Pharand also addresses the issue of the possible internationalization of the Passage, if Canada does not take preventive measures. Some such measures are recommended in the last part of the article. (Abstract courtesy of Ocean Development and International Law).

After China entered into the World Trade Organization, the State Council promulgated regulations affecting international maritime transportation. In its first administrative proceeding under those regulations, the Ministry banned terminal handling charges in China. Tai and coauthors report and comment on this decision, giving the history leading up to the decision. The authors argue that the decision did not live up to the judicial standard required by the regulations.

XXII. SUSTAINABILITY


Brooks discusses how the Supreme Court’s interpretation of eminent domain in Kelo has transformed the doctrine in the United States. He recognizes that statutes are in place to prevent the abuse of public interest at the hands of private interests. He concludes that Kelo brings to light the inadequacies of judicial review of government purposes.


The public trust doctrine is the idea that some resources are subject to state ownership and held in trust for the use and benefit of the public. Klass advances a new theoretical framework based on state common law for a modern public trust doctrine that can be used for environmental protection purposes. Klass focuses on the history of the public trust doctrine, recent case law, and explains the significance of recent judicial developments of the doctrine.


In comparative law, scholars examine the similarities and differences between legal systems in different countries. Nolon journeys through nearly 100 worldwide laws that pertain to land use and sustainable development. He briefly states historical examples of governmental control of land development and explains the Rio Declaration of 1992, whose principles guide the remainder of the laws Nolon discusses.


Sylvan argues that there are significant economic benefits to adapting existing legal regimes, in particular the public trust doctrine, to protect the sustainability of coral reefs. Sylvan discusses the benefits that healthy coral reefs provide, the primary threats they currently face, and the relevant legal regimes for conservation and sustainable use of coral reefs.
XXIII. UNDERWATER CULTURAL HERITAGE
Duclos discusses the overlap of the laws of salvage and finds and the conceptual conflict caused by their respective policies. He uses the R.M.S. Titanic, Inc. opinion to illustrate how that court made the remedies under the laws of salvage and the law of finds mutually exclusive and then argues that a conceptual conflict allows a preferable result to requiring mutual exclusivity.

XXIV. WATER LAW
Amos examines the relationships among the four major federal land managing agencies and the water laws of individual states. He offers five recommendations regarding water rights to federal lands that are aimed at helping alleviate tensions between state and federal governments.

Benson gives a comparison of both Colorado and Wyoming’s position with regard to instream flow. He recognizes that the two states have much in common with their water supplies and uses and that both have followed the traditional approach to instream flow laws found in western states.

Benson recognizes that federal deference to the states with regard to their water resources is not a uniform requirement of federal law; however, he argues that some situations do call for such deference. Benson cites federal water right claims, which are subject to state jurisdiction in general stream adjudications, as an example.

Bonham discusses several instream flow issues on a state-specific and regional scale, and makes recommendations for developing a solutions-oriented approach to water problems in the West. Bonham concludes that participatory democracy is a critical step towards ensuring a healthy water future in the West.

Freestone explores the current threats to our oceans, illegal, unreported and unregulated fishing, threats to biodiversity, exploitation of deep sea fisheries, and exotic species. He then recommends a new solution and calls for a holistic marine agreement.


Mayland explains that riparian landowners in Connecticut have the right to make reasonable use of the waters of a stream for the benefit of his land, but must take into account other riparian owners’ right to act similarly. He examines whether this right is a type of property right that is subject to governmental takings, exploring the “takings” section of the Diversion Act.


Stauffer evaluates the recreational stream access in Montana by looking at the disputes over access on the Ruby River and elsewhere in Montana, which was demonstrated by a Stream Access Float Day. Stauffer also describes and analyzes the public trust doctrine in Montana and other states. She concludes that the Montana constitution requires the state to provide for reasonable access to trust resources and imposes a duty on riparian landowners to make reasonable accommodations to achieve that result.


The Convention on Biological Diversity (CBD) puts in place many priority actions toward conservation and sustainable use of marine and coastal biodiversity; however, implementation has lagged. Vierros focuses on the CBD targets relevant to oceans and coasts, and in particular marine protected areas and associated measures. Vierros examines target development and how targets have been incorporated into implementation of the CBD.


West explains that ethicists and legal analysts have not separately analyzed water and environmental ethics. He also notes that the constitutions of some developed countries do not contain water protection; however, he recognizes that these protections are present in the manuals of regulatory agencies such as the Environmental Protection Agency.
XXV. WETLANDS


Adler’s article analyzes the Supreme Court’s holding in Rapanos. Adler delves into Justice Kennedy’s concurrence, in which Kennedy called upon the Corps and EPA to identify ecological and other factors that could indicate that a particular water or wetland has a “significant nexus” with navigable waters.


Campbell discusses wetlands law and policy in the United States. The author focuses on wetlands compensatory mitigation and its place in American wetlands law. This article also discusses proposed legislation that would help to achieve the goal of “no net loss” of wetlands and to avoid further destruction of wetlands.


Connolly and Gardner discuss the Ramsar Convention, which is an international gathering that discussed the need to designate sites as wetlands of international importance, to apply a “wide use” concept to all wetlands within a Party’s territory, and to engage in international cooperation. They then discuss the twenty-two sites that were designated by the convention and the data taken on these sites and make recommendations to strengthen the aims of this convention in the United States.


Murphy states that the Supreme Court’s inability to convince Justice Kennedy that existing information supports broad deference to the Corps’s categorical regulation of wetlands adjacent to non-navigable waters has resulted in one of the most confusing environmental law cases since the 1960s and 1970s. His appraisal of the case finds that the Supreme Court gave no guidance to lower courts on how to apply either of the two tests that Justice Scalia and Justice Kennedy handed down in Rapanos.

XXVI. WHALING


Clapham and co-authors comment on the major problems with Morishita’s 2006 article in Marine Policy that provided “multiple analysis” of the whaling issue. Morishita’s analysis is basically a restatement of the Japanese government’s whaling policy. The authors argue that the main debate is not that some whales are not abundant, but that
the whaling industry cannot be trusted to regulate itself. The Japanese government’s poor use of science, implausible stock assessments, and its most recent falsification of whaling and fisheries catch data are the source of most people’s distrust of the whaling industry. The authors recognize that Japanese policies cannot be viewed alone because they are only a part of a much larger network of countries that believe in a right to secure unlimited access to global marine resources. The authors note that the International Whaling Commission (IWC) is key to controlling Japan and similar nations, thus any concessions made at the IWC conference would have potentially detrimental effects in other forums.


Currie discusses the international governance structures with respect to whales. He points out that the International Convention for the Regulation of Whaling (ICRW) lacks elements that the International Whaling Commission has deemed important. He suggests that the necessary reforms to the ICRW are so substantial that a new convention is essential. He suggests elements and goals that a new, successful convention would have.


The International Whaling Commission (IWC) is the primary international organization for controlling whaling. The IWC has been losing influence and power, partly because of its unconditional support for the moratorium on commercial whaling. Decker contends that a solution must be found that will not only protect whales from over-hunting, but will also increase cooperation and strengthen the organization. Decker briefly discusses the history of the IWC, the current state of the international whaling industry, and the culture of whaling. She also discusses possible solutions to this problem.


Endo and Yamao examine the policies behind the distribution of byproduct from scientific whaling programs to the public and the how the general public utilizes such byproduct. The article also addresses the potential end of the international moratorium on commercial whaling and what impact it would have on the scientific whaling programs.