International Submerged Lands Management Conference Support

Final Report
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Introduction

The annual International Submerged Lands Management Conference (ISLMC) has been an ad-hoc effort organized by numerous federal, state and international submerged land managers for the past 26 years. Each annual conference has been hosted by a volunteer organization, usually a state or provincial government agency, responsible for management of publically owned submerged lands.

The purpose of the annual ISLMC is to spotlight the issues surrounding the administration of submerged lands and adjacent uplands. Conference sessions focused on the opportunities, successes, and challenges facing managers of submerged lands and resources. Attendees met with land and resource managers from other states and countries, in order to share their experiences and gain new perspective.

The objectives of the ISLMC are to:

- Increase awareness of the management issues surrounding submerged lands within the United States, the Provinces of Canada, and the Caribbean basin.
- Provide a continuing forum to discuss and exchange information about those issues and, in the process, uncover possible alternatives and solutions to conflicting uses.
- Through panel discussions, papers, and workshops, disseminate information about current statutes, regulations, and other management frameworks of continuing value to managers and conference participants.
- Improve and encourage communications between submerged lands managers. Facilitate information and ideas exchange among participating states, provinces, and nations, as well as groups with similar interests.
- Identify and maintain a current contact list of submerged lands managers from participating states, provinces, territories, and nations.

The 26th International Submerged Lands Management Conference was held in Williamsburg, Virginia from October 28 - November 2, 2007, at the Colonial Williamsburg Woodlands Conference Center. The conference was hosted by the Virginia Marine Resources Commission with assistance and support from others including the Virginia Institute of Marine Science-Sea Grant Program, the Virginia Coastal Program, NOAA Coastal Services Center, Minerals Management Service and The Nature Conservancy. Financial support provided by a Virginia Coastal Zone Management Program grant from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended, was used to contract services for a facilitator to produce conference notes for each presentation during the various conference sessions and to facilitate a session devoted to development of a website for submerged lands managers.

This document is to serve as a final report for the facilitation services provided during the 26th Annual International Submerged Lands Management Conference. It includes the conference agenda, session notes, the homepage for the conference website and a draft homepage produced as part of the facilitated discussion for a submerged lands management website.

ISLMC 07

26th Annual

International Submerged Lands Management Conference

Williamsburg, Virginia
October 28 - November 2, 2007

Host

Virginia Marine Resources Commission

26th Annual International Submerged Lands Management Conference

Daily Session and Presentation Schedule

Monday
October 29, 2007

9:00 - 9:30	**Welcome and Opening Remarks** Steve Bowman, Commissioner of Marine Resources Nikki Rovner, Deputy Secretary of Natural Resources Review conference schedule
9:30 - 10:30	**Public Trust Doctrine** Moderator: John W. Daniel, II, Troutman Sanders LLP Speaker: Timothy Mulvaney - New Jersey's Beaches: The State as Trustee of Public Rights Speaker: Erin Ryan - Mono Lake and the New Public Trust
10:30 - 10:45	Break
10:45 - 11:45	**Public Trust Doctrine** (continued) Speaker: Megan Higgins - Applying the Public Trust in Rhode Island Speaker: Carl Josephson - What is the current Status of the Public Trust Doctrine in Virginia? Discussion
11:45 - 1:15	Lunch (provided)
1:15 - 2:30	**Determining Submerged Land Ownership** Moderator: Bob Grabb, VMRC Speaker: Lynda Butler - Legal Issues Affecting Submerged Land Ownership Speaker: Callie Webber - Who owns Alaska's River beds and Lake Beds Speaker: Barry Boyer and Roberta Vallone - Global Warming in the Great Lakes: Emerging issues in Submerged Lands Management Discussion
2:30 - 3:00	Break

3:00 - 4:00	**Private use of Submerged Lands** **Living Shorelines – Shoreline Management Involving Submerged Lands** Moderator: Pam Mason, VIMS Center for Coastal Resources Management Speaker: Sandra Erdle - Living Shorelines Summit Follow-Up: Outcomes and Plans Speaker: Karen Duhring - Ecosystem Tradeoffs Associated with Marsh Sills Discussion
4:00 - 5:00	**Private use of Submerged Lands (continued)** **Managing Housing over Submerged Lands** Moderator: Chip Neikirk, VMRC Speaker: Francea McNair - Washington State Regulations on Residential use of State-owned Aquatic lands. Speaker: Robin Swinford - Residential Encroachment onto Submerged Land in Alaska: Land Management Policy and Issues Discussion
5:00	Hospitality Suite (supper on your own)

Tuesday
October 30, 2007

9:00 - 10:15	**Compensation for the Privatization of Public Trust Lands** Moderator: Melanie Davenport, Troutman Sanders LLP Speaker: Bob Grabb - Determining “fair market value” in Virginia Speaker: Jessica Berrio - Submerged Lands Leasing on South Carolina’s Coast Discussion
10:15 - 10:45	Break

10:45 - 12:00	**Managing Submerged Cultural Resources** Moderator: Krista Trono, NOAA Monitor National Marine Sanctuary Speaker: John Broadwater - History, Treasure, and Resource Management: A Brief Overview of Legislation Concerning Submerged Cultural Resources Speaker: Jeff Johnston - USS Monitor: Discovery and Preservation Discussion
12:00 - 1:30	Lunch (provided)
1:30 - 5:00	**Field Trip** **Mariners Museum and USS Monitor Center Exhibits**
5:00	Hospitality Suite (supper on your own)

Wednesday
October 31, 2007

9:00 - 10:30	**Mapping Submerged Lands: Overview of Federal Mapping Efforts** Moderator: Cindy Fowler, NOAA CSC Speaker: Meredith Westington - Developing Federal Maritime Zones and Boundaries: History and State of the Art Speaker: Steve Kopach - Mapping Federal Submerged Lands: The OCS Marine Cadastre Speaker: Andrea Geiger - Marine Spatial Planning: International and National Perspectives Speaker: Jim Fulmer and David Stein - The Multipurpose Marine Cadastre Discussion
10:30 - 10:45	Break

10:45 - 12:00	**Mapping Products: Identification of Resources and Use** Moderator: Jay Udelhoven, The Nature Conservancy Speaker: Laura McKay - Coastal GEMS (Geospatial and Educational Mapping System) Speaker: Matthew Strickler - Assessing the Impacts of Land Use Change on Hard Clam Aquaculture Speaker: Jay Odell - Planning for Biodiversity Conservation on Submerged Lands Discussion
12:00 - 1:30	Lunch (provided)
1:30 - 5:00	**Jamestown or On You Own** Visit Jamestown Island or Jamestown Settlement 400th Anniversary Exhibits (Transportation provided)
5:00	Hospitality Suite (supper on your own)

Thursday
November 1, 2007

9:00 - 10:15	**Federal Activity and Federal Authority over State-owned Public Trust Lands** Moderator: Traycie West, U.S. Navy Little Creek Speaker: Kerri Nicholas - Clean-Up on State-Owned Submerged Lands: Federal Authority vs. State's Rights Speaker: Rymn Parsons - Naval Installations and Operations, a Federal Perspective Speaker: Joe Rieger - Remediation of Contaminated Sediments in the Elizabeth River Discussion
10:15 - 10:30	Break

10:30 - 12:00	**Combining Land Use and Submerged Lands Management** Moderator: Shep Moon, Virginia Coastal Zone Management Program Speaker: Lewis Lawrence - Use conflict: an emergent conundrum for land-use and water-use management in Virginia Speaker: Jeannie Butler - Using Green Infrastructure to Protect Water Quality Speaker: Grover Fugate - Rhode Island Urban Coastal Greenway Speaker: Elaine Sterrett Isely - Great Lakes Submerged Land Policy and Management Discussion
12:00 - 1:30	Lunch (provided)
1:30 - 2:45	**Public Access and Working Waterfronts** Moderator: Tom Murray, VIMS Sea Grant Speaker: Tom Murray - Access to the Waterfront – Issues and Solutions Across the Nation Speaker: Dr. Molly W. Jacobs, Sea Grant Fellow, Congressman Thomas H. Allen - Keep our Waterfronts Working: A Federal Legislative Update Speaker: Martin (Marty) Laven - Submerged Lands Banking - Rationalizing the Management of Public Trust Resources Discussion
2:45- 3:15	Break
3:15- 4:30	**Website Workshop – Developing a Resource for Submerged Lands Managers**
4:30	Hospitality Suite
6:00 - 9:00	**Conference Banquet**

Friday

November 2, 2007

9:00 - 11:00	Planning for next years conference

Sponsors and Support

Virginia Sea Grant Marine Advisory Program

Virginia Coastal Zone Management Program

NOAA Coastal Services Center

Minerals Management Service

The Nature Conservancy

"New Jersey's Beaches: The State as Trustee of Public Rights"

Timothy Mulvaney,
Deputy Attorney General for the State of New Jersey, Land Use Division of the Environmental Permitting and Counseling Section

Mr. Mulvaney provided an overview of the Public Trust Doctrine, which recognizes that the public maintains particular inalienable rights to certain natural resources. The presentation addressed the origins of the doctrine, starting with early Roman law and ultimately arising in America in an early New Jersey case, in which a dispute arose over oyster beds. The court found that New Jersey never conveyed those public trust rights to the sea and its beds, which had been reserved to the Crown. The State succeeded to the Crown's rights in the oyster beds, and, when the Revolution took place, the people became themselves sovereign and held these rights to tidal waterways and their shores.

Mr. Mulvaney explained that, today, the Public Trust Doctrine has evolved to also protect fragile ecosystems and modern recreational activities, and its application has been extended to periodic navigation, artificial reservoirs, flooded lands, adjacent wetlands, and wildlife habitat. He explained that as "trustee," the people of each state have an obligation to ensure that the state's regulation and protection of these resources will safeguard them for future generations.

Mr. Mulvaney then reviewed two specific cases demonstrating the evolution of the doctrine. In Matthews v. Bay Head Improvement Association, 95 N.J. 306 (1984), New Jersey's Supreme Court recognized public rights of access and use to a reasonable area of upland dry sand along tidal waterways on quasi-public beaches and identified four factors that can aid in determining the scope of this dry sand area (the location of dry sand in relation to the foreshore, the availability of nearby dry sand, the extent of public demand, and the prior usage of the upland by the property owners). In Raleigh Ave. Beach Ass'n v. Atlantis Beach Club, Inc., 185 N.J. 40 (2005), the court applied the Matthews factors to an exclusively private beach, and found that an entire beach must be open for public access and use and all beach fees must be commensurate with services provided and approved by the State. Mr. Mulvaney also identified several current legal issues in New Jersey surrounding the public trust, including viewshed cases, the right and duty of government to provide shore protection, and strengthened public access conditions of environmental permits.

Mr. Mulvaney closed by suggesting that sea level rise and the associated landward migration of today's mean high water line will have significant impacts in the near future on development rights and water allocation.

"Applying the Public Trust Doctrine in Rhode Island"

Megan Higgins,
RI Sea Grant Legal Program/Marine Affairs Institute at Roger Williams University School of Law

Rhode Island's public trust doctrine (PTD) is codified in Article 1, Section 17 of the state constitution. Essentially, it protects fishing, passage along the shore, swimming and navigational rights for all citizens of the state. The protected interests under the PTD, as a whole, are constantly evolving to include other rights such as recreational use of the shore and tidelands (including aquaculture), preservation and protection of habitats and tidelands, and even the right to recover damages to natural resources under federal legislation (in these cases, NOAA is identified as the trustee).

Coastal homeowners also have rights related to the PTD, such as the rights: of access, to wharf out, of a view-shed, to acquire accretions, to fill, and of continued water flow.

Ms. Higgins then explained the boundary of the PTD in RI, which includes tidal waters or any lands subject to the ebb and flow of the tides. The state uses the mean high tide line (MHTL) to delineate public resources and defines it as, "[t]he line formed by the intersection of the tidal plane of mean high tide with the shore." The MHTL is further defined as the "arithmetic average of high water heights observed over an 18.6 year Metonic (or lunar) cycle." Of course, determining the MHTL is problematic, as the shoreline is dynamic and continues to evolve.

In Rhode Island, the Coastal Resources Management Council holds title to resources in trust for the benefit of the public. The CRMC's jurisdiction is determined by a 200-foot buffer from the actual public resource or coastal feature. Express consent or a legislative decree is needed to transfer title to another.

The state has an interest in public trust resources and management of such public resources is based on: need, uses, and water quality standards (covered in management plans); or, a holistic approach. Forms of consent for private uses of public resources include: easements, management agreements, permits and licenses, leases, and consent by rule. The state relies on its Coastal Resources Management Plan for guidance in balancing public versus private rights.

Recent caselaw cited included:

- Westerly v. Bradley: Bradley used the PTD to argue that he could swim a channel that was very actively fished (by commercial interests) and the town said "no" under a public safety ordinance; Bradley lost.
- Champlin's Realty Assoc. v. Tillson: Concerning Block Island, 13 miles off the coast. The town claimed ownership to submerged lands within the Great Salt Pond, but the court ruled that even though the town had title to the land, it does not have exclusive permitting rights to those lands. The state retained its

responsibilities under the PTD and thus the Town of New Shoreham did not enjoy exclusive jurisdiction over the pond.

- Palazzolo v. State: Palazzolo wanted to develop 18 acres of salt marsh into a beach club; more than 50% of the land was submerged throughout the year. Management regulations prohibited him from filling that land and he claimed a 5th Amendment "taking," arguing that the state was depriving him of an economic benefit from the development of his property. The state successfully used the PTD as a background principle of state law to prove that Palazzolo should have known about the regulations in place and therefore should not have held expectations about the submerged land's economic value. The court ruled that the submerged lands were never legally his, and were always in the public trust because they were submerged 50% of the time. Other factors the court considered regarding his proposed development were: septic impacts, nuisance, water quality, and developing wetlands for a non-suitable use. This case is a good example of the state exerting its authority to implement the PTD for the greater good.

"Current Status of the Public Trust Doctrine in Virginia"

Carl Josephson,
Senior Assistant Attorney General, Environmental Section, Virginia

Contrary to many other states, Virginia uses Mean Low Water (MLW) to delineate the boundary between upland private property and State-owned submerged lands. Mr. Josephson reviewed an early Virginia case addressing the PTD, *Commonwealth v. City of Newport News*, 158 Va. 521 (1932). The case involved a proposed longer sewage treatment pipe and the impact of the discharge of raw sewage from the pipe on oyster grounds.

In essence, the Virginia Supreme Court analysis says that the PTD "Does not help us in our thinking." According to its analysis, in order for a trust to exist it must be created by the State, itself, or a power with dominion over the State. The Court determined that the part of Virginia's sovereignty that it relinquished to the federal government by virtue of agreeing to the U.S. Constitution gave rise to what may be considered an implied trust for protection of navigation.

The Court viewed fisheries as part of the State's *jus privatum* (right of private property), subject to State regulation. The State could take away the right of fishery, except for natural oyster grounds (referred to as Baylor Grounds in Virginia), which are specifically protected for the benefit of the people in Virginia's State Constitution. However, the Court said the legislature can also authorize "public use" of Baylor Grounds. Considering the use of tidal waters for discharge of sewage to be a public use, the Court held that Newport News could discharge untreated sewage into Hampton Roads, notwithstanding the harm to fisheries that may occur.

In 1971 the Virginia Constitution was amended and included a new provision, Article XI, Section 1, relating to conservation of natural resources. Some commentators, such as Professor A.E. Dick Howard of the University of Virginia, view that provision as creating a PTD in Virginia. However, in a 1985 case, the Virginia Supreme Court held that Article XI, Section 1 is "not self executing." In other words, that Constitutional provision needs to be implemented by the legislature enacting a statute to make the provision effective for particular purposes.

Virginia Code § 28.2-1205 includes many matters which MRC shall consider and be guided by when determining whether to grant a permit for the use of State-owned bottomland. The legislature amended the section to say that MRC shall be guided in its deliberations by the provisions of Article XI, Section 1 of the Virginia Constitution." In this way Article XI, Section 1 has been "executed" by the legislature and is applicable as guidance for MRC habitat decisions.

In 1999 Virginia Code § 28.2-1205 was further amended to include two specific references to the PTD. In the first reference, MRC is required to exercise its authority

consistent with the PTD as defined by the common law that Virginia adopted from England as of the time of our independence. At that time, it is fairly well recognized that the PTD only extended to protection of navigation, fisheries and commerce on the waters. In the second reference, relating to judicial review of MRC decisions, if MRC's decision is consistent with the PTD it is deemed not to be pursuant to the police power. Mr. Josephson has argued to several Virginia Courts that this second reference qualifies the scope of judicial review of MRC decisions. If an MRC decision is consistent with the PTD, then it is a proprietary decision of the Commonwealth. The Court's review should be limited if MRC's decision is proprietary, i.e. when MRC, on behalf of the Commonwealth, is determining what use can be made of the Commonwealth's own property.

He then reviewed two recent appellate court cases in which it was argued that the scope of judicial review has been altered by the 1999 amendment, but the Courts chose not to address the argument. *Evelyn v. MRC*, 46 Va. App. 618 (2005) and *Palmer v. MRC*, 48 Va. App. 78 (2006), involved, respectively, a roof structure and a large storage shed on private piers. In both cases, MRC told the owners to take the structures down. The Cases were appealed and in each the judges agreed with and upheld the original MRC decision, without addressing whether the 1999 amendment qualified judicial review of MRC decisions that are consistent with the PTD.

A more recent case was cited, *Harrison v. MRC*, (Norfolk Circuit Court 2007)— involving a rebuilt pier that had been destroyed by Hurricane Isabel. A neighbor challenged a rooftop bar structure and took the MRC to court. The Circuit Court ruled that MRC's granting of an after-the-fact permit for a rooftop bar on top of the restaurant/bar of the public fishing pier was redundant and violated the PTD. The Circuit Court considered MRC's permit, in light of the potential noise and view impacts of the rooftop bar on the neighbors, to be inconsistent with the PTD.

The MRC is now appealing that decision, arguing that noise and view issues were decided by the City in the exercise of its zoning authority and the Circuit Court improperly expanded protections of the PTD beyond that which the legislature specified for MRC decisions, i.e. navigation, fisheries and commerce.

Concluding remarks:

The PTD is specifically mentioned in Code § 28.2-1205, but its scope for MRC decisions remains to be determined by the Courts. Because the General Assembly has defined it by reference to a specific period of time (i.e. our independence) the PTD for purposes of Code § 28.2-1205 MRC decisions should not be amenable to expansion beyond navigation, fisheries and commerce.

For other purposes, Article XI, Section 1 of the Virginia Constitution may be argued to provide PTD protection. However, because Virginia Courts consider that section not to be self-executing, it needs to be "executed" by implementing legislation for specific purposes.

For example, Article XI, Section 1 of the Virginia Constitution is "executed" by specific reference thereto in Virginia Code § 30-73.3.A.2. By that Code section the Joint Commission on Administrative Rules is authorized to review the impact of a rule or regulation on the protection of the Commonwealth's natural resources.

Although not specifically cited by Article and Section number, the thrust of the language of Article XI, Section 1 of the Virginia Constitution is also included in statutory language pertaining to Virginia's Department of Environmental Quality. Virginia Code § 10.1-1183(1) identifies, among the purposes of the Department, assisting "in the effective implementation of the Constitution of Virginia by carrying out state policies aimed at conserving the Commonwealth's natural resources and protecting its atmosphere, land and waters from pollution."

"Who Owns Alaska's Riverbeds and Lakebeds?"
An Introduction to The Federal Recordable Disclaimer Of Interest Program In Alaska

Callie Webber,
Bureau of Land Management, Alaska State Office

Let me start off by reviewing a few facts.

- The State of Alaska is approximately 365 million acres in size.[1]
- The BLM is conveying over 103 million acres of land to the State of Alaska under the Alaska Statehood Act of 1958 and 44 million acres of land to Native corporations under the Alaska Native Claims Settlement Act of 1971. After the State and Native corporations reach final entitlement, the federal government will still manage approximately 60% of lands within Alaska (almost 14 times the State of Virginia).[2] Much of this land is located in national parks and national wildlife refuges created after the date of Alaska's statehood (1959).
- The number of waterbodies in Alaska is unknown; however, one estimate is 3,000 rivers and 3 million lakes. The number of streams is unknown.[3] A large number of these waterbodies are located within Federal boundaries.

So, "who owns Alaska's river beds and lake beds" on these lands? When I say "lands," I mean Federal lands—national park lands, national wildlife refuge lands, BLM public lands, Forest lands, military withdrawals, and so on. I am not referring to non-Federal lands, such as State lands or private lands.

Again, who owns the lands underlying Alaska's river, streams, and lakes?
Only time will tell.

Traditionally, we have relied upon the federal courts to make final title navigability determinations. In Alaska, this is not possible. Only ten (10) judicial determinations of navigability have been made for unreserved water bodies. I should point out, however, that the courts have ruled several times on specific federal withdrawals and reservations, that is, whether the State's title to the beds of navigable waters was defeated by the withdrawal or reservation.

What does this mean? After nearly 50 years, since Alaska achieved statehood, few water bodies on the remaining federal lands have been identified as navigable from a legal point of view. The recordable disclaimer of interest program is intended to help answer this question.

So, what is a "Recordable Disclaimer of Interest?" And how does it relate to "Who owns Alaska's Riverbeds and Lakebeds?"

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[1] 2006 Public Lands Statistics, 365 million acres. There is a reference of 12 million water acres, totaling 378 million?
[2] Alaska (586,000 sq. miles) and Virginia (42,767 sq. miles)
[3] State of Alaska Library

A "recordable disclaimer of interest" – RDI – is a document that affirms the United States does not claim an interest in specific lands, and it is prepared in such a way that will meet local requirements so that it may be "recorded."

The RDI program was born out of necessity. In 1992, the State of Alaska notified the Secretary of the Interior of its intent to quiet title to more than 200 rivers, streams, and lakes. The State subsequently filed on three rivers--the Black, Nation, and Kandik Rivers (located in northeast Alaska).

In 2000, the Ninth Circuit Court ruled it lacked jurisdiction over Black River because there had not yet been a dispute between the United States and Alaska over the riverbed. (The U.S., for example, had not included the riverbed in a conveyance to a private party.)

Unable to rule on the river's navigability, the Court expressed its sense of urgency in identifying navigable waters in Alaska, writing as follows: "Eventually, all the witnesses will be dead, reducing the reliability of litigation. Someone who used one of these rivers in 1959 at age 20 is now 60. The population in the area was so sparse at all relevant times—probably no more than a couple of hundred people who might have used the three rivers during the relevant time, most too young to have relevant knowledge or too old to have survived the forty years since statehood—that a few deaths by old age can remove all the knowledgeable witnesses."[4]

This decision helped prompt the Department of the Interior to amend its regulations affecting recordable disclaimers of interest.

The Authority for RDIs begins with the Federal Land Policy and Management Act of 1976, Section 315. The Act provides that the Secretary may issue a disclaimer when:

1. A record interest of the United States has terminated by operation of law or is otherwise invalid;
2. The lands lying between the meander line shown on a plat of survey approved by the Bureau or its predecessors and the actual shoreline of a body of water are not lands of the United States; or
3. Accreted, relicted, or avulsed lands are not lands of the United States.

In our program, we focus on the first one – *A record interest of the United States has terminated by operation of law or is otherwise invalid* – citing the Equal Footing Doctrine, the Submerged Lands Act of 1953, the Alaska Statehood Act, and the Submerged Lands Act of 1988 as the basis. In other words, title to the beds of navigable waters automatically vested in the State of Alaska upon its entry into the Union in 1959.

The Secretary delegated this authority to the Bureau of Land Management. We are the responsible agency for administering this program on behalf of all federal agencies of the United States. The BLM makes the final administrative decision on whether the United States has an interest in the submerged lands.

[4] Alaska v. USA, case no. 96-36041 (9th Circuit 2000)

In January 2003, the BLM amended its regulations (found in 43 CFR 1864), effectively

- removing the 12-year regulatory filing deadline for states;
- removing the requirement that an applicant be a ‘‘present owner of record’’ to be qualified under the Act;
- allowing any entity claiming title, not just current owners of record, to apply for a disclaimer of interest;
- defining the term ‘‘state’’ as it is used in this rule; and
- clarifying how we will approve disclaimer applications involving another Federal land managing agency.

The result: an administrative tool that can be used to disclaim federal interest in lands underlying navigable waters. Clearly, this tool can be used to avoid unnecessary and expensive litigation over waterbodies that interested parties (United States and the State of Alaska) can agree are navigable, and unreserved, at the time of statehood.

The Recordable Disclaimer of Interest document is important to the State of Alaska because it is a very cost-effective administrative tool, equivalent to bringing Quiet Title Action to a summary judgment in federal court.

The lack of any title document or judgment creates a cloud on the State's title. A recordable disclaimer for submerged lands under navigable waters helps to lift the cloud on its title stemming from the lack of any permanent determinations of ownership.[5]

So, what is the process? Working cooperatively with the State, federal land managers, and the Department’s attorneys, BLM-Alaska developed a policy on how to implement the regulatory requirements, specifically for the State of Alaska’s RDI applications. This policy was implemented in 2004. Before I go through the process with you, I need to point out that the State carries the burden of proving that a river, stream, or lake is navigable, and unreserved, at the time of statehood. Basically –

1. The process usually begins with the State proposing to the BLM certain water bodies as potential candidates for an RDI application. We discuss potential sources of information and what is known about the water body, and advise the State on what is required of a complete application. Once the State believes its draft application and supporting documents are ready for review, the BLM hosts a meeting between the State and affected federal agencies. The State presents its preliminary evidence to support why the State believes title to the submerged lands vested in the State, and the affected federal agencies brings forth information that may support or negate the State’s evidence. As each particular case is unique, discussion is guided by the draft application and the submitted factual information. Discussion also includes reservation or withdrawal information both current and at the time of statehood.

[5] Email correspondence, October 25 & 26, 2007. Tammas Brown, Navigability Manager, Public Access and Assertion Defense Unit, Alaska Department of Natural Resources.

2. After the State submits its final application, the BLM reviews the evidence and prepares a summary, or navigability, report. This report summarizes relevant factual evidence and may include the BLM's proposed recommendations on the State's application. Copies of the State's application and the BLM draft summary report are sent to identified parties and major upland owners. The Notice of the State's application is published in the Federal Register (and in local newspapers), and is available for public review and comment.

3. After the end of the Notice period, comments are analyzed, and the report is finalized. The BLM may then issue a decision on the State's application. If the application, or a portion thereof, is accepted, the BLM will prepare the "recordable disclaimer of interest."

Although the BLM has the authority to issue decisions on the applications, it will not approve a disclaimer over the valid objection of another federal agency. A valid objection must contain sustainable rationale, which has not yet been defined.

The BLM has successfully used this authority to help confirm State ownership of submerged lands within Alaska. To date, the BLM-Alaska RDI Team has reviewed a total of 47 water bodies and completed actions on ten (10) applications, resulting in disclaimers in lands underlying 889 river miles and 873,000 acres of lakebed.

The State of Alaska has 26 pending applications. Currently under public review are 17 miles of a portage system, 399 river miles, and 2 lakes. The Navigable Waters Specialists are also analyzing the Tanana and Kuskokwim Rivers, which total 940 river miles. Next to the Yukon River, these are the two largest rivers in Alaska.

We have a long way to go and I thank you for your time.

"Global Warming in the Great Lakes: Emerging Issues in Submerged Lands Management"

Barry Boyer,
Professor, University at Buffalo Law School, Environmental Law and Policy Clinic

Mr. Boyer focused his presentation on the area of Buffalo, New York, and the issues they are facing with regard to global warming. He hopes to see a network evolve [from this audience] with emphasis on global climate change and submerged lands. His specific interests and focus today:

- How will climate change affect Great Lakes water levels and the lands below them?
- What will altered water levels do to habitats?
- How can management agencies and legal regimes adapt?

As background, the Great Lakes represent a system moving in the other direction – to reduced flows and changing lake levels. Lake Superior, for example, is down a couple of feet and sand bars are forming. Freighters in Lake Ontario must be "light loaded" due to depth constraints.

Why is this happening… because of climate change. New York's climate is today more like that of the Carolinas. This has significant impacts on the hydrology of the entire GL system, where 99% of the water is "legacy" water, not provided by annual influx.

The projected effects of climate warming on the system are: later freeze up, earlier iceout, warmer water temperatures, reduced ice cover, more evaporation, and more lake-effect precipitation. Most of the lakes have small watersheds, and evaporation has a greater effect. Other impacts mentioned included: longer growing seasons, more transpiration, more droughts, flashier runoff, and increase demands on groundwater.

Pressures to divert water out of the basin will increase, and groundwater will be drawn down even more. Quantitatively, levels may drop by 2 to 3 meters (or 6.5 to 10 feet) this century. As a result, many submerged lands will emerge.

Mr. Boyer then talked about specific areas and anticipated impacts. He cautioned that the accuracy of predictions is greatly debated, and that humans continue to modify these natural systems, which makes such predictions even more problematic. He referenced the St. Clair drain-hole example, where greater flows are now occurring from the upper to the lower lakes.

Northern Lake Michigan and Lake St. Clair will experience lots of shallow areas. Lake Eerie (which is the most shallow of the GL) will be particularly affected, especially in the western basin. Here, there are lots of important fisheries habitat, including spawning

reefs and shoals important to fish such as walleye, many forage fish, and sport fish. Serious changes in fish populations and communities will occur.

Important bird areas will be impacted as waters become shallower. Wading, waterfowl, and neo-tropical migrants will face serious declines. Lots of important wetlands are found here, especially along the Ottawa shores. Wooded and emergent vegetation will become exposed. In Lake Superior, for example, a 2-foot decline is already impacting wild rice fields. These fields are used by native peoples for their local economy and used by waterfowl.

Vegetation regimes will shift from submerged to emergent, to shrubby to woody, to upland forests. Will habitats be able to move along with the changing/dropping water line? Many variables will probably affect this, such as: the rate of change, the substrate over which waters are retreating, the contour of the underwater areas (deep grade means losing more habitat quickly, for example). Detailed mapping will help to determine the likely outcomes.

Climate change will add a suite of stressors that will drive GL ecosystems toward an irreversible tipping point. Current changes, such as lost species, toxic/boil pollutants, rampant sprawl, and modified hydrology are greatly stressing these systems already. Their new structure and function "won't be pretty."

Social and legal systems will also be stressed by changes in the GL. Will such systems have the capacity and resilience to adapt? For example, infrastructure stresses like the need to dredge deeper in shipping channels and more frequently, to build docks farther offshore, to adapt water intake pipes… they all take money and raise important management questions.

More property disputes will occur (see www.OhioLakefrontGroup.com). Is the PTD written to the high or the low water mark? That will change who owns the newly emergent land, and litigation costs will likely skyrocket. In the lower Niagara River, water use disputes between water plants in different jurisdictions illuminate a legal conundrum of many layers of common law rights, statutory rights, federal government interests, and more.

“Levels and Ownership of Submerged Lands in the Great Lakes”

Roberta Vallone,
Clinical Instructor, University at Buffalo Law School, Environmental Law and Policy Clinic

Generally, the land under navigable waters in lakes and streams is publicly owned below the high water mark. The Environmental Law Clinic has taken a proactive approach to submerged lands of interest. In the Great Lakes area, this means dealing with eight state governments who have ownership to the international boundary with Canada.

Submerged lands are held in public trust. The limited privatization that has occurred favors economic development. Public rights include navigation, fishing, and swimming, except in NY, where most non-tidal and non-Great Lakes submerged lands are privately held.

When water levels change, property boundaries move with these results:

- Avulsion – shoreline suddenly moves; no change in title, upland owner can fill
- Accretion – land gradually grows; added to upland owner’s property
- Erosion – land slowly washed away; added to public trust
- Reliction – water level gradually falls; added to upland owner property

Shoreline owners have riparian rights, such as: reasonable use of waters, and reach to navigable waters (which implies construction of infrastructure over formerly or shallowly emerged lands).

Ms. Vallone then reviewed the possible legal system responses to changed water levels, which include:

- Modify deed recording system
- Property tax system respond
- Coast land use P&X updates
- Adjust to federal navigation servitude
- Possible alteration or acquisition of riparian rights
- Potential revisiting of laws re water use

Impacts on the private conservation of submerged lands result. Conservation easements are typically applied to permanent property interests, with the following results:

- Courts can refuse to enforce covenants
- Lease contracts may be terminated
- Lease contract may be rescinded

If the government conveys a conservation easement and reliction occurs, does the conservation easement convey to the new owner? It is time to start planning a coordinated response in the Great Lakes!

Do we have adequate baseline information on current conditions? Can we predict habitat shifts? What new resources need to be protected? How should legal and management agencies respond?

Current legal research at the law clinic is focused upon:

- Miles of coastline and acreage of submerged lands
- Agencies managing water quality and related resources
- Public trust boundaries
- Ownership of reliction lands
- State laws and policies on conservation leasing of submerged lands

(See handout; looking for feedback)

“Living Shorelines Summit”

Sandra Erdle,
Coastal Training Program Coordinator, Chesapeake Bay National Estuarine Research Reserve in Virginia

Ms. Erdle recounted the highlights of the Living Shorelines Summit held in Virginia last year – which focused on shoreline protection alternatives – and the recommendations that came out of it.

Recommendations included:

- Initiate efforts to use social marketing concepts to promote “living shorelines” in the Chesapeake Bay. Target realtors, homeowners, and others.
- Incorporate living shorelines into the NEMO curriculum.
- Identify existing and new financial incentives opportunities to promote the implementation of living shorelines over hard stabilization options.
- Promote research on the design of living shorelines, large-scale sediment issues, sea level rise on living shorelines, and the impacts of living shorelines on property values.
- Determine sediment budgets for the Chesapeake Bay, its tributaries, and coastal bays.

Other recommendations, specific to:

- Data and tools: use existing monitoring and effectiveness studies to validate GIS-based suitability models and planning tools.
- Design and effectiveness: improve existing project selection and design criteria to reflect recent science-based assessments and modeling.
- Planning, policy and regulation: develop a regulatory framework to allow for regional shoreline management, and be more proactive by using shoreline management plans to guide future development activities.

In conclusion, the summit brought together a diverse group of people: contractors, NGOs, scientists, and policymakers. The groups shared their work from the break-out sessions. Some hurdles still exist, and these groups need to continue to work together and coordinate among neighboring states and the region.

"Ecosystem Tradeoffs Associated with Tidal Marsh Sills"

Karen Duhring,
Shoreline Advisory Scientist, Virginia Institute of Marine Science

Ms. Duhring outlined her plans to cover: typical erosion protection strategies in Virginia; what are preferred approaches; marsh sill case studies; and a summary of ecosystem tradeoffs associated with marsh sills.

As background, the Chesapeake Bay system is tidal and its rivers extend quite far west. Typical erosion protection projects include revetments, bulkheads, and bank grading combined with these structures. The area of the Bay is increasing with sea level rise. While tidal range varies, it is moving landward generally. Most of the shorelines in Virginia are under private ownership, and landowners want to protect against erosion. Bulkheads are commonly used, and today's vinyl materials last longer in the marine environment.

Permit requests to deal with physical changes occurring along tidal shorelines are growing; 200+ sites each year in past 8 years have been visited by Karen alone. The Virginia Institute of Marine Science (VIMS) serves as the advisory agency that reviews permit requests and assesses environmental interests. That information is passed to the state and local permitting agencies, where it is weighed against other interests.

Tidal shorelines include a very wide range of environmental conditions, from high energy to low energy sites, with variable risks. There is growing concern at the state and federal level over the accumulation of hardened shoreline. The cumulative length of new structures permitted from 1993-2006 in Virginia's portion of the Chesapeake Bay was 255.5 miles, with an average of 18.2 miles permitted each year. Direct loss and isolation of tidal wetlands is one of the results.

How do shoreline projects contribute to this? How can we lessen the overall impact on estuarine resources? There are a number of approaches from most to least preferred:

- No action: leave the shoreline in its natural condition or restore habitats, use vegetation (and reduce further risk through land use changes)
- Non-structural: maximize vegetative cover
- Hybrid approach: use structures to support natural erosion buffers (e.g., tidal marshes, beaches)
- Revetments (sloped) – better for benthic community
- Bulkheads – benthic community becomes less diverse

Preferred approaches that may affect public submerged lands:

- Tidal marsh enhancement or creation
- Beach nourishment in sand-limited system
- Bank grading with cut and fill to create or enhance tidal marsh
- Offshore breakwater systems for high energy beach shorelines

- Tidal marsh sills for low to medium energy shorelines – this is the focus today!

- Marsh Sill (with planted marsh)
    - Low profile revetment, quarry stone, backfilled with sand to create/enhance tidal marsh
    - Imported sediment from upland source or suitable bank grading material (analyzed first for good sand mix)
    - Offensive approach – structures built in sand transport region to address impinging waves before they reach upland areas

- Typical sill cross-section diagram; no "typical" design exists however
    - Tidal marsh needs to be very wide to handle the exposure dynamics (average width needed is 20-30 feet)
    - Can design the sill to go channelward or landward (preferred) by grading bank

- Marsh Toe Revetment (natural marsh edge stabilization): low profile revetment placed along the eroding edge of an existing tidal marsh

Ms. Duhring referenced the 2004-05 VIMS Study of 36 marsh structures to see how effective they were. These questions were asked:

- Constructed as permitted?
- How persistent were they (TS Isabel)?
- How did planted vegetation do, or was the natural marsh enhanced?

Case studies were cited:

- The marsh sill at the VIMS boat basin canal, built in 1983: stone sill, saltmarsh cordgrass, salt bushes (from water to upland); very little maintenance ever done and very sustainable!

- Another case study: high, vertical sandy bank, undercutting erosion at bank toe, narrow fringe marsh ~5 ft, tidal creek with regular boat wakes
    - After 1 year: graded bank now stable, suitable material used for backfill, planted marsh ~25 ft wide, gapped sills
    - Started with grading, cut and fill; planted tidal marsh; gapped sills for tidal inundation for water to reach salt marsh grasses
- Another case study: sill structure added to remnant marsh, high energy zone; dominated by submerged aquatic vegetation (SAV), desire to protect oak tree from saltwater intrusion
    - Outcome: perched marsh not accessible to marine organisms
- Tidal openings used: straight, offset gapped, offset end at upland revetment
    - Important to aquatic animals and vegetation
- Another case study to illustrate ecosystem tradeoffs: sill structure augmented with wide, vegetated inter-tidal area; after 10 years, less open water area, sediment

trapping, nutrient cycling by marsh plants and infaunal community, stable upland bank with dense vegetation

- Habitat comparison: much more diversity results; aerial habitat for spiders, insects, wading birds, waterfowl, mammals; marsh surface and below ground for microbial fungi and bacteria, algae, mesofauna (nematodes, copepods, rotifers, protozoa); foraging invertebrates (polycheates, gastropod mollusks, fiddler crabs, blue crab, amphipods); filter feeders (ribbed mussel, oyster); aquatic pools and channels for small and juvenile fish, shrimp, blue crab

In general, habitat in riprap reefs is found at lower diversity and abundance than in marshes and oyster reefs. Riprap may support similar or higher nekton abundance than bare sediment.

Potentially negative effects of tidal marsh sills include the covering of shallow water benthic infauna, hydrodynamic changes, construction access/maintenance impacts, altering sediment transport, altering habitat use at marsh edge, and inferred impacts on submerged lands.

Potentially positive effects: wave attenuation; sediment stabilization; vegetation stabilization; tidal marsh creation and restoration; habitat diversity and complexity – for terrestrial, aquatic, and wetland organisms.

Current guidelines for marsh sills: use only if action is required and non-structural methods will not be sufficient; minimize channelward encroachment into subaqueous lands; make porous and as low as possible; minimize/restore construction impacts; periodic maintenance is required.

In conclusion:
Sills are a better choice for low and medium energy shorelines than bulkheads; not as appropriate at high-energy sites; tidal marsh creation/restoration at land/water interface is beneficial for Public Trust resources; more research is needed before and after sill construction. (Referenced the Hull Springs Farm demonstration project underway in Westmoreland County, Virginia.)

“Washington State Regulations on Residential Use of State-owned Aquatic Lands”

Fran McNair,
Aquatics Lands Steward, Aquatic Resources Region and Division, Washington State Department of Natural Resources

As background, Ms. McNair explained that the state owns salt and fresh waters that were navigable at statehood, but that many of the tidelands and some shorelands were sold to private individuals after statehood, mostly to promote aquaculture. The beds of these navigable water bodies were never sold. In 1971, the Washington State Legislature passed the Gissburg Amendment, ending all sales of these tide and shore lands, except to other public entities. The rules concerning the sale or trade of these lands are very strict and must ensure that the state receives a benefit from these transactions. As a rule, we do not trade or sell these lands even to jurisdictions, because we are trying to reclaim our aquatic land base. We can accept gifts of aquatic lands and have a bill before the legislature to be able to purchase aquatic lands for very specific purposes that align with our statues...

State owned Aquatic lands include 2.6 million acres of tidelands, shoreland and bedlands of Puget Sound, and navigable, at statehood, freshwater lakes and rivers state wide. The state also has jurisdiction over the Pacific Ocean out to three nautical miles. DNR has a proprietary role to ensure environmental protection, encourage public use and access, encourage renewal resource use, and foster water-dependent use and commerce and navigation. We are completely self-supporting, receiving no General Funds from the Legislature. We must earn as a result of our businesses significantly more revenue then we need to support our programs, because we provide funds for a grant program and for other state agencies for their operations. The Legislature makes the determination on the allocation of all funds. We must compete with other agencies for the use of these funds. Obviously, this is a tough balancing act to be both environmental stewards and economic revenue generator. We have developed set priorities in our strategic plan and a business plan that guides our work and programs.

I referenced the Washington Administrative Code (WAC), under which we function. The Legislature passes statutes and the Board of Natural Resources passes WAC, which often provide the details needed to supplement the statutes. Why did DNR adopt new WACs on residential use of state-owned aquatic lands? .The prior Commissioner of Public Lands didn’t want to allow any residential use. We decided that it might be okay to have residential use, but, the existing statutes and regulations lacked definitions, clarity, and guidance, thus creating the potential for environmental problems. .This situation became political due to the lack of certainty for marinas, and uses by the general public. If you are going to have this type of use, it is imperative that regulations that provide environmental stewardship are in place, and the public feels engaged in the process.

Today, the rules and the definitions are clear. A floating home is now defined as a structure designed or remodeled to serve primarily as residence over water. and may

include house barges and house boats. These structures are charged a non-water-dependent "rent", which is a market rent and not discounted. A boat that is primarily used for navigation, but is a residence is charged a water dependent rent and is charged about 30% of the market rate. For any type of residential use, the local jurisdiction needs to allow for this use in their shoreline Master Plan, regardless of whether it is in marine or fresh water.
Today's rules provide for a balance of public benefits for all citizens, while fulfilling the requirements of the Aquatic Lands Act. They ensure local government input on planning issues; provide certainty for marinas, residential users, and the public. The residential rule, in particular, is a local planning issue and local governments have a strong voice.

Highlights of the Residential Use Rules are: clear definitions, treatment of sewage waste, Best Management Practices (BMPs), limits, and open water moorage areas.

- Sewage and gray water – new rules clarify that they must be disposed upland, in accordance with federal, state, and local laws (by marinas). Marinas must also adopt BMPs for gray water. (These are currently being developed.)
- Ten Percent Limit – limits residential use to 10% of available slips in a marina; it also allows local governments to alter that limit. We allowed attrition to be the mechanism to get the marinas to 10% if they are over that amount and the jurisdiction didn't change it.
- Stipulates that no existing residential users will be evicted, as long as they remain in compliance.
- An open water moorage area – the rule defines the areas and authorizes same if local government leases and manages the area. Local governments must amend the SMP within 5 years of the adoption of the WAC to be eligible. The 5 years ended this past November. The environmental regulations are the same for open water moorage and marinas attached to the land.

I referenced the Bainbridge Island area, an important navigation route that is congested with moored boats. The new rules require the state to balance such uses, to ensure environmental protection, commerce and navigation and residential use to include local government participation.

The program has been in place five years and the marinas that have residential use seem to be complying and doing well. We do not hear the strong constituent complaints that were constant when this process began. We involved stake holders in the process and held extensive public review. We would be happy to provide our WAC and guidance as a reference if desired.

"Residential Encroachment onto Submerged Lands in Alaska"

Robin Swinford,
Natural Resource Manager, Alaska Department of Natural Resources, Division of Mining, Land and Water, Southcentral Region Office

The state role in this matter is one of proprietary management. Managing for the public interest remains the primary focus.

Ms. Swinford referenced the state constitution, Article 8 (Natural Resources), Section 1, which says, in essence:

- Encourage resource development, create jobs and economic growth in all regions.
- Ensure that resource development is based on sound science, prudent management, responsive public involvement.
- Ensure resource sustainability and multiple uses.
- Streamline natural resource leasing, sales, and permitting processes.

There are three basic regions of land management across the state: northern, southern, and southeast. The land base managed includes: surface, uplands, tidelands, shore land, and submerged land, as well as some special categories and special use areas.

This is a vast area, and her department manages 60 million acres of surface uplands. There will be 165 million acres of public land statewide, once all current conveyances are completed. (Some of this will revert to local governments.)

Ms. Swinford described management "controls" used as: state constitution, state laws, regulations and policies, and area management plans. In general terms, disputes are settled by a state preliminary decision, followed by a public notice, followed by a final decision. Administrative appeals go to court.

Regarding residential encroachment, the general public generally views economic growth as something that naturally spurs residential growth – a good thing. There exists a certain lack of education, lack of enforcement, and "frontier mentality" across the state.

Economic growth leads to greater need for access, generally met by boats and float planes and a growing phenomenon of residential houses built over water (due to the lack of road access).

In general, the public is not very informed regarding land use regulations, and often questions authority. This is combined with a general lack of enforcement, due to the vast geographic area – 23,000 miles of coastline – and the fact that the state DNR does not have the authority to do so.

Alaska is still known for its "free land." As a young state, only 48 years of statehood, residents want to maintain a free lifestyle and resist government intrusion.

Development is encouraged with little oversight. There is still a tightly held belief that you can do whatever you want to do here – among the older generation – and the new generation is following suit.

Encroachment into tidal and submerged lands is regulated as:

- Generally allowed uses, adjacent to existing private land
- Anchoring a mooring buoy – no problem!
- Float dock and boat haul-out have been defined; as have boathouse and floating breakwater. But people are going way beyond these accepted definitions (see slides, examples).

When is such encroachment problematic? The state says: if it impedes access to water by an adjacent landowner; if the local community wants management control on the amount of development occurring; and if it is a hazard to navigability.

Authorizations needed? There are no specific authorizations, regulations, or statutes governing private land.

The state has 3 tools for managing submerged lands:

- Permits for short-term use
- Easements for long-term use
- Leases, which are designed for long-term use and interests. This is the only "real" tool to deal with private residential encroachments. A fee is based on acreage used and while it is expensive, it is not a good tool for managing growth.

In summary, how does Alaska handle encroachment issues? Historically, "we ignore them." In the past, we have created statutes or regulations to authorize a particular type of encroachment within a specific area. Then we repeal the statute so that no more can be authorized (this is a little like a "grandfather" clause). We also create discrete policies, called a "director policy" which is created to deal with a specific problem.

What should we do about the problem in the southeast region over the rising number of float homes? We should develop new regulations that establish: that authorization is easily obtained, at a low cost; that fees are fair, and bonding and insurance requirements are met.

The pressure is on to manage Alaska's coastal growth. Government assistance is now being sought (by landowners), but apprehension still exists. There remains an inherent lack of trust with government involvement.

From a state perspective, we don't want docks that are worth more than their houses or a regulatory process that is cost-prohibitive. We want to learn from other states and begin

an education process with people, and encourage them to become more involved in managing state lands. We are currently using “Halibut Cove” as an exercise in the process of the state working with a local community.

"Determining the Value of Previously Filled Subaqueous Lands in Virginia"

Bob Grabb,
Chief of Habitat Management Division, Virginia Marine Resources Commission

Mr. Grabb noted that we followed English Common Law regarding the use of subaqueous lands until 1776. He then briefly reviewed important, related milestones in Virginia legislative history, as follows:

- 1779 – A land office was established to issue patents for "waste and un-appropriated" land.
- 1792 – Virginia prohibited granting of any bed of any river/creek in the eastern part of the Commonwealth
- 1819 – The General Assembly extended the boundary of all riparian lands to the low water line (7,000 miles tidal shoreline estimated now in the state, and the public owns less than 200 miles of that shoreline)
- 1873 – Legislature reinstated the prohibition against granting beds and shores if not previously conveyed, but removed the requirement that they be used as a common, See Sect. 28.2-1200. Virginia owns the beds of navigable waters and cannot grant to private ownership. Title of filled bottoms remains with the state. Lawfully filled land authorizes riparian owner's exclusive private use of that filled area, including filled bottoms. This exclusive right to use state-owned bottoms constitutes a "compensable" property interest.
- Art XI, Section 3 – Special protection was afforded to natural oyster beds defined by the Baylor survey.

Today, the only mechanism whereby a property owner can acquire fee simple interest in a lawfully filled land is by virtue of an Act of Assembly. So the question posed is: What is that worth?

Mr. Grabb referenced Ch. 201 of the Acts of Assembly, 2006, which involved the transfer of submerged land to Jerry Ferguson from oyster ground surrounding an old wharf site at end of long causeway on the Rappahannock River. Mr. Ferguson wanted to purchase 1.2 acres of filled land lying within the original 11.2-acre oyster lease and beneath a manmade island; this Act allowed such conveyance.

In 2005 the Commission adopted a fee structure for upland creation / fill placement, as follows: Private individual at $1 per square foot; commercial entity at $3 per square foot.; and industrial user at $5 per square foot.

Other actions/bills introduced during this timeframe were reviewed:

- HB 1533. Moon Engineering wanted to buy old shipyard land and acquire title to the subaqueous land, but that included both filled and unfilled lands. The governor introduced an amendment for payment of fair market value considerations deemed proper by the MRC. Moon went back to the original plat of 1871 to see original land and fill and subaqueous land, for purpose of getting clear title to sell it.
- 2006 Legislative budget amendment was introduced that prohibited even the governor from selling "unfilled" land.
- Ch 879, Acts of Assembly, 2007 – Says that the Commonwealth shall not convey fee simple title to state-owned bottomlands covered by water.

28.2-1200.1.B

- May convey title if lands were lawfully filled
- Authorized by statute
- Pursuant to court order
- Authorized or permitted by state after 7/1/60
- Filled under apparent color of authority prior to 7/1/60

28.2-1200.1.C

- Shall compensate the Commonwealth in an amount commensurate with property interest conveyed
- Equivalent to 25% of assessed value (exclusive of any buildings and improvements)
- Assessed value is the average of local RE tax assessments for preceding 10 yrs
- If no such assessments are available, value calculated as %, by square footage or acreage, that specific parcel is of a parcel for which assessments are available

28.2-1200.1.D

- If MRC determines unique circumstances, may allow grantee to compensate in an amount less than 25% of assessed value of specified parcel

So, returning to the Moon of Norfolk, LLC case:

- Under the old procedure – state fees collected at commercial rate would be $325,398; at industrial rate, $542,330.
- Under new procedure – average assessed value is $597,410 and 25% is $149,352.5; ratio of filled to unfilled land is 83%, so compensation due the state is $123, 962.58.

How this new guidance will be used and how it will be accepted remains to be seen. The Moon example has yet to come to the Marine Resources Commission for consideration.

"Marine Leasing on South Carolina's Coastal Submerged Lands: Potential Options and Considerations for Commercial and Conservation Strategies"

Jessica Berrio,
Research Assistant, South Carolina Sea Grant Consortium

Ms. Berrio described her thesis project, working for South Carolina Sea Grant. Her thesis question: How does SC currently manage submerged land what could we borrow from others? She found a document published by the Rhode Island Coastal Resources Management Council very helpful.

As background, the state has 196 miles of ocean front and 5,000 tidal wetlands to manage. The definitions of coastal zone and critical areas were given. The state owns to the mean high water mark and out 3 miles; also recognizes the Public Trust Doctrine (PTD). Ms. Berrio narrowed her focus to consider specifically the leasing of submerged lands, and discovered the following.

With regard to shellfish harvesting:

- No leasing program exists; rather a licensing program for shellfish harvesting and aquaculture.
- Exclusive area license is granted for industry, for commercial purposes.
- Areas of shellfish grounds –
  - 20 private shellfish grounds covering 100 acres; charge users at $10 per residence
  - 62 state shellfish grounds account for 222 acres
  - Shellfish culture permits cover 1800 acres; permits mostly for oysters and clams
- Private grounds: annual fees run $5/acre; licensing requirements for specific area needed; additional fees are charged for mechanical vs. non-mechanical harvesting.
  - Planting quotas of 20 bushels/yr have been established

Marinas represent other permitted activities.

- Commercial and community docks 250 ft +; marinas are not charged above but fees are higher for community docks
- Conversions from traditional leases to condo sales occurring, creating "dockominiums"
- Leasing/selling of these dockominiums is big business, range from $50,000 - $500,000; but question remains, are they legal?
  - Permit does not grant ownership to land (but no lawsuits brought yet)

Ms. Berrio also reviewed conservation leasing case studies, e.g., Port Susan Bay in Washington.

- Types of leasing options created: exclusive area lease up to 30 years, shorter term leases, and conservation easements
- NC-Pamlico Sound: smaller scale leasing
- NY-Great South Bay: creating partnerships to help with costs; e.g., TNC partnership to help restore large area
- Idea is still young; she hopes SC will adopt some of these leasing options
  - Potential to use in degraded or poor water quality areas
  - Restricted shellfish classification areas

She also looked at the Gulf Coast and Southeast states:

- Most have a lead and support agency
- Most have a fee system in place (TX $850/acre, LA at current market value, AL uses a bidding process, etc.)
- Water bottoms, marinas, aquaculture are managed by lease; also by easements and right-of-ways
- Lease revenue supports: restoration/coastal programs and general state fund; state treasury for waterways improvement fund

She also researched leasing for private uses: specifically, compensating the public and addressing profits being made by private entities.

Ms. Berrio concluded that South Carolina needs to better regulate coastal activities: to prioritize activities, consider user conflicts, and consider potential future uses (such as oil and gas, wind farms, etc.)

- Submerged Lands Inventory is needed in SC; identify current status of PTD and use current technology
- Consider public and various stakeholders (educate and involve)
- Specify leasing activities: extraction, commercial/industrial uses, aquaculture, etc.
    - Base on marine acreage
    - Address conservation activities

General Fee System:
She discovered fees are based on several methods: annual, bidding, royalties, current market value, appraisal, incentive plans, fee installment plans, general credit system (those who help collect data, for example), and conservation.

Fees are used for the state general fund and/or conservation programs. Lease terms vary, as follows:

- Length: Short-term, long-term and/or activity dependent; renewable, re-evaluations, violations
- A number are issued for each activity: marine acreage, moratoriums, where can occur
- Regulating agencies: lead plus support

Conclusions:
South Carolina is the only state without a submerged lands leasing policy. It is up to state General Assembly to determine the efficiency and effectiveness of such a policy and bring legislative changes.

Recommendations for South Carolina:
Conduct a survey, educate and involve the public; conduct legal analysis; conduct economic analysis; determine if conservation leasing should be considered; use information/models from other states.

“Protecting Our Underwater Cultural Heritage: International, National and State”

John Broadwater,
Chief Archaeologist, National Marine Sanctuary Program, National Oceanic and Atmospheric Administration (NOAA)

Mr. Broadwater spoke of the importance of preserving our underwater cultural resources and then followed with these questions:

What are submerged cultural resources?

- Historical and archaeological remains that are located underwater
- Shipwrecks are best known; artifacts, refuse, sunken remains, etc.
- Inundated Native American sites; villages and hunting camps
- UN uses the term: Underwater Cultural Heritage (UCH)

Why are they important?

- Non-renewable
- Can give us unique information about our past
- Provide exciting opportunities for recreational and educational experiences

What problems exist?

- Looting and commercial salvage – intentional removal and site damage
- Souvenir collecting – removing just a “keepsake”
- Inadvertent human impact – anchor damage, dangling gear, resting or hanging onto a wreck, etc
- Erosion – from currents, wakes, runoff, waves
- Development – construction, dredging, draining, etc.

History of Preservation Law – a global perspective:

- Law of the Sea Convention, 1982 – 100+ countries participated, large impact on our coasts, definitions given for areas/features
- UNESCO Convention on Protection of Underwater Cultural Heritage, 2001 – this was an international effort to create a convention, to provide an *international* scope to antiquities preservation laws
- Antiquities Legislation (1906-2005)
- International Law of Salvage (admiralty law)
- U.S. Multi-lateral Agreements

The U.S. has not signed the Law of the Sea Convention, but the U.S. always attempts to comply with international legislation. Maritime zones have been established: from high seas, to EEZ/200 mi, to 24 mi contiguous zone, to 12 mi territorial sea, to 3 mi state territorial zone (within that 12 miles).

Many federal laws cover shipwrecks in U.S. waters; the latest is the Sunken Military Craft Act of 2005, which applies to sunken naval and government vessels and aircraft from all nations. Myriad state laws also exist.

Admiralty law – intended to encourage rescue of vessels, to save lives and property by providing compensation to salvors; does not apply to historic shipwrecks imbedded in state bottomlands and covered by the federal Abandoned Shipwrecks Act.

- Admiralty law recently used to gain control over shipwrecks and their cargo
- Bush used AA to designate the largest marine protected area in world: the Papahanaumokuakea Marine National Monument in the Northwestern Hawaiian Islands.

National Historic Preservation Act:

- Mitigate potential damage – regulation and permits
- Inventory and assess – management and research

Archaeological Resources Protection Act:

- Applies to resources 100+ yrs old on public or tribal lands
- Prohibits excavation, removal etc.
- Cannot transfer resources across state line
- Provides guidelines, BMPs and penalties under law

Abandoned Shipwreck Act of 1987 – an umbrella law for the states:

- Management and control by states, admiralty does not apply, gave "teeth" to protection efforts

Sunken Military Craft Act, 2005:

- All military craft (ships and aircraft) of U.S. service are still property of U.S. government
- Same right and protection for state craft from another country that lie on U.S. bottomland
- Encourages development of international agreements to protect sunken state craft
- Regulations still being developed

National Marine Sanctuary Regulations Regarding UCH:

- Prohibits removal/injury of UCH without permit
- Prohibits alteration of seabed
- Enforcement of regulations upheld in Admiralty court
- No Law of Finds, because UCH not abandoned
- This is available protective tool for use by states (contact NOAA)

- Two sanctuaries established to date for cultural resource conservation purposes:
  - USS *Monitor*
  - Thunder Bay

- Best way to protect shipwrecks: get everyone to the table and get them to help develop a special agreement.

Discovery of foreign vessels:
A Virginia example was cited – the ships *Juno* and *La Galga* discovered off Assateague Island. In this case:

- Jurisdiction of state bottomlands vs. federal national seashore questioned
- Jurisdiction with other states
- Country of Spain made claim of ownership

- Supreme Court refused to hear the case, supporting lower case ruling that Spain's claim of ownership was valid.
- Spain requested that they be left undisturbed as military gravesites, 2001

Mr. Broadwater's recommendation on how to proceed with permits and related matters: consult with others at the state and federal level.

In closing, Mr. Broadwater mentioned the Convention on the Protection of the UCH of 2001. Many states and NOAA are complying with this convention.

"USS *Monitor*: Discovery and Preservation"

Jeff Johnston,
Program Specialist, *Monitor* National Marine Sanctuary, NOAA

The USS *Monitor* was the first national marine sanctuary and it was designated to protect a *cultural* resource. Mr. Johnston gave a brief background on the history of the ship's recovery.

The ship was a Union ironclad; a very innovative warship that used a rotating gun turret.

NOAA wanted to preserve it, but had to locate it first; used side-scan sonar (one of its first applications) and found the ship 16 miles out, in international waters. These were tough waters to work in, where the Gulf Stream and Labrador Current collide.

Partnerships with the U.S. Navy and the Mariners Museum were very important.

Mr. Johnston reviewed how they stabilized the ship; then installed an engine recovery structure over the wreck. Attention then focused on the turret; it was lifted with a large "spider" onto the platform of the Naval vessel.

Once it was transported to the museum, priorities were to: first document it, conserve it in saltwater, then protect it. It is considered a premier Civil War attraction, locally and around the world.

The site of the shipwreck was off of "Diamond Shoals," also known as the graveyard of the Atlantic.

NOAA staff and Navy divers continue to work at the wreck site to document what's left. Future dives and recoveries are planned.

Hurricane Isabel hit this site hard and rendered great damage. Such natural events are a management issue for NOAA, with regard to long-term disposition of underwater cultural treasures.

"Developing Federal Maritime Zones: History and State of the Art"

Meredith Westington,
Chief Geographer, NOAA, Office of Coast Survey

Ms. Westington first provided background for the maritime zones digital mapping project, which began in 2003. Essentially, NOAA evaluated all large scale nautical charts, examined the baseline, and redefined the U.S. maritime zones as set forth in under customary international law (United Nations Convention on the Law of the Sea). NOAA's nautical charts contain the "official" depiction of the limits of U.S. national jurisdiction. Ms. Westington described the different jurisdictions projected from the U.S. baseline, including the 12 nautical mile territorial sea, the 24 nautical mile contiguous zone, and the 200 nautical mile exclusive economic zone (or EEZ). Ms. Westington also mentioned that NOAA charts a Three Nautical Mile Line, previously the outer limit of territorial sea until 1988 when the limit was expanded to 12 nautical miles. It is retained on nautical charts because there are some domestic laws that still reference a 3 nautical mile territorial sea. As background, basic terminology was addressed as follows: "Maritime boundaries" refer to lines between two opposite or adjacent coastal States or countries, and "maritime zones or limits" represent non-competing interests so the full breadth of each jurisdictional area is projected from the baseline.

The term EEZ was described in its international and domestic contexts. Internationally, the term references a zone that extends to 200 nautical miles and is contiguous to the territorial sea, whose outer limit is 12 nautical miles in the U.S. by Presidential Proclamation. Domestically, the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) references the term EEZ and defines it as a zone that extends to 200 nautical miles and is contiguous to the federal/state boundary.

In terms of establishing the outer limits of the maritime zones, the normal baseline (U.S.) derives from 1958 Convention on the Territorial Sea and Contiguous Zone as well as Article 5 in the 1982 Convention. According to Article 5, the baseline is the low water line along the coast marked on large-scale, officially recognized charts. Since the term low water does not represent a specific tidal datum, the U.S. interprets this article to reference the lowest charted datum, which is Mean Lower Low Water in the U.S. In 1970, U.S. Baseline Committee was formed as an inter-agency forum to discuss and make determinations on all questions relating to the official delimitation of the U.S. coastline. The Committee, which is chaired by the State Department, includes NOAA, Department of Interior/Minerals Management Service, and Department of Justice, NGA, U.S. Coast Guard, and others.

To evaluate the baseline, NOAA digitized relevant portions of the charted low water line from the largest scale, most recent edition nautical charts, including mouths of rivers and bays—which had to be defined, as follows:

- River: flows directly into sea; baseline is straight line across mouth
- Bay: area must be well marked indentation; area of bay must be greater than area of semi-circle whose diameter is a line drawn across mouth of indentation; line drawn across must not exceed 24 nautical miles in length

Other definitions were needed, as follows:

- Ports: permanent and integral part of harbor system; offshore installations and artificial islands not considered permanent harbor works; nor piers

- Low tide elevations, under Article 13: naturally formed features, above water at low tide and submerged at high tide

Other projects currently underway and areas of focus:

- Delimiting the territorial sea – the inner and outer limits
- Evaluating the charted baseline vs. the Submerged Lands Act coastline – how could they differ? (consider for example, rocks/jetties, storm changes)

All of this work is available for download and use in a GIS at two Websites:
http://nauticalcharts.noaa.gov/csdl/mbound.htm
http://nauticalcharts.noaa.gov/csdl/eez.htm

"Mapping Federal Submerged Lands: The OCS Marine Cadastre"

Steve Kopach,
Chief of Mapping and Boundary Branch, U.S. Department of the Interior, Minerals Management Service, Offshore Energy and Minerals Management, Division of Leasing

The Minerals Management Service (MMS) was established in 1982 to manage the outer continental shelf (OCS). The Bureau of Land Management handles onshore resources and MMS manages offshore activities. Together, this accounts of 2.3 billion acres on and offshore managed in the U.S.

OCS manages to 200 miles out, generally. Key programs include: oil and gas, alternative energy, sand and gravel, coastal impact assistance, and other revenue sharing (with states). They are responsible for 1.76 billion acres; on which they issue leases.

Note that 30% of our domestic oil and 20% of our natural gas come from the offshore area; this represents roughly $8 billion in annual revenue.

MMS works primarily in the Gulf of Mexico, the Pacific, and Alaska regions. They now have the ability to operate in deeper waters, which opens up new areas of exploration.

The agency's operational focus, with regard to leases, is: safety, environmental protection, and at a fair market value.

Mr. Kopach made the point that large areas of the U.S. are not currently utilized.

The Mapping and Boundary Branch determines federal and state jurisdiction under the Submerged Lands Act. He referenced the "National Spatial Data Infrastructure" project, as follows:

- Data Themes: Baseline determinations; Offshore (Cadastral); Marine Boundaries; Offshore Minerals; Outer Continental Shelf Submerged Lands
- Develop maps and diagrams
- Use Universal Transfer Mercator Grid System (UTM)
    - Discussed OCS Blocks, 4800 meters per side
- Products : planning area maps, leasing maps, supplemental official block diagrams (where needed)
- Submerged Land Act boundaries to 200 nautical miles out are mapped
- Considerations: marine sanctuaries are marked (but not completed); definitions still problematic

A new development/response is the OCS 5-year Oil & Leasing Program; specifically incorporates alternative energy. He noted the Mid-Atlantic planning area off the Eastern Shore. New leasing areas outside the 25-mile buffer are under discussion by Congress. A lease sale is scheduled for 2011.

Other areas of agency focus:

- Alternative energy uses of OCS and their role in permitting and regulations. New, energy alternatives may be able to use former platforms, for example. See website for new activities.

- Interagency work group on ocean and coastal mapping; an inventory has been established.
- Marine Boundary Working Group is trying to standardize things, best practices for boundary making, etcetera.

“Marine Spatial Planning: International and National Perspectives”

Andrea Geiger, NOAA Coastal Services Center

Ms. Geiger focused on a Coastal Services Center initiative, Marine Spatial Planning:

- Marine uses and rights – showed a diagram of vertical air/water column
    - Allocates marine space for specific uses; balanced approach between conservation, social, economic objectives
    - One tool for ecosystem-based management
    - Ocean zoning; regulatory measure to implement spatial plan
- Ex: Used internationally, in Europe, Canada, Australia (for Great Barrier Reef)

She recommended a UNESCO Workshop publication; can find it on the Web at http://ioc3.unesco.org/marinesp/ .

She also referenced work in Massachusetts, where a broad management plan for state waters is under development.

She closed by saying that the Coastal Services Center has two, related focus areas: marine boundary making and decision-support tools.

"The Multipurpose Marine Cadastre"

Jim Fulmer,
Cartographer, Department of the Interior, Minerals Management Service

David Stein,
Spatial Analyst and Project Manager, NOAA Coastal Services Center

The Energy Policy Act of 2005. Section 388 amended the OCS Lands Act and authorized the Dept. of the Interior new authority to regulate Federal offshore renewable energy and alternate uses of the Outer Continental Shelf (OCS), and as the lead agency to establish an OCS Mapping Initiative to assist in decision making related to alternative energy uses on the OCS.
Mr. Fulmer then reviewed the OCS Mapping Initiative. Multiple agencies are involved under a Marine Boundary Working Group – to maximize public resources and avoid duplication of effort. They develop data content standards and standardized methodologies. They are working to bring a digital web map viewer into being (coordinating this with other agencies).

What exactly is the Marine Cadastre? It is a legal framework to tie positions between features on the Outer Continental Shelf (OCS). It is also an information system, for rights/roles on the OCS.

Why build this new map? Importantly, it provides an overall infrastructure for the public to view rights/responsibilities in this geographic environment. It helps decision-makers make best decision, good ocean governance. It will provide information on OCS federal, permitted activities; obstructions; undersea cables; offshore aquaculture; and information about safety, security, and conservation areas.

It provides a view of who owns what, and the rights associated with ownership. Mapping the shoreline more significant today due to pressures; many lines are ambulatory.

The map basis is the UTM grid. Data themes incorporated are the Submerged Lands Act, OCS boundaries, and more. Supporting themes – such as anything affecting others on the OCS (like alternative energy devices) – are also incorporated.

Why is it so important? It is the one place that ties all this information together!

Dave then reviewed the process to build the map, noting that it:

- Integrates with existing systems; Geospatial One Stop
- Open standards
- Simple, clean interface
- Data must reside with AOR (Agency of Responsibility) and kept up to date
- Uses legislative atlas, existing template
- Geospatial One Stop (GOS)
    - Uses metadata
    - Has marketplace for planned acquisitions
    - Communities of interest
        - Very functional for choosing and printing, and report generation
    - Takes data from many sources, put on their server and push out through Arc IMS Web

He noted the importance of keeping data up to date; they will harvest data out of other agencies. Other issues to be aware of: it uses a geographic coordinate system; it is a graphical view of the data (not data itself); there will be compliancy issues (due to sensitive nature of data); the format of the original data differs sometimes – challenging construction; and working in 3 and 4 dimensions is challenging their budget.

Future development issues: who will host it, maintain it, add web features, etcetera. Also, have the potential to incorporate other data sets: utilities, alternative energy, conservation areas, human uses.

"Coastal GEMS: A Tool for Coordinated Coastal Planning & Education"

Laura McKay, Program Manager, Virginia Coastal Zone Management Program

Ms. McKay cited the Coastal Zone Management Act, which was created in 1972, and noted that in Virginia, ten agencies have purview over aspects of the coastal zone (tidal waters out to 3 miles offshore). Virginia's Coastal Program focuses on: coastal resource protection, sustainable uses of the coastal zone, and coastal management coordination – and maximizing the availability of data while doing so.

She noted that two-thirds of the population now lives within a quarter of the land area in Virginia. Population density is rising fast in tandem with global warming (and, sea level rise). Fifty to eighty percent of our tidal wetlands will be lost if we experience 1.5 to 2 ft. rise in sea level. That means more submerged lands to manage.

She also pointed out time and project "realities" of the modern workforce, where people jump around between jobs, yet projects often span a long time period (20+ yrs). Other challenges: the Office of Governor – and administration – changes every four years and there continues to be a lack of public support for environmental initiatives. For example, in Virginia less than 1% of the state budget goes to natural resource protection.

Recent Coastal Program focal areas include the Seaside Heritage Program and emphasis on coastal zone management through new, enforceable policies enable by better maps. A recent summit resulted in a "vision" for Virginia's coastal zone that included both green and blue infrastructure. The goal: to better link local land use policy and state water use policy, and help the public understand.

The result is the Coastal GEMS Mapping Project, which serves as a repository of map layers, which are attributed to their source (such as VIMS, etc.) The map brought together 100 coastal projects, and was launched in February 2007. It is comprehensive in scope, giving the use the ability to query water features, shoreline, land, wildlife, recreational, conservation planning tools, reference layers (county boundaries, for example).

Other cool features: it includes links to fact sheets for every data layer, including who owns the data, how to get it, why we should care, management entities, and more. You can search by various mechanisms – by locality, for instance, and various themes. A news and events menu provides related links; another tool helps you identify a specific natural feature.

Version 2 is about to be released – with the capability to download into PDFs to create general reports!

How might you use this new application? Examples given: reviewing a pipeline proposal from an offshore facility; designating a seaside water trail to keep it away from sensitive resources; prioritizing lands for acquisition (using multiple agency data layers); establishing shellfish aquaculture zones; and more.

"Assessing the Impacts of Land Use Change on Hard Clam Aquaculture"

Matthew Strickler,
Sea Grant Fellow, NOAA Office of International Affairs

Mr. Strickler reviewed his thesis project, entitled, "A GIS-based Watershed Model to Map Use Conflicts and Inform Policymakers." The problem he studied was shellfish aquaculture, which depends on good water quality, versus coastal development and, by inference, increased nutrient pollution in those same areas.

Mr. Strickler gave some background on the aquaculture in Virginia, as follows:

- Eastern oyster and hard clam are the primary species harvested
- Clam growers grossed $27 million in sales during 2005
- Temperature and salinity requirements needed for growth present physical and spatial constraints; also environmental concerns.
- W/Q is very important for healthy animals; serious sickness presents real risk
- Bacterial standards have been established for fecal coliform levels

The location of the study area was Old Plantation Creek on lower Eastern Shore, bayside. The area has long been characterized by large farms, but this watershed is now changing to residential use, with a new 3000-unit housing develop featuring 2 golf courses. With the build-out planned, significant changes will occur along the shorelines as well as the Route 13 corridor.

What does this mean and how do we use the information? His methodology:

- The target pollutant is fecal coliform bacteria (the indicator)
- Used GIS: to map land uses and shellfish leases
- Built a watershed loading model, to estimate bacterial loading
    - Spatially explicit; precipitation driven, delivery ratio (hydro features)
- Built a water quality model to predict bacterial concentrations
- Built an economic model to determine impacts of closures

He applies the watershed model in a predictive fashion; useful for planning over the long term. Other features of the model:

- Reviewed inputs and outputs
- Delineated sub watersheds, linked to creek bottom; can simulate events and observe data
- Delineated closed areas: present and future; upper creek closed, middle with new land use scenario - 151 acres of bottom land condemned (all leased for shellfish growing)

With such water quality declines, growing waters are condemned – what does it mean?

- Loss of $24 - $49 million to the economy: based on input-output economics model (Kirkley)
- Direct, indirect and induced impacts
- Annual industry sales: $7.5 mill to close to $17 mill out of industry
- Reopening: realize a gain of $1-2.25 million

Knowing that nonpoint source pollution leads to significant economic losses, he raised rhetorical questions, such as:

- Should we address it?
  - Consider that this "loss" competes with contributions from home builders and others to the economy
- How do we address it? Ideas:
  - Recognize the jurisdictional complexity of this issue; identify policy gaps; eliminate market failure. Here are a few possible responses:
    - Local level: mandate pet waste disposal and septic pump-out
      - Offer builders proffers for environmental protection
    - State level: let localities limit impervious surfaces
      - Hold locals accountable
      - Improve balance between public/private uses
    - Federal level: Employ predictive modeling
      - Step up a "total maximum daily loads" (TMDL) implementation schedule

“Marine Ecoregional Planning”

Jay Odell, The Nature Conservancy in Virginia

Mr. Odell introduced the idea of marine ecoregional planning and defined it as:

- Assessments that integrate diverse data on habitats, species, marine resource use to provide baselines for ecosystem-based management approaches
- Identification of sites that best represent diversity of species and habitats within an ecoregional planning area -- the “portfolio”
- Information to assist in development of strategies to abate threats
- The next generation of marine ecoregional assessments will include analyses of connectivity, meta-population and food web dynamics, and better characterization of habitat-species relationships.

- Steps:
    - Identify conservation targets -- habitats and species
    - Set conservation goals for each target (number, extent, spatial distribution)
    - Assess viability: condition and threats
    - Portfolio: site section
    - Select priority areas for conservation based on ecological importance and biodiversity representation.

- Methods:
    - Establish expert teams (species, habitats, peer review)
    - Identify targets – the habitats and species to focus on for effective conservation of the whole system
    - Map those locations and evaluate viability – how likely are they to persist over time given current condition and threats
    - Establish ecological representation goals – minimum goals for conservation and restoration
    - Identify, map, analyze threats/positive factors – human uses that impact marine ecosystems and enabling conditions for conservation

- Target selection:
    - Course (habitat types, e.g. seagrass, salt marsh, rocky subtidal, etc.)
    - Species assemblages (e.g. anadromous fishes)
    - Fine (threatened and endangered, species unlikely to be effectively conserved through habitat protection alone)

- Compilation and analysis of spatial data:
    - This is the most labor intensive step and includes collection and integration of diverse data that characterizes the ecoregion, including data layers for bathymetry, substrate, currents and other oceanographic conditions, diverse, habitats, species, and human uses.
    - A marine ecoregional assessment currently underway for the NW Atlantic (east U.S. coast) is utilizing comprehensive benthic survey data to characterize marine habitats

- Benthic conservation targets:
    - Marine ecoregional assessments have largely relied on geophysical “surrogates" for biodiversity – constructed habitat classes assumed to support diverse species.
    - Conservation goals were then set based on mostly untested assumptions
    - The NW Atlantic Assessment is characterizing benthic habitats using principal components and classification and regression analysis of detailed species and habitat data.
    - Proof of concept pilot study for this method indicates potential to improve regional scale marine conservation by providing a robust marine habitat classification system that explicitly links species level data with specific habitat types.
    - Next steps include using marine habitat classification to produce context specific maps showing sensitivity to various human impacts.

- Human use mapping – such as fishing, shipping, energy production, etc:
    - Multiple uses and multiple management objectives – challenging and necessary precursor to ecosystem based management approaches
    - GIS overlays of human uses and sensitive areas can help inform marine area management plans and strategies to balance ecological and economic objectives.

Other Remarks:

- TNC has worked with partners to produce and update marine assessments around the U.S and around the world
- The NW Atlantic Marine Ecoregional Assessment covers Cape Hatteras to the Bay of Fundy and is scheduled to be completed in early 2009.
- The Nature Conservancy defines a successful marine ecoregional assessment as:
    - Objective and transparent, created with diverse partners
    - A helpful decision support system for locating appropriate areas for energy infrastructure, aquaculture, dredging, and other human uses
    - A biodiversity blueprint to inform ecosystem based management approaches
    - Baseline information to support regional ocean governance initiatives

"Clean-up on State-owned Submerged Lands: Federal Authority vs. State's Rights"

Kerri Nicholas,
Assistant Attorney General, Environmental Section, Virginia

Ms. Nicholas gave a brief overview of the federal CERCLA authority (the Comprehensive Environmental Response, Compliance, and Liabilities Act). The law is known as SuperFund; it was amended in 1986 by SARA (Superfund Amendments and Reauthorization Act) and funded by a tax on chemical companies.

CERCLA is a "reactive" statute used to remedy problems from past uses and regulate remediation efforts. Other aspects of the law:

- Notification requirement
- Regulates places rather than persons
    - Any bldg, structure, installation, equipment…
    - Hazardous material sites are covered
- Private rights for recovery of cleanup costs
- Liability can be joint and several, or several
- Includes limited waivers of sovereign immunity; 120a4; when such facilities are not included on the National Priorities List
- §121(e)(1)- No federal, state, or local permit is required for portion of any removal or remedial action conducted entirely on site
    - What is on-site? Aerial extent of contamination necessary for implementation of response action

States rights with regard to the statute:

- EPA manages Superfund program in VA
- DEQ involved in its implementation
- States may judicially challenge a decision
- States should participate in applicable, relevant, appropriate requirements
    - 19 private and 13 federal sites in VA
- Right to substantial involvement in remedial action and future operation/maintenance of remedial and removal actions (groundwater monitoring, maintaining a cap over pollution site, etc)
- Virginia Code §1-405: no transfer to Commonwealth until remediation is satisfactory and approved by Governor

Ms. Nicholas then discussed the Atlantic Wood Industries case on the Elizabeth River

- Creosote treated wood
- EPA preferred remediation includes new bulkhead construction – requires filling on state-owned bottom land
    - New land accrues to AWI by right?
    - G.A. would need to allow by legislation to give title to AWI

The debate continues on whether state permits are required at federal remediation sites. There exists a lot of differing interpretation in this area of the law, raising more questions for the courts to review.

"Naval Installations and Operations: A Federal Perspective"

Rymn Parsons,
Assistant Counsel, Naval Facilities Engineering Command, Mid-Atlantic, Virginia

Using theoretical examples, Mr. Parsons took a closer look at state and federal laws. (With regard to decisions made under the Submerged Lands Act and case law, much of that activity comes out of the Navy in Hampton Roads and the Coastal Zone Management Act.)

- Has 6-page outline to include on Web

- VA Code, title 28.2, ch. 12: What does statute say? Are federal agencies "persons" under this law?
  - No real definition of what a person is in this part of code; government and government agencies/state;
    - Does not specify federal government

Submerged Lands Act:

- Lands beneath navigable waters belong to the state
  - Filled or reclaimed by US are excepted
- Federal retained rights
  - Navigational servitude and control for commerce, navigation, national defense, and int'l affairs
  - Right of first refusal to buy land for national defense

Mr. Parsons stated that a great deal of naval-owned lands in Hampton Roads is *filled* land. Navy ownership of these lands has not been challenged.

The question, "Can the Navy impose navigational servitude?" is a question of federal law. (States will be heard, but decision resorts to federal level.) The most prominent examples are highways and tunnels built for purpose of commerce.

Does this mean that any time the Navy builds piers for aircraft carriers, operating equipment, etcetera on Submerged Lands for national defense use, it needs to purchase that land because it is a "taking"?

Other cases/examples he reviewed, briefly:

- Commodore Park on Mason Creek
  - Got federal appropriation to dredge in Willoughby Bay for seaplanes
    - Case went to Supreme Court: feds get to do it, don't have to pay; under commerce clause
- Yorktown, oyster grounds near long Naval pier, restricted area
  - Court says okay, citing commerce clause
- Removal of obstructions in Navy operating area also allowed
- Older cases: Bailey case in Norfolk, commerce servitude; dredging Eliz R (Navy won)
  - San Francisco: fuel pier is NOT navigational servitude

With regard to the CZMA: How hard a look do we take at Virginia law and the statute to demonstrate consistency with it?

- Federal submerged land not statutorily within coastal zone, but effects are important and must be consistent with state management programs
- Reserved federal powers: control over SL, navigation and project funding

- Consistency to maximum extent practicable: do retained powers excuse full consistency? Not if other federal law explicitly says we don't have to
- Virginia Submerged Lands Program: state permit not required to demonstrate consistency

He cited another case, Friends of the Earth v. the Navy:
Is state permit required? The court said the Navy needs to comply with the water quality focus of the state permit. It did not require the Navy to get permission from a state agency to build on submerged land owned by the State of Washington.

In concluding, Mr. Parsons stated that there remain many issues of interpretation, and that inter- and intra-agency disagreements occur frequently.

Mr. Parsons' views do not necessarily represent the position of the Department of the Navy or the Department of Defense.

"Remediation of Contaminated Sediments in the Elizabeth River"

Joe Rieger,
Staff Scientist, Elizabeth River Project, Virginia

Mr. Rieger is a scientist with the Elizabeth River Project—part of a 200-square- mile watershed, encompassing four cities and the Great Dismal Swamp (freshwater source and a "trap" estuary). The Elizabeth River Project (ERP) is a nonprofit group that works cooperatively with federal, city, business interests in the watershed; has 2000 members, including 59 industries.

ERP focuses its efforts on actions that will make the most difference. Their research on the mummichog is the focus of today's presentation. Briefly, mummichogs are found in Elizabeth River sediments contaminated with PAHs. Many populations have 75% pre-cancer or cancer indicators. Specific sites referenced: Atlantic Wood, Money Point (lead), and Scuffletown Creek.

Details of sites:

- Money Point Background:
    - 189 acres of subaqueous lands dredged
    - 10.3 mill cubic acres
    - Trust Fund established in 2003 to focus money for rest work; $5 mill to dredge for remediation
    - Plan for cleanup – broad stakeholder participation; took landscape approach – oysters, uplands, poll prevention, multi-faceted
- Money Point remedial actions:
    - Dredging at northern and central corridors, remove hotspot
    - Habitat enhancement at milder areas – provide continuum from soft bottom to oyster reefs, to berm area
    - 19 acres site
    - Saltwater marsh, 2 acres
    - 4.3 acres oyster reef restoration
    - Sand fill included drainage channel for habitat maximization

- Atlantic Wood Sediment Restoration (superfund site) Background:
    - Contamination: at Portsmouth site, near bridge, very hot spots
        - Very productive, but contaminated fisheries habitat
    - Want to bulkhead upland area, bring in clean sand, and install sheet piling around site at top of bad sediment/water interface
    - Material could be brought upland (have 50 acres), spread and cap
    - Also, could bulk head out, bring in bad sediment behind bulkhead and cap there; but state would have to maintain and could be pricey
- Project issues at Atlantic Wood:
    - River bottom loss
    - Wetlands and sand beach habitat
    - Upland owners could become land locked
    - Structural issues with cutoff wall

Lessons learned:
Community consensus on design is needed; sit at table with everyone, especially anyone who could stop you, and listen; collaborate with players who have much to learn, because they have the greatest potential to improve the watershed.

"Use Conflict: an emergent conundrum for land-use and water-use management in Virginia"

Lewis Lawrence,
Director of Regional Planning, Middle Peninsula Planning District Commission, Virginia

This presentation offered a local government perspective regarding use conflicts; specifically, within the York River basin. Mr. Lawrence asked, "How did it get so complicated?"

He then described the transition going on in land uses within the York watershed, noting that conflicts at the shoreline are becoming increasingly common. He brought up the idea of "rights" versus "privileges" to the Commonwealth's water resources.

His slides revealed the many-sided perceptions among people viewing and/or accessing the same public resource, asking rhetorically, "Why can't we get along?" One answer: what one person finds visually appealing another finds visually appalling.

Taking that a step further, then, what we consider "good" public policy or "bad" public policy is really the same question. At the local level, governments try to answer the questions, "Are these good uses or bad," and, "Who allocates space?"

In Virginia, it is very complicated and many regulatory layers exist for the oversight of land/water use. We need a better mouse trap for regulatory oversight!

Mr. Lawrence described a new, 3-D model built with Google software that focuses on the Virginia portion of the Chesapeake Bay watershed. Seventeen agencies have jurisdiction; the model shows their purview, as well as their authority as established by state code.

In the York River basin, a committee has been established to look at historical uses; to consider who is arguing and why; to consider how to mitigate damages; and to make recommendations to resolve use conflicts. The core problem they are grappling with: Who gets to manage use and allocate space?

He concluded with a prediction about the future, asking "Where are we headed?" And answered, use conflicts that are not resolved at the local level will eventually end up in the court system. When those issues get enough press and exposure, they will make their way to the General Assembly to decide.

“Stewarding the Public Trust in Georgia”

Jeannie Butler, Coastal Nonpoint Source Coordinator for Georgia

Ms. Butler introduced her agency’s mission and focus, “Managing development on the Georgia coast; to preserve our public trust resources for future generations.” Georgia has some 400,000 acres of tidal marsh and one-third of the salt marsh left on the East Coast. Also: vegetated and non-vegetated bottomland; a 6 to 9-foot tidal range; and 100 linear miles of shoreline. Also, 14 islands; some developed, some part of the state natural heritage program, some federally owned, and some private.

“Together, we own these resources. We are a high water state, using the highest spring tide to demarcate the Public Trust Doctrine line. She also noted that no coastal wetlands are privately held, generally. Boating is therefore very restricted in time/use (as managed by state).

Georgia has incredible wildlife: shorebirds, horseshoe crabs, manatee, etc.

Ms. Butler briefly reviewed state regulatory tools: Coastal Marshlands Protection Act, 1970; and the best wetlands protection tool, the Shore Protection Act of 1979.

The CMPA purview: to ensure the functions and values of marshlands; issue tidal wetlands permits for marinas, docks, boat ramps, etc. (private docks exempted.

1) Facilities within 500 or more linear feet of docking space require leases, as do shellfish harvesters; at fair market value.

2) Permits for water dependent use, when there is no non-marshland alternative, it does not unreasonably harm or alter natural flow of navigable water, it does not increase erosion, shoaling of channels, it does not unreasonably interfere with wildlife, other resources, water quality, even air supply.

Permits are not issued for:

- Fill activities
- Private parking lots or roads, dredging of canals/ditches, mining, aquaculture which would damage, structures constituting obstruction of view to adjoining riparian landowners, including signs/enclosures.

The Shore Protection Act 1979:

- Primary legal authority for protecting shoreline features of state
- Jurisdiction includes: Submerged lands, sand beaches, dynamic dune field

The Act says you can’t interfere with typography, wildlife, access and recreational use of public property.
So, no buildings on the beach; crosswalks, walkovers are okay. Other stipulations: Building must occur landward of sand dunes, occupy the back end of a parcel, 1/3 of the vegetation and natural topography must be retained, structures must be hurricane-resistant and construction must be kept to a minimum.

With regard to how the state manages marsh and beach: Either or both statutes can be applied to give the most protection.

Other voluntary measures in place: Natural heritage inventory, protect isolated wetlands, wildlife corridors/natural area retention, wildlife and marine species education programs, quality/smart growth, limits on impervious cover, retain native understory and canopy, riparian buffer expansion, BMPs with maintenance plan, deed restriction to prevent private docks, speed zones or water zoning to protect wildlife.

She noted that more development is occurring in sensitive areas, and that large tracts of land are changing hands. She referenced 600 upland areas in transition; one is a 1200+ home site/large scale project. Concerns center on their impacts to: wildlife (right whales, manatees, sea turtles), the National Seashore, NPS pollution.

Ms. Butler noted that ditching, draining, and filling land has historically occurred at a very large scale. She noted the importance of education, NPS management programs, and ongoing work between federal and state governing agencies to "build bridges."

One area of current focus is stormwater management, and she referenced some helpful resources: stormwater management manual by the Center for W/S Protection; Green Growth Guidelines – for developers (model scenarios, economics, etc. a growing document); program for homeowners, subdivision builders, widening buffers – a management strategy document.

Ms. Butler talked about "Green Infrastructure," which she described as an umbrella for how you want an area to look like at the end. It answers the question of how to handle Public Trust resources.

- Challenge of Growing Communities! How we do it is so important.
- Healthy systems require vital connections
- Science-based strategy. (Maryland uses scientific model to do this.)
- Supports natural resources values and their functions
    - Get many benefits: trails, cultural sites, historical sites
- Infrastructure implies we have to have it (vs. it's a nice thing to do)
- Holistic view, guides development, targets mitigation, protect water quality and corridors for wildlife
- Provides predictability and certainty for planning
- See Massachusetts Example, (Natural Resource Benes) in the Charles River Basin:
    - 8 to 1 return on dollar from: wetlands, tree values, hunting on economy, tourism ($100 million/year industry)
    - Helps sell homes and increases their value
    - Quality of Life – people are willing to pay more
    - Process: leadership forum, network design, implement

"Urban Coastal Greenways"

Grover Fugate,
Executive Director, Coastal Resources Management Council, Rhode Island

His agency handles coastal and Submerged Lands management and permit authority. The focus of this presentation is the Providence area of Rhode Island.

Mr. Fugate first reviewed the scope of permits, which are very broad (cover barrier islands, coastal wetlands, freshwater wetlands, and aquaculture). He then reviewed the scope of the SAMP, or Special Area Management Plan.

He then provided background on a former, Metro Bay Area case:

- Coastal and bit of freshwater; a working waterfront and metropolitan region
- Buffer program designed for suburban areas, residential lots; setbacks range from 150-175 ft. of undisturbed, natural vegetation
- The Problem: the program doesn't work for industrial and urban zones

Mr. Fugate noted that there are currently $4 billion worth of construction projects under review right now. The challenge is to write a new coastal buffer policy that addresses this current situation in Providence. A policy is needed that:

- Acknowledges the hardened shoreline;
- Streamlines the permitting process;
- Reduces variance requests; and
- Increase consistency and predictability.

The process:

- conduct data set analyses;
- rank habitat areas;
- provide SAMP links.

The product: a zoning map with four different regions (ranking system) for development

An "Urban Coastal Greenways Policy" for the region has been written.

- Reviewed goals: vegetation, stormwater management, public access, flexible greenway widths
- Used Low Impact Development (LID), green roofs, filter strips, bio-retention (to reduce impacts of impervious surface; in Providence, this is roughly 80%)
    - LID design has highest level of functionality during winter months (at most challenging time); addresses primary w/q problem of NPS
    - LID can help offset challenges of climate change

The next step: coastal hazards and responses, a look at water sheet zoning and how we use it.

The result: The regulations have been in place less that a year and have already opened up 7,050 linear feet of shoreline for the first time in over century. Other policy stipulations: Does not require access. Developer can choose the old route (habitat restoration alternative) and most do not want to do this because it is a lengthy process.

He also referenced a new design manual that covers landscape plants, public access tips, etcetera, and an Interactive Map Service on Internet: www.crmc.ri.gov .

“Great Lakes Submerged Lands Policy & Management”

Elaine Sterrett Isely,
Research Associate, Robert B. Annis Water Resources Institute, Grand Valley State University, Muskegon, Michigan

Ms. Isely performed a comparative analysis of the eight Great Lakes states’ coastal and Submerged Lands laws, regulations, and policies. This presentation recapped what she discovered.

- All 8 participate in CZMA and SLA
- The Public Trust Doctrine is handled differently in each state
- Recent challenges include: public access to shoreline; state management of Submerged Lands
    - Michigan Supreme Court: Right to walk along shoreline given, between the high water mark and water’s edge
    - Ohio State Court case about ODNR right to lease lakefront property below the historical OHWM

She referenced the Great Lakes Commission Survey, 2002 – a summary of what GL states were doing about setbacks, submerged lands leasing and the boundaries of state bottomlands – and the ODNR questionnaire, 2005 – which queried information from GL coastal program managers meeting about state CZMPs, SL regulations and enforcement, and the public trust doctrine.

Over 6,000 linear miles of GL shoreline; programs must manage water resources, navigation, environmental conservation, property rights, and more.

- Leases, permits, setbacks are tools used; terms and costs vary broadly
- Some states have fixed setbacks, others do not
- Some allow grandfathered nonconforming structures, others do not

Definition of ordinary high water mark also varies with each GL state. Most do use ACOE definition exclusively, but combine that with a state definition. The management implications for this: variation in state statutes, regulations, and policies creates confusion for coastal managers, lakefront property owners, and the general public.

Encouraging managers to work together: reduce confusion and ambiguity; establish consistency in standards; look at the GL as single resource and share information, take regional approach, ask for federal assistance, etc.

“Access to the Waterfront – Issues and Solutions Across the Nation”

Tom Murray,
Faculty, Virginia Institute of Marine Science, College of William and Mary

Mr. Murray gave a recap of a recent “Working Waterfronts Conference” which provided a forum to talk about tools available at various levels of government to address water access issues.

The conference brought a broad base of user groups together. Some of the outcomes:

- Education is very important, as is cross-fertilization among user groups
- Audience: 180 coastal/program managers attended
- Solutions: commitment to make public access a high priority
  - National agenda for action, M-SFMA, CZMA, etc.
- Strong coalition now in force
- Other local tools: legislative, regulatory, compensation measures

He referenced the website as a resource to check out: www.wateraccess2007.com .

"Keep Our Waterfronts Working: A Legislative Update"

Molly Jacobs,
Fellow, Dean John A. Knauss Marine Science Policy

Dr. Jacobs works for Congressman Tom Allen of Maine, and focused her remarks on efforts to keep working waterfronts alive in that state and nationally through Mr. Allen's recently introduced "Keep Our Waterfronts Working Act of 2007".

What is a working waterfront?

- Property that gives access to water to businessmen and women, to make a living
  - Gave legislative definition, and discussed challenges associated with defining this concept at the state level and at the national level.

Working Waterfronts in Maine

- Geography
  - Maine has a 5,300 mile coastline including tidal lands and islands, and a long connection to the working coast.
  - Only 175 miles of coastline are sufficiently deep and sheltered to provide working waterfront
  - 1,045 provide working waterfront access, totaling only 20 miles
  - Only 82 provide prime working waterfront access (parking, fuel, etc); 62 support commercial Fishing (individuals)
  - 66% of current access points are privately owned, and therefore vulnerable to conversion.

- - How important are working waterfronts in Maine?
  - Comm. Fishing 39M jobs and $750 mill in state revenue
  - Tourism, recreational, boat building, aquaculture, etc.
  - History and tradition: economic hearts of coastal regions

- A Working Waterfront Coalition has formed: 140 members, broad constituency; policy, planning, education, investment. Current focus:
  - Current use taxation
  - Bond programs to purchase working waterfront land
  - Working waterfront covenant
  - Create partners
  - Land-use research, etc.
  - Completed GIS mapping publication: at Island Institute
    - Data collected community to community; boat use, types of fishing, etc.
  - WW Access Pilot Program: criteria: economic significance, etc.
  - 6.82 acres protected so far; $4 million worth

Working Waterfronts around the Nation: The Keep Our Waterfronts Working Act of 2007

- - Why a national legislative solution?
  - States strapped fiscally
  - Timeline is critical, right now
  - All citizens have a stake in working waterfronts

- Approach taken:
  - Outreach to Maine stakeholders, national working waterfront community
  - Consultation with NOAA, House Nat Res Committee
  - State and national industry and advocacy organizations – you guys are needed!

- Legislation introduced, HR 3223, this summer
  - Flexible: allows states to plan for and address regionally specific working waterfront needs.
  - Designed as amendment to CZMA; planning grants and implementation grants
    - Planning:
      - Target working waterfronts under threat of conversion
      - ID economic, social, cult values of working waterfronts to state
      - ID current availability of public access to coastal waters in working waterfront areas
    - Implementation
      - Acquisition of working waterfronts
      - Improvements to working waterfronts
      - Requirements: covenants, public access or improvement, 25% match
  - Bill under review; working to recruit co-sponsors right now

"Submerged Lands Banking – Rationalizing the Management of Public Trust Resources"

Martin Laven,
Owner/Broker, The Dockominium Group, Florida

Mr. Laven began his presentation by suggesting that the more salient questions to ask today are not whether to allow SL banking or not, because it's happening; but rather, to what degree and manner will stakeholders be held to account for lost access (from dockominiums, for example)? He described the situation of dockominiums in Florida as, "an onslaught going on, but recently slowing down."

He cited a recent case in the City of West Palm Beach; where SL credits were traded across/between counties. Many of these situations benefited private individuals only and were not in the public interest.

He also referenced land use and zoning restrictions in use; specifically a marine industrial ordinance in Miami-Dade, a concurrency tool, and comp plan tools. He cited moratoriums used in Brevard and Monroe counties – which succeeded in a "pause" to get stakeholders together to discuss the issue. This is a useful tool when used effectively.

With regard to approaches, he believes incentives are always the best strategies: buffers, density caps, etc. He believes in progressive versus regressive methods.

Mr. Laven briefly mentioned other management tools used and offered some opinions:

- No net loss: does not address expansion and rates
- Tax deferrals – not very useful
- Design standards and visual access – good start-up action, before developers come to town
- Land acquisition by land trusts – short-term solution
- Liability waivers – do not create access but mitigate exposure
- Transfer of Development Rights and Transfer of Density-Rights – conservation programs
- Transfer of Slip Rights – consider transferring condos away from working waterfronts
- SL Bank – sending and receiving areas are identified (devil in the details though)
- Rights of way – backlash occurring in form of takings
- TNC kudos! Conservation leasing and ownership; part of existing state policies
- SL banking model – privatizing environmental commons is crucial for sustainable development; see wetlands mitigation banking example, forests, etc. Oversight is critical.

Balance is needed between markets and regulators.

Website Workshop: Developing a Resource for Submerged Lands Managers

Lisa Ayers Lawrence,
Facilitator, The Write Stuff, Virginia

Ms. Lawrence described the focus of this interactive workshop and the two primary considerations for a long-term website: content and logistics.

Starting with content, it's important and necessary to identify the site: purpose, primary audience, secondary audiences, granularity, topics to be covered (wish list), and tools and features (wish list).

A discussion ensued about the site's primary purpose: to be a tool for submerged lands managers. At a minimum, the site is a place to capture information presented at conferences; a place to post presentations and discussions/ideas/outcomes.

Other purposes:
1) to network with each other through a chat room feature and/or the ability to IM with multiple folks;
2) a place to find information – searchable by topic or by individual or by other;
3) a place to list appropriate contacts by state, province, territory; those specifically responsible for SL permits or SL management;
4) a place where issues raised at each conference are identified and amplified. In other words, a place to keep track of important issues that popped up last year, so we don't have to start anew each year; and
5) the conference section should include abstracts, agendas, presentations, etc.

Comment: We are speaking about the same issues from many years go. We could go back ten years, for example, and try to post historical papers/presentations. A link to contact offices also would be helpful. This would be of great benefit also to those who cannot attend the ISLM annual conference.

Comment: This site could evolve into an "information portal" for SL management, in general; could include or link to technical resources, such as white papers and links to SL case law, outside of the ISLM meeting sphere. The site could become a broad repository for resources.

Primary Audience: Submerged Lands managers and policy folks; conference attendees and their peers. This represents a relatively small corps of people. (Need to characterize meeting attendees and be sure to capture other countries/provinces not represented, such as Canada.)

Secondary Audiences: NGOs, conservation groups/nonprofits, researchers, academics, legislative staff, educators; even a kids page could be developed (down the road); realtors and business interests; developers; offshore developers; alternative energy folks; consulting folks who work with the development community; special interest groups at the community level.

Granularity (meaning, how specific/narrow do you want your focus): All 50 states and outside the U.S., for those who come to conferences; e.g., Canada; U.S. Virgin Islands; Kenya; Nigeria. May depend on who *wants* to participate, who is willing to send us the information.

Comment: We could begin with a "call" to submit your information and request to identify for this site – at the state level – who is the agency of responsibility and what is their direct link to content regarding Submerged Lands. To help this process move forward, we could provide each state with a "template" of information we want to include (definitions, enabling legislation, fees charged, royalties received, etc.).

Topics: See mock-up of front page (on screen). What else is needed?

Long laundry list is needed! (TNC perspective)
Mapping – takes you to state resources such as Virginia Coastal Gems
Contacts – list of states, provinces, with a few sub-categories within
Fee Structures – list by state with specific examples and/or case studies
Legal issues – case studies
At a minimum, topics need to reflect the information presented at the annual conference.

Tools & Features (this is a wish list!):
Jay from TNC gave a sneak preview of their related site. He cautioned that this is just one example and their focus is one of targeting conservation organizations interested in SL (ocean and coastal waters). He demonstrated some of the cool site features; specifically, the interactive tool used in the "terms" section of the site. He also showed a decision checklist feature. Other features under development include: state summaries for each ocean coastal state, the ability of conservationists to lease/own SL and relevant agencies to contact for information/data on water quality, aquaculture, fish and wildlife, etc. Also, a listing by state concerning specific statutes and leasing/ownership case studies. Also, a contact matrix by state and spatial data on leases and parcel information.

The discussion then turned to "logistics" and associated considerations in order to move forward.

Timeframe:
Establish a committee to keep this idea alive? Is your goal to make it available by next conference?

With regard to establishing your timeline, it's important to incorporate "usability" testing along the way. This can be done by conference participants or by a smaller group. Suggest that you begin with a steering committee. Start with something simple, such as this year's conference information. By 1/31, have that information up and running.

Budget:
What you can put into it will determine how much to do initially. The steering committee can look at resources for funding to do cool stuff.

Comment: Establish a Web Steering Committee and lead person. The steering committee will review workshop notes and get the discussion ball rolling.

Where will the site reside?
For near-term, it could reside at the Virginia Institute of Marine Science, on their server.

Who will provide content?
The steering committee should appoint people for content areas. Need to agree on that process and designate who will be the liaison for each area of the site. The more you can assist your "customers" with a template of the information you need, the more successful you will be in getting it. Other tools to consider using: survey monkey, etcetera (automated survey tools).

Other considerations for the steering committee:
Who is responsible for defining scope/priorities of content? Who is responsible for getting estimates to build the site according to identified content needs? What happens when people fail to deliver the promised content? Who is responsible for making edits and revisions?

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International Submerged Lands Management Conference 2007

October 28 - November 2, 2007
Woodlands Conference Center
Williamsburg, Virginia

Overview

The International Submerged Lands Management Conference spotlighted the issues surrounding the administration of submerged lands and adjacent uplands. Conference sessions focused on the opportunities, successes, and challenges facing managers of submerged lands and resources. Attendees met with land and resource managers from other states and countries, in order to share their experiences and gain new perspective.

Audience

State and provincial managers and other specialists who deal with issues pertaining to the administration of submerged lands and adjacent uplands will benefit from this conference.

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Submerged Land Resources

An On-Line Tool for Resource Managers



Topics

- Government
  - Control
- Public Trust
  - Doctrine
- Mapping
- Resource Use
- Annual Conference
- About Us
- Home

Welcome

TheSubmerged Land Resources Website spotlights the issues surrounding the administration of submerged lands and adjacent uplands. Conference sessions will focus upon the opportunities, successes, and challenges facing managers of submerged lands and resources. Come and meet with land and resource managers from other states and countries, in order to share your experiences and gain new perspective.

This on-line tool is designed for state and provincial managers and other specialists who deal with issues pertaining to the administration of submerged lands and adjacent uplands.

News & Events

The International Submerged Lands Management Conference 2007 will be held in Williamsburg, VA at the Woodlands Conference Center from Sunday, October 28 - Friday, November 2. The conference will be hosted by the Virginia Marine Resources Commission. Conference objectives are to increase awareness of the management issues surrounding submerged lands within the United States, the Provinces of Canada, and the Caribbean basin and provide a continuing forum to discuss and exchange information about those issues and, in the process, uncover possible alternatives and solutions to conflicting uses.

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