Summary

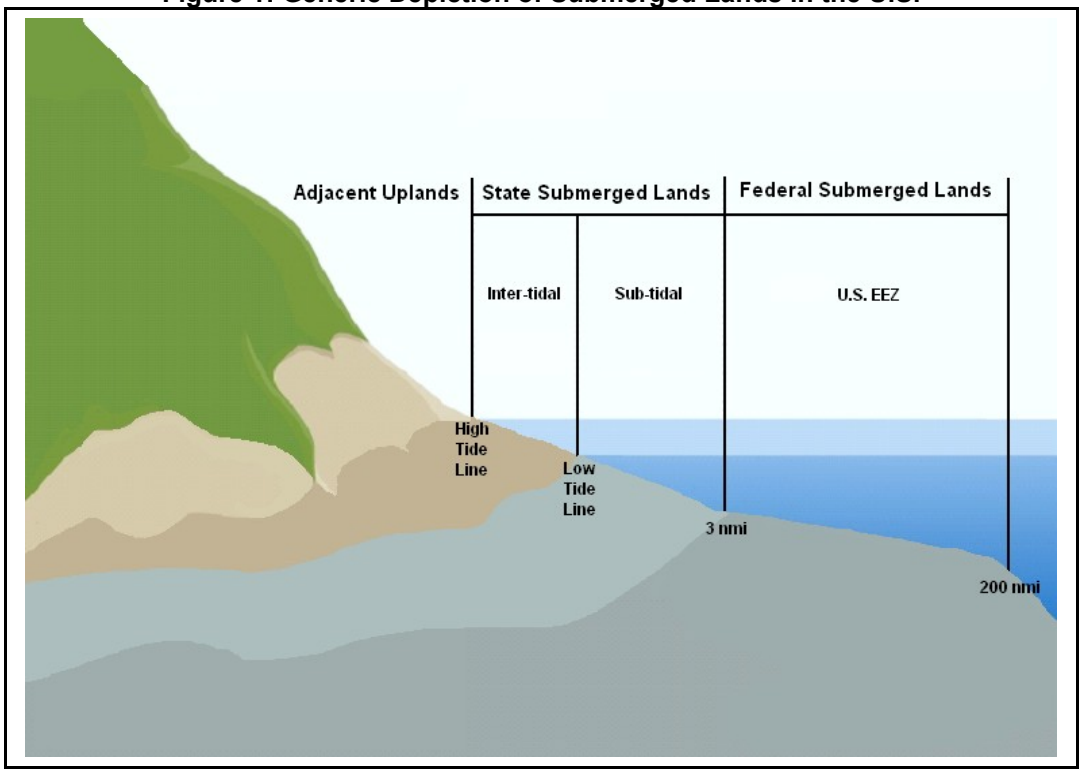
Can private organizations acquire interests in submerged lands for conservation purposes? Research proposed in this request will answer this question by assessing laws and policies for private submerged lands within state waters of Southern New England. The Nature Conservancy and our partners (Roger Williams University, Rhode Island Sea Grant, the Coastal States Organization, NOAA's Coastal Services Center, and the University of Rhode Island) have recently completed law and policy assessments regarding submerged lands conservation in Massachusetts and Rhode Island. The Massachusetts assessment was comprehensive and included ownership and leasing evaluations. The Rhode Island assessment focused primarily on leasing. As such, there is a dearth of information regarding the ability of private conservation organizations to acquire proprietary rights to submerged lands through ownership or leasing in Connecticut, through ownership in Rhode Island, and through leasing in the United States Exclusive Economic Zone (U.S. EEZ) off the coasts of Connecticut, Massachusetts, and Rhode Island.

Introduction

For the purposes of this proposal, submerged lands refers to all marine lands that are cyclically or perpetually covered by seawater, beginning at the high tide line and extending 200 nautical miles off shore, encompassing all lands beneath the ocean's water column. While individual states within the United States often define their landward jurisdictional boundaries differently, state submerged lands typically extend three nautical miles from shore (43 U.S.C. §1301 1953) (see Figure 1). Beginning at the states' seaward boundaries, federal submerged lands extend further off shore to the 200-nautical mile line of the U.S. EEZ (43 U.S.C. §1331 1953). Lands and resources lying within these zones are biologically diverse and ecologically critical as identified in global and national reports (Pew Oceans Commission 2003; U.S. Commission on Ocean Policy 2004). Despite this recognition, many of these lands and resources continue to be degraded due to the ineffectiveness of traditional marine conservation strategies. This ineffectiveness is due in large part to misconceptions that conservation strategies for submerged lands must inherently be different than conservation strategies for terrestrial lands.

Misconceptions about submerged lands continue to permeate management agencies and conservation organizations as it is often believed that submerged lands and associated resources are all publicly-owned, cannot be acquired by private conservation organizations, and are already protected. To help relieve these misconceptions, The Nature Conservancy (TNC) has been working with local, state, and federal agencies and conservation organizations around the United States to understand, resolve, and create opportunities for private conservation of submerged lands through proprietary acquisitions. This emerging movement of proprietary rights applies tried-and-true terrestrial conservation strategies to ocean and coastal environments in an innovative and unique manner.

Figure 1: Generic Depiction of Submerged Lands in the U.S.



Private conservation organizations have traditionally taken educational, watchdog, research, and advocacy roles in ocean and coastal conservation efforts. By assuming a proprietary role through leasing or ownership, conservation organizations can get off of the sidelines and onto the front lines of ocean and coastal conservation. Instead of identifying what government agencies and private landowners should be doing in the name of conservation, as lead proprietary entities conservation organizations can assume the responsibility for conservation success. By assuming this responsibility, conservation organizations can protect their conservation investments in submerged lands and resources through proprietary means. This approach is similar to the mechanisms private, for-profit businesses use to protect their development investments in marinas, shipping terminals, and other waterfront enterprises.

Background

States within the United States formally received title and authority to manage lands lying below the high tide line extending seaward three nautical miles (except for the Gulf of Mexico coastlines of Texas and Florida, where submerged lands extend seaward nine nautical miles (Marine Boundary Working Group (MBWG) 2006)) under the Submerged Lands Act of 1953 (43 U.S.C. §§1301-1315 2002). The federal government extended its authority over the U.S. EEZ and federal submerged lands to 200 miles offshore through a presidential proclamation in 1983 (Presidential Proclamation 5030). However, lands and associated resources lying below the high tide

line have been managed, sold, leased, and otherwise used by local, state, and federal authorities and private entities since the respective governing bodies have existed. As such, submerged land management across the country is inconsistent and uncoordinated. The condition is similar for state and federal submerged lands. Indeed, there are over 140 federal laws and more than 20 federal entities that relate to ocean management within the U.S. EEZ (Pew Oceans Commission 2003). Jurisdictional authority over some activities is well-established, such as for off-shore fisheries and oil exploration, while for other activities is poorly established, such as for aquaculture and bioprospecting (U.S. Commission on Ocean Policy 2004).

The presumed boundaries of submerged lands and potential rights afforded public and private entities differ from state to state. The Submerged Lands Act identifies the high tide line as the landward side of state submerged lands jurisdiction, but different states manage submerged lands in different manners, interpret federal law differently, and have passed various state laws, rules, and interpretations. For example, some states are considered high water states[1] while other states are considered low water states[2] (MBWG 2006). In high water states, state submerged lands begin at the high water line. In low water states, state submerged lands begin at the low water line. Regardless of high or low water line status, private entities can often own, manage, or otherwise acquire long-term proprietary interests in lands and resources below the high tide line in many of these states. For example, private entities own approximately 70% of the inter-tidal lands in the Puget Sound of Washington State and approximately 75% of the inter-tidal lands along the coast of Massachusetts (Lanzer 1999; Kelly 2007).

Because of the many differences in submerged land management laws and programs, when a private organization such as TNC asks government agencies whether it is possible to buy or lease submerged lands for conservation purposes, it gets a wide variety of initial responses. Most often, the initial responses suggest that it is not possible. However, TNC's research and experience, as well as the experiences of other conservation organizations, prove differently.

The Nature Conservancy has been advancing the knowledge and conservation of submerged lands in the United States for over seven years. With the recognition that several TNC-owned shoreline properties included adjacent inter-tidal areas, TNC undertook a nationwide assessment of the ocean coast states to determine if state submerged lands were available for private conservation action. The results of the research showed that all states have submerged lands available for some type of leasing, usually some form of aquaculture leasing (Marsh et al. 2002). The research concluded that state and local aquaculture leasing programs could and should be used by conservation organizations to restore and protect submerged lands. On a state-by-state basis, however, the application of this proposition has proven difficult.

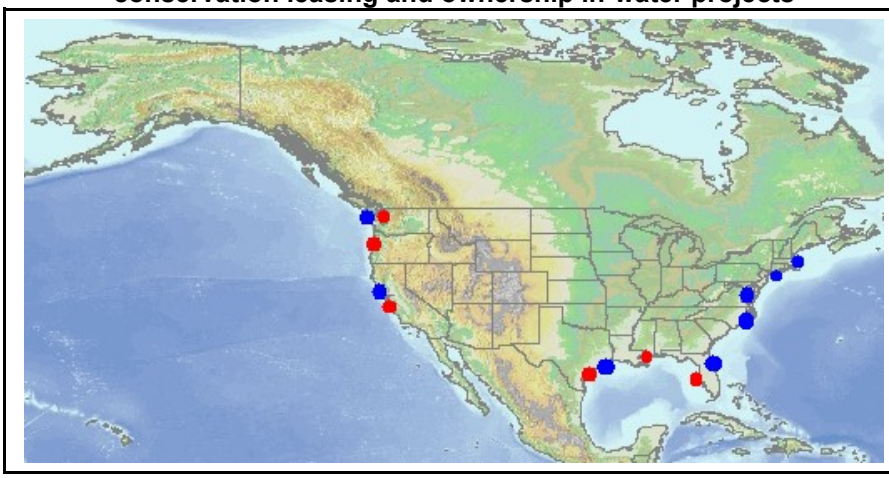
For several years, TNC and other conservation organizations have been painstakingly acquiring fee-title to privately-owned submerged lands and acquiring leases (or lease-like encumbrances) to publicly-owned submerged lands in various states. While comprehensive inventories have not been completed, TNC and other organizations (such as Audubon and the Galveston Bay Foundation) have acquired

[1] High water states: AL, AK, CA, CT, FL, GA, LA, MD, MS, NJ, NY, NC, OR, RI, SC, WA
[2] Low water states: DE, MA, ME, NH, VA

ownership and leases of submerged lands in California, Florida, Massachusetts, North Carolina, New York, Texas, Virginia, and Washington State (see Figure 2). In addition, TNC worked with the Washington State Department of Natural Resources (WADNR) to develop the first formal state program for submerged lands conservation leasing (WADNR 2004) and undertook the first pilot conservation lease in Washington State. In addition, TNC collaborated with Roger Williams University and the Rhode Island Sea Grant to undertake a general assessment of the laws and policies related to conservation leasing and ownership of submerged lands (Beck et al. 2005).

The law and policy assessment produced several important findings: 1) leasing and ownership of submerged lands are tools that can be used by conservation organizations; 2) conservation leasing and ownership are supported by the Public Trust Doctrine; 3) riparian and coastal landowners often have rights to adjacent submerged lands that need to be considered; 4) state laws and policies often leave room for interpretation which supports conservation leasing and ownership even when productive use requirements exist; and 5) submerged lands inventories are needed.

Figure 2: States with known current and pending submerged lands conservation leasing and ownership in-water projects



(Red indicates leasing; blue indicates ownership.)

Following the two national-level assessments, TNC began to pursue additional leases and state-level legal assessments in Alaska, California, Hawaii, Texas, and Washington State, among other areas (see Figure 3). The Nature Conservancy discovered that each state was very different in terms of the legal, policy, and procedural requirements and obstacles. As such, before private organizations can move forward with in-water submerged lands conservation leasing and ownership projects, state-specific pilot projects or legal analyses need to be undertaken.

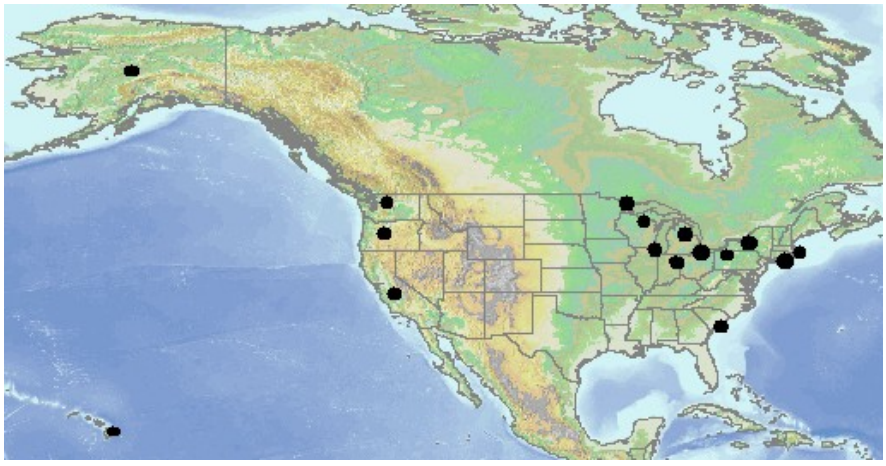
Through a partnership with Roger Williams University and the Rhode Island Sea Grant, TNC developed a pilot project to assess state-specific laws, policies, and spatial data in Massachusetts and Oregon. The pilot project, which also included direct collaboration with the National Oceanic and Atmospheric Administration's Coastal Services Center and the Coastal States Organization, set out to assess the situations in

Massachusetts and Oregon while at the same time develop a framework for similar assessments in other states. The pilot project findings were documented in five reports (Kelly 2007; Murphy & Udelhoven 2006; TNC & NOAA 2007; TNC 2007a; TNC 2007b) and uncovered the processes for fee-title acquisition of privately-owned submerged lands in both states, conservation leasing of publicly-owned submerged lands in Oregon, and conservation licensing of public-owned submerged lands in Massachusetts. Equally important to the findings were the agency relationships and opportunities the project developed in each state.

In Massachusetts, TNC reached out to the Massachusetts Audubon Society (MAS) to understand the history and conservation of MAS-owned shoreline and submerged lands. TNC also established working relationships with the Massachusetts Coastal Zone Management Program, Department of Environmental Protection, and Department of Conservation and Recreation. TNC is currently discussing in-water pilot project possibilities with these state agencies. In Oregon, TNC reached out to the Oregon Department of Land, Conservation and Development, the Department of State Lands, and a local port district during the assessment. TNC is now in the process of applying for two conservation leases, one with the state and one with the port.

TNC's work on submerged lands conservation has triggered other organizations to undertake state-level assessments on their own, including work in all Great Lakes states by Great Lakes United and the State University of New York at Buffalo, in California by a student at the University of California - Santa Barbara, in Rhode Island by a doctoral student at the University of Rhode Island, and in South Carolina by the South Carolina Sea Grant (see Figure 3).

Figure 3: States with known current and pending submerged lands conservation leasing and ownership law and policy assessments



Throughout the past seven years, TNC and our partners have also been reaching out to agencies and conservation organizations through numerous regional, national, and international forums and publications (i.e., Coastal Society conferences, Coastal Zone Management conferences, Conservation Biology journal, international submerged land management conferences, Land Trust Alliance rallies, Ocean and

Coastal Law Journal, Restore America's Estuaries conferences, and Society for Conservation Biology conferences, among others). This outreach has served to inform and engage additional organizations and agencies in submerged lands conservation.

Experiences and research to-date have led to our current understanding and justification for private conservation of submerged lands. Private conservation leasing and ownership of submerged lands and resources is similar to the widely used and understood conservation practices of traditional terrestrial fee-title acquisition and other, less-than fee-title acquisitions, including conservation easements, deed restrictions, and water, timber, or mineral rights acquisitions. Similar to terrestrial acquisition and easements, submerged land ownership and leasing affords private organizations the right to protect sites and habitat features from destructive activities and development. Similar to water rights acquisition in which water is left in streams for conservation purposes, conservation leasing establishes "conservation" (i.e., "no use" in the minds of some) as a legitimate use of submerged lands that can be acquired and protected (by leaving the lands and resources "in the water").

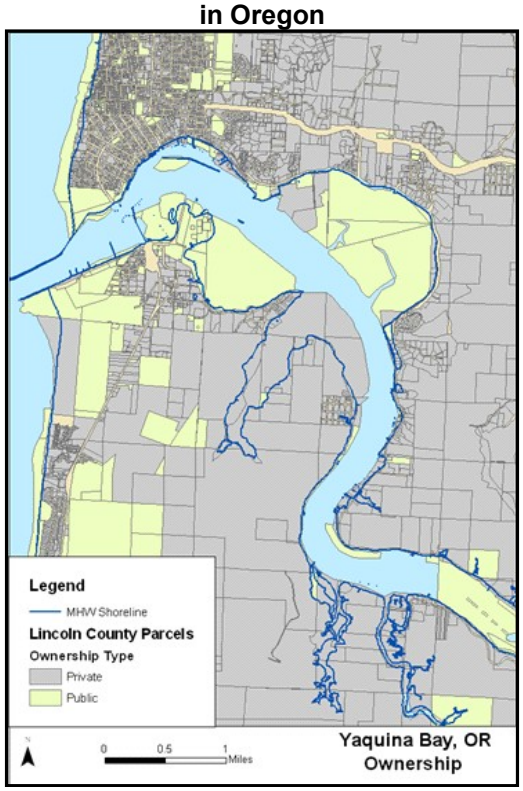
Many private (frequently for-profit) entities currently lease and own submerged lands and resources for purposes that often degrade the environment. These entities include, but are not limited to: adjacent residential upland owners; aquaculture businesses; logging companies; marina businesses; oil companies; park authorities; ports; restaurants; shops; and utility companies. In addition to the traditional pressures, there are increasingly new requests to use the marine environment for activities such as alternative energy development (Minerals Management Service 2007). If private entities such as these can secure proprietary rights to submerged lands and resources for purposes that often generate personal wealth while degrading the environment, then private, not-for-profit entities should also be able to secure similar proprietary rights to submerged lands and resources for public purposes that improve the environment

Most submerged lands and resources lying under state and federal waters are owned and managed by government agencies. Contrary to popular belief, due to multiple-use mandates, these lands and resources are not necessarily protected from harm simply because they are publicly owned. If private conservation organizations want or need to assume lead roles in protecting, managing, and restoring these lands and resources, and if management agencies want or need additional funding, expertise, staffing, and allies, then some form of partnership, agreement, or authorization must be entered into between management agencies and conservation organizations. There are several different forms of authorizations and partnerships which may be available under different circumstances and in different areas. A proprietary authorization through a sale or lease (as opposed to a partnership agreement or regulatory permit) provides many advantages to conservation organizations that make it a useful and applicable tool under many circumstances.

While most submerged lands and associated resources are publicly owned, private ownership does exist in some locations under varying circumstances (see Figure 4 for an example). Some of these privately owned lands and resources are used in conjunction with business activities that take place on adjacent publicly-owned submerged lands (i.e., marinas, shipping piers, and aquaculture facilities) where upland access and control is needed. Other private owners of submerged lands and resources may not even be aware of their ownership interests as they are part of a larger adjacent

upland parcel. In any case, whether the privately-owned submerged lands and resources are actively used or unconsciously left fallow, an opportunity exists to acquire fee-simple or less-than fee-simple interests to secure their long-term protection. In some areas private ownership of inter-tidal lands is extensive, thus necessitating collaboration with private owners in some capacity if the areas are to be protected.

Figure 4: Private and public submersible lands in Oregon



The totality of the above efforts and knowledge are culminating in an online toolkit that will serve organizations and agencies to better understand and apply private options for submerged lands conservation both within and outside of the United States. As part of the toolkit development efforts, TNC is collecting existing information about submerged lands management programs and projects. To the extent possible, TNC is also assessing the specific laws and policies at the state and federal levels to understand the circumstances of each state and federal jurisdiction. Herein enters the need to assess laws, policies, and practices for state and federal submerged lands within Southern New England.

Based on the information above, The Nature Conservancy is proposing research to fill an information gap for Southern New England. While the entire set (#s 1-3) of research actions below are desired and would serve to complete the information needs, we recognize that the availability of funds is a limiting factor. As such, TNC proposes that Rhode Island Sea Grant fund:

1. The law and policy assessment for fee-title and less-than fee-title ownership of privately-owned submerged lands in Connecticut and Rhode Island ($10,000).

TNC may seek funding during subsequent Rhode Island Sea Grant funding cycles or from other funding sources for the remaining components of the research, which includes:

2. The law and policy assessment for leasing/licensing of publicly-owned submerged lands Connecticut ($7,500); and
3. The law and policy assessment for leasing/licensing of federal submerged lands in the U.S. EEZ off the coasts of Connecticut, Massachusetts, and Rhode Island ($7,500).

Research Plan

This research will be carried out by Jonathan Kaledin, an attorney serving as counsel for The Nature Conservancy's New York Chapter. Mr. Kaledin has extensive experience with legal and policy issues concerning submerged lands, most noticeably as they relate to TNC's acquisition of 13,000 acres of submerged lands on Long Island in 2002. Mr. Kaledin will be supported by TNC's Senior Marine Policy Advisor and TNC staff in each state, including:

- Jay Udelhoven, Senior Policy Advisor for TNC's Global Marine Initiative, will serve as the PI;
- Adam Whelchel, Ph.D., Director of Conservation Science for TNC-Connecticut, will serve as a co-PI;
- Caroly Shumway, Ph.D., Director of Conservation Science for TNC-Rhode Island, will serve as an assistant PI; and
- The Coastal Program Director for TNC-Massachusetts (to-be-determined), will serve as an assistant PI.

Due to the limited funding and duration of this project, the PIs will undertake a high-level, preliminary assessment focusing on constitutional provisions, state and federal laws, agency regulations and policies, Public Trust Doctrine interpretations, judicial determinations, and traditional practices. It is not anticipated at this stage that the PIs will substantially engage the local, state, and federal agencies, private landowners and lessees, or other private conservation organizations. Nor will any site-specific, in-water projects be developed or implemented during this initial assessment.

The research has specific geographies, subject matter, activities, and timelines (see Table 1). In general, there will be seven phases of research activities: 1) Scoping, 2) Analysis, 3) Interviews, 4) Writing, 5) Internal review, 6) External review, and 7) Coordination meetings. Sub-activities will be undertaken within each phase. We expect the research will take approximately 14 months to complete.

The proposed timelines take into consideration several factors: 1) Project staff will not be dedicated to the research full-time during the project period; 2) Outside

resources, information, and feedback will be required and will be subject to external timelines; and 3) This is a multi-state, regional assessment which will require internal and external coordination.

Table 1: Research Options Summary

Research Options	Research Geographies & Subject Matter			Research Activities						
	CT	RI	MA	1) Scoping: Identify information needs; collect information	2) Analysis: Analyze information and assess information gaps; collect additional information	3) Interviews: Interview local, state, and federal experts as-needed; continue to analyze information; begin drafting of findings	4) Writing: Complete draft findings	5) Internal Review: Internal review and revision of draft findings	6) External Review: External review of draft findings; finalization of findings; prepare draft publication manuscript; develop brochure	7) Meetings: Meet with relevant agencies and organizations to discuss findings; identify conference presentation; summarize and post on TNC Internet toolkit site
Option #1	Fee/less-than fee acquisition of privately-owned submerged lands within state waters	Fee/less-than fee acquisition of privately-owned submerged lands within state waters	n/a	Months 1-2	Months 3-4	Months 5-6	Months 7-8	Months 9-10	Months 11-12	Months 13-14
Option #2*	Leasing of publicly-owned submerged lands within state waters	n/a	n/a	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Option #3*	Leasing of federal submerged lands in U.S. EEZ	Leasing of federal submerged lands in U.S. EEZ	Leasing of federal submerged lands in U.S. EEZ	Months 1-2	Months 3-4	Months 5-6	Months 7-8	Months 9-10	Months 11-12	Months 13-14

(*Research options #2 and #3 may be proposed during subsequent RI Sea Grant funding cycles or for funding from other sources.)

Outputs

We currently do not have a comprehensive understanding of proprietary conservation options within submerged lands of the three-state area of Connecticut, Massachusetts, and Rhode Island or within the federal submerged lands of the adjacent EEZ. This project will fill an information gap by:

- Completing the first regional (multi-state) view of private conservation ownership opportunities on private submerged lands.
- Augmenting a growing understanding of submerged lands conservation options that can be exported and informative to other states.

Subsequent TNC research will complement research proposed for funding under this request by:

- Providing the first view of private conservation leasing opportunities on state and federal submerged lands within three adjacent states (CT, MA, RI) and their respective areas of the U.S. EEZ.

The Conservancy will use the assessments to help determine next steps for in-water conservation within the jurisdictions of Connecticut and Rhode Island. The Conservancy will encourage other private conservation organizations, such as local lands trusts and municipalities, as well as local, state, and federal agencies to use the information to help inform their ocean and coastal conservation efforts.

Project Coordination

The existing law and policy assessments and the in-water projects around the United States represent a gradual and swelling movement of private conservation organizations becoming directly involved with, committed to, and responsible for in-water ocean and coastal conservation. The research proposed to the Rhode Island Sea Grant will be an integral part of the growing effort and will fill a needed information gap for Southern New England. Understanding if and how private conservation organizations can acquire proprietary rights to private submerged lands through ownership along the coasts of Rhode Island and Connecticut is a pivotal step in moving forward in these states. This information will allow conservation organizations, municipalities, and resource agencies to assess the threats to ocean and coastal biodiversity and determine viable, in-water strategies to ensure their conservation. TNC and other conservation organizations will then be able to identify the specific procedures and mechanisms that will protect specific sites. By acquiring rights to these submerged lands and related resources, conservation organizations in Southern New England will also gain a "proprietary seat" at the negotiation table when resource agencies are contemplating other decisions and actions that will affect the ocean and coastal environment.

The proposed research will also help to inform similar law and policy assessments undertaken in the future within the New England region and in other regions by continuing to develop, substantiate, and legitimize the research process and substantive findings. To the extent that TNC and other researchers can point to the proposed research as a good example of how and why additional research in these and other states can and should be undertaken, it will help inspire and facilitate conservation of submerged lands in Southern New England and other geographies.

Outreach

We anticipate two primary audiences at the local/municipal, state, regional, and national levels for the findings of this research: 1) conservation organizations; and 2) management agencies. Conservation organizations will be able to use the project findings to determine if their ocean and coastal conservation objectives can be met by acquiring proprietary rights to private submerged lands within and outside of Southern New England. Conservation organizations will also be able to use the project findings to

begin thinking about the types of resources, expertise, and commitments that are necessary to engage in in-water, proprietary ocean and coastal conservation activities.

Agencies at various levels (local/municipal, state, federal, and regional) within Southern New England will be able to use the project findings to determine their formal positions on private conservation ownership of submerged lands while determining if they have roles, processes, and mechanisms for authorizing such activities.

Secondary audiences of the research findings include other researchers, state Sea Grant programs, and the general public. Other researchers and state Sea Grant programs will be able to use the information generated from the project as background and supportive information for similar research in other geographies or related research throughout the New England region. The general public will be able to use the research findings to help them understand the management and conservation of submerged lands as well as the public and private rights associated with submerged lands.

To make this information available to our audiences, we intend to:

- Develop a brochure explaining the project findings that can be distributed to conservation groups and management agencies;
- Meet with management agencies and local conservation organizations;
- Deliver the findings at a regional, national, and/or international conference(s); and
- Post the findings and project report on TNC's state chapter websites and leasing and ownership toolkit web site.

It is important to note that the proposed research is part of a larger effort that TNC is undertaking (or has undertaken) in formal and informal collaboration with several external entities, including, but not limited to:

- Rhode Island SeaGrant
- Roger Williams University
- National Oceanic and Atmospheric Administration - Coastal Services Center
- University of Rhode Island
-
- Coastal States Organization
- Great Lakes Commission
- Great Lakes United
- Great Lakes Protection Fund
- Land Trust Alliance
-
-
- South Carolina Sea Grant
- The Audubon Society
- University of California - Santa Barbara
- University of California - Santa Cruz
-
- University of New York at Buffalo
- Washington State Department of Natural Resources

- Washington State University

As such, the research and outreach proposed here will benefit from and complement efforts being undertaken elsewhere.

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