The Coastal Society

TCS Bulletin
Volume 28 (1) 2006

TCS20 IS ALMOST HERE!!
JUST A FEW MORE WEEKS! HAVE YOU REGISTERED YET?

DON'T MISS THE COASTAL SOCIETY'S 20TH INTERNATIONAL CONFERENCE
MAY 14-17, 2006 IN ST. PETERSBURG, FL (Turn to page 10)

COASTAL POLICY AND THE END OF OIL

by Richard Burroughs

What does the end of oil mean for coastal policy in the United States? A lot. As energy supply options shift, coastal managers will face new challenges. Human values and changing supply options will alter the science required, policies advanced, and ultimately the management of coastal areas. Here I consider the challenges that will emerge for coastal managers as U.S. oil production continues its decline. The recommendations of two federally mandated US ocean commissions orient this discussion.

Coastal Energy Policy Past

For nearly three quarters of the last century domestic oil production increased in the U.S. In 1969 the National Commission on Marine Science, Engineering and Resources, popularly known as the Stratton Commission enthusiastically reported on expansions in the ability of the sea to meet human needs. In specific, the Stratton report anticipated that offshore oil development would grow to provide one third of world production in ten years. The report focused on legislative change that could result in the growth of various facets of offshore oil development.

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JOINT OCEAN COMMISSION INITIATIVE

U.S. Ocean Policy Report Card

by Ellen Gordon

We can talk the talk, but can we walk the walk? That's the question asked of us by the U.S. Ocean Policy Report Card in February of this year (www.jointocean-commission.org/assets/ReportCard%200206.pdf). Since the 2003 and 2004 releases of recommendations by the United States Commission on Ocean Policy and the Pew Oceans Commission, hearings have been held, legislation introduced, strategies discussed, and collaborations proposed. The two acceptable grades on the Report Card were given in these areas. In every other category, ratings were dismal. It seems that we've taken the easiest steps, but we can only manage minimal action when it comes to the harder choices. If we are to save the oceans, if we want healthy, diverse ecosystems, if we want to continue to harvest resources, and to enjoy our coastlines, we need to make changes at every level and in every aspect of ocean resource management.

The future is now. I don't know when that phrase was coined, nor who first uttered it, but the fact is the crisis is here. Admiral James Watkins, co-chair of the Joint Ocean Commission Initiative

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INSIDE

"There is always an easy solution to every human problem - neat, plausible, and wrong."

-- H.L. Mencken, "The Divine Afflatus," A Mencken Chrestomathy

Pick up a newspaper. Flip through a magazine. Watch the CNN or BBC news. Listen to talk radio. Scan through the shelves at a bookstore. There's a very strong likelihood that you'll encounter an article, editorial, or discussion on one or more of the critical environmental issues of the day: global warming, air and water pollution, deforestation, extinction of species, loss of habitat, etc. Why? Because unlike most other human concerns, these problems affect every person on the planet (whether they realize it or not) and, so it seems, everyone has an opinion about how to deal with (or ignore) them. Given that these concerns are so complex, so wide-reaching in their impact, so political in nature, so potentially devastating to the planet's natural regulating systems and, thus, human survival it's no wonder that devising an effective, widely acceptable, affordable, sustainable solution to even one of them is far more complicated than understanding the problem itself.

So, what does it require to actually develop a remedy to treat our environmental ills? What action should be taken? Who should take it? How do we prioritize our efforts? How much will it cost? What is the appropriate time-scale in which to work? How do we overcome the prejudices inherent between developed and developing nations? How can we even conceive of true worldwide positive environmental changes while intolerant philosophical tenets of some governments and appalling poverty endure?

Here's a powerful, yet not-so-new idea: we work both separately and together. And we work very hard. And, in the midst of it, we try to gain some vision, both for ourselves individually and for all people collectively. On a personal basis, we learn as much as we can, teach others around us (especially our children), and then make changes to our everyday lives by altering our lifestyles to leave a shallower footprint. At the same time we work together. We promote better science, develop new technologies, create better laws and regulations, write more sustainable resource management plans, positively influence the political process, recognize and foster new connections between seemingly antithetic parties, widen the circle to involve more people, and share our gained knowledge.

One opportunity for those of us involved in coastal and ocean issues to come together, learn, share and leave with new ideas is our upcoming 20th biennial TCS conference on May 14-17, 2006 in St. Petersburg, FL. The theme of the meeting, "Charting a New Course: Shaping Solutions for the Coasts," speaks directly to the need to develop innovative solutions to coastal and ocean problems. We expect three hundred or so individuals to bring their knowledge, passion and thirst for a better present and a more sustainable, equitable future to bear on these problems. We hope to see you there, hear what you have to say, and show us how you're going to do it, individually and collectively. Let's revel in this opportunity! Yes, finding true solutions to problems is formidable. Mr. Mencken, the great satirist and social critic (often referred to as the "American Nietzsche"), was correct: a neat and easy solution is invariably wrong. But the struggle to find the "right" solution is a worthy, rewarding and vital one.

Paul C. Ticco
TCS President

This issue was produced with assistance from the Urban Harbors Institute, University of Massachusetts Boston

As I write this, the 3rd quarter marking period of school for my children is drawing to a close. Teachers will soon be sitting down to finalize grades, preparing to send home the ultimate measure of progress at school: report cards. Rare is the child, no matter how nonchalant or how good a student, who won't experience some trepidation as their teacher hand them that slip of paper. How many parents find themselves slightly anxious on report card day, checking the expressions on their children's faces, looking for downcast eyes as the report card is handed over?

It's really not a surprise that the Joint Ocean Initiative Commission (JOIC) chose a report card format to relay the status of the United States' efforts to implement the recommendations made in recent reports by the U.S. Commission on Ocean Policy and the Pew Oceans Commission. Universally recognized, report cards and their letter grades lay out performance quite succinctly. Doesn't everyone cringe, seeing an F or a D in those small boxes? If you haven't yet seen the JOIC's dismaying assessment, www.jointoceancommission.org/assets/ReportCard%200206.pdf takes you right to it.

Like other parents, I earnestly tell my children that it's not the grade that's important, that I will be satisfied with whatever they earn, if I believe that it represents their best effort. Well, looking at the written supplements that accompany the U.S. Ocean Policy Report Card, it's clear to me that as a nation, we are definitely not "doing our best." Phrases like, "tangible results have been limited," "absence of an ocean and coastal stewardship ethic," and "funding for essential ocean programs…remains woefully insufficient" pepper the assessment. If this report card belonged to my child, could I idly sit back? Would you?

Poor performance in school calls for working closely with teachers, listening to the student, figuring out the resources that are needed to solve the problem, and then following through. Responding to the problems cited in the JOIC U.S. Ocean Policy Report Card is not very different. All the parties need to communicate. We're pretty aware of where the problems lie; now we've got to fund the science that will help us find the solutions, and develop the political backbone to implement the needed changes. We know it isn't going to be easy, and it certainly isn't going to be cheap. Political vision tends to be short and cyclical; saving the oceans and restoring coastal areas to health is a long-term project. But if we cannot summon the honesty and political will to change, it is not us who will suffer the consequences, but our children.

Ellen Gordon, TCS Editor
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TCS NEWS

TCS Co-Sponsors Coastal and Ocean Celebration

The Coastal Society was a co-sponsor of the Thirteenth Annual Coastal and Ocean Celebration held in the Senate Dirksen Office Building in Washington, DC on March 8, 2006. Senior Administration officials, Congressional staff, leaders in the coastal and ocean community, and representatives from state governments, research and educational institutions, and non-profit organizations were present. The Celebration, held during the Annual Coastal Program Manager's Week, is hosted by the Coastal States Organization and other groups to raise awareness of coastal and ocean issues, and for attendees to become better acquainted on both a personal and professional level.

TCS Honored as One of "100 Best Conservation Groups"

Citing its efforts to preserve the ocean environment, The Coastal Society was honored as one of the "100 Best Conservation Groups" by the Wyland Foundation of Laguna Beach, California. A small check and a certificate of appreciation, signed by the eminent marine life artist Wyland, Dr. Sylvia Earle, United Nation's Secretary-General Kofi Annan, Dr. Bob Ballard, and others was given to The Coastal Society "with sincere gratitude, as acknowledgment of your commitment to our marine life, and your dedication to clean water for the 21st century."

TCS Goes to the Movies

Organized by Executive Director Judy Tucker, a small group of D.C. metropolitan members attended a March 22nd screening of the 2006 Earthwatch Institute's award-winning film, "A Life Among Whales." Cosponsored by National Geographic as part of the D.C. Environmental Film Festival, the film traces the influential work of whale biologist and activist Roger Payne. Known for his discoveries of whale songs and cross-ocean communications, as well as his studies of ocean pollution, Dr. Payne is an outstandingly articulate scientist and passionate advocate for whale conservation. The screening of the hybrid biography/natural history film was followed by a question and answer session with, among others, Dr. Payne and filmmaker Bill Haney. Both spoke with optimism of the impact that individual involvement can have in ensuring the continued survival of whales and the ocean environment.

Energy Policy continued

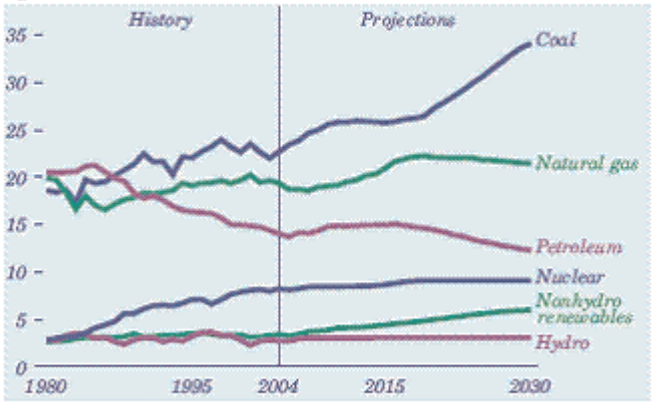
Advances would be aided by enhanced scientific and technological capabilities. But the report also acknowledged that seismic surveys, pipeline construction, and oil spills, among other factors would be a source of conflict with fishermen and others. Furthermore, the Commission foresaw that emerging management needs related to oil juxtaposed state interests with those of the federal government. When offshore oil production expanded, royalty payments to the federal government increased, but coastal states assumed larger infrastructure costs without those new revenues. The coastal management act, proposed by the Stratton Commission and enacted in modified form, began to address this central issue of coastal energy past.

However, in the 1970s the big decline in domestic oil production began. Even successes in Alaska and the Gulf of Mexico did not stem the reduction in total domestic production, while America's demand for oil continued to increase. Furthermore, laws related to impact assessment, water quality, and coastal land and water management were enacted, curbing the utilitarian approach to coasts as energy suppliers. Ultimately, the Outer Continental Lands Act Amendments incorporated environmental concerns directly into the oil leasing process. Conflicts sharpened between this utilitarian view of the coasts as oil suppliers and a perspective that coasts are beautiful, symbolic, natural areas, requiring special protection from disruptive uses.

Coastal Energy Policy Present

So what are our expectations today? Assume the U.S. wishes to maintain per capita energy consumption and sustain a growing population. Furthermore, assume domestic oil production continues to decline, and oil itself becomes linked to local and global environmental problems ranging from oil spills to climate change. As U.S. supplies diminish, the need to import oil from elsewhere grows and coastal areas serve as the conduit. Thus, in the near future more oil passes through the coast to refineries and ultimate points of consumption. In short, demand for energy remains high, domestic oil production declines due to geological limitations, and imports increase, assuming sufficient political and market stability. Indeed, Energy Information Administration (EIA) data show petroleum imports have increased more than five fold between 1970 and 2004.

Figure 7. Energy production by fuel, 1980-2030 (quadrillion Btu)



"Projections show domestic production of petroleum will continue to decline below historic highs and ultimately mask any increase from deepwater offshore production." Source: Annual Energy Outlook 2006, Energy Information Administration.

Another description of our current situation was completed in September of 2004 when the U.S. Commission on Ocean Policy (USCOP) released its report. Over the 35 years between Stratton and USCOP, both the values of society and the options for energy supply changed. However, underlying this change in outlook was and is an unspoken assumption that Americans would continue to consume energy at the current or perhaps an even higher per capita basis. In 2001, this meant that U.S. per capita energy consumption was just over five times the world average, according to the EIA.

With these significantly changed circumstances for oil, it's not surprising that the energy policy recommendations of the 2004 Commission report took on a different tone. Gone is the emphasis on offshore drilling found in the Stratton Report and in its place is a recommendation for more research on methane hydrates, a potential new source of energy from the seabed. Significant expenditures for integrated ocean observations are proposed, with the expectation that better environmental information will lead to better management. Most forward-looking is the increased attention to legislative change that will be

necessary to comprehensively accommodate renewable forms of energy (including wind, thermal conversion, current, and tidal).

The Energy Policy Act of 2005 and ever-higher prices for energy have followed the U.S. Commission report. This recent energy legislation provides direct spending to states with significant oil production offshore to assist with environmental and infrastructure needs, and thus addresses one of the needs noted by the Stratton Commission. To further enhance the older oil-based energy policies, the law calls for research, inventory and royalty relief. Furthermore, the law charges the Federal Energy Regulatory Commission (FERC) with primary responsibility for locating LNG facilities. Provisions for renewables and for better environmental performance out of coal and nuclear are also included. Much like the Stratton Commission, the Energy Policy Act of 2005 encourages expansion of domestic oil development. In the intervening years between Stratton and the 2005 legislation, domestic offshore crude oil production rose by 19% according to EIA statistics. However, in the same time period total U.S. crude oil production declined about 43%.

Photo Credit: National Renewal Energy Laboratory

This pattern of decline is in the process of repeating itself for global oil production. As Ken Deffeyes describes in his book Hubbert's Peak, the question is only "when." If we haven't already passed the peak of maximum production, how many more years will it take to do so? Now that domestic supply is declining and global supply may soon follow suit, coastal issues will change profoundly.

Coastal Energy Policy Future

If this is the present, what is the future? Coastal managers will face evolving human values and emerging technologies and institutions. We can travel down the coastal energy highway by focusing on the rearview mirror at coastal energy battles of the past, or we can proactively enlist challenges of the future by looking through the windshield. On the one hand, practices related to conventional forms of coastal energy will remain important. That's the rearview mirror. On the other hand, we can proactively engage the energy expectations and social values that lie through the windshield. Ultimately, success will require good vision in both directions.

Any speculation about the future requires recognition of the present situation. We have tacitly set goals for energy use through individual behavior manifested by current high per capita energy use, while the goals we have set for the coast through laws may be seen as conflicting with our energy consumption patterns. One hears discussion of increasing efficiencies, but not of reduction in energy use. Most recognize that oil will become less plentiful, and that a mix of new technologies will be required to meet future energy demands. Much of this energy consumption and production will intensify in coastal areas because that is where end-users live and because many of the energy technologies themselves are dependent on the sea for its motion, cooling properties, winds, and/or transportation values. In this situation, managers working in coastal areas will face heightened challenges. First, they will have to better understand conflicting values. Is the coast an energy purveyor or a place for recreation, nature, research, and aesthetics? How can these aspirations be combined in one geographic region? Not only do these conflicting values about energy and the coast arise in opposing groups but also, at times, as internal conflict within the individual. The current debate over wind power exemplifies this dilemma. Some individuals value the virtually carbon-free renewable nature of the energy resource while others focus on safety of navigation, as well as environmental and aesthetic changes.

continued

Energy Policy continued

In this situation, managers will have to develop techniques to balance whole new categories of activity in the coastal area. In this new terrain, the interest groups and coalitions in the rearview mirror will not be the same as those who will become visible through the windshield.

Secondly, managers will need to understand new approaches for conventional systems and a variety of new energy technologies. Conventional systems noted by USCOP and the recent energy legislation focus on oil, gas, coal, and liquefied natural gas (LNG). Each has potential impacts on the coast and one might expect issues and alternatives to be similar to those we've seen in the past. Other energy sources, such as nuclear have environmental impacts that are relatively well known but highly controversial. Renewable energy supplies (solar, wind, hydro-tidal, hydro-river, waves, currents), because of the nature of the technologies involved, generally require more space per unit of energy produced than do traditional sources. To a certain extent, the recent commission and energy policy act embrace these alternatives, but they do not fully define their roles. For example, how might the manager balance a preference for renewables in general with the larger land or sea areas needed and the new impacts that these technologies will require? Coastal managers must also confront cumulative impacts across diverse energy technologies in the context of the total capacity of the coastal region for these developments.

Third, when values and technologies are relatively well understood, the operational challenge of creating institutions to reconcile them in an ever-crowded coastal area will remain. By one recent calculation, coastal counties are about six times more densely populated than non-coastal counties. Coastal populations will continue to increase. Most coastal residents are attracted to the region for values other than those related to energy production or hydrocarbon importation. These high population densities mean quite simply that unless values change, there will be less space on land and at sea to expand. Coastal areas are everyone's back yard. One only need look at the controversies surrounding new

Photo Credit: Courtesy of www.lngoneworld.com

LNG terminals or wind power to understand the conflicts and the lack of a good forum for them. Here managers will be challenged to help create institutional structures at local, state, regional, and federal scales that accommodate diverse values and that creatively incorporate emerging scientific and technical information. Current legislative changes do not rise to this important challenge. Without some sort of comprehensive guidance from the federal government, managers are forced to try to reconcile a much larger field of competing interests on a project-by-project basis.

The end of oil does not by any means reduce the role of energy in coastal areas. Enhanced conventional systems and new technologies, particularly the renewables will affect these regions. Coastal managers at all levels will need to design and engage new deliberative processes to meet these challenges. Over the last two years the nation has made some inroads into the future of coastal energy systems but much, much more lies through the windshield.

Rick Burroughs' work on coastal energy policy began at the President's Council on Environmental Quality with the supertanker environmental study which culminated in the Deep Water Ports Act. Through subsequent appointments at the National Academy of Sciences-National Research Council and, during the Carter Administration, the U. S. Department of the Interior he also contributed to reforming the role of environmental science in coastal policy applied to energy development. Presently, he is Professor and Chair, Department of Marine Affairs, University of Rhode Island and may be reached at rburroughs@uri.edu.

Ocean Commission continued

(JOCI) stated that, "This Report Card highlights our concern about the slow rate of progress…which jeopardizes the rare opportunity our nation has to make fundamental changes in ocean policy before it is too late." (italics added) The need to conserve and wisely use the ocean—for security, economic health and ethical reasons—transcends partisanship and must not be overwhelmed by petty squabbles.

Internationally, the U.S. needs to step up and take responsibility; we have one of the largest Exclusive Economic Zones in the world, and we are voracious consumers of an array of ocean resources. Yet, "…our continued failure to become a party to the United Nations Convention on the Law of the Sea hampers our ability…to demonstrate international leadership." The JOCI attributes declining ocean and coastal ecosystem health to failures in our governance approaches and structures. They point to a "fisheries industry that has changed [over the last 30 years] from one of seemingly boundless potential to one that is struggling." Each of the Commissions' reports identify numerous policy, scientific research and education issues in urgent need of attention to address the degradation of the ocean environment and meet future challenges. Global warming, resources depletion, natural hazards, harmful algal blooms, invasive species and nonpoint source runoff are just a few cited threats to the health of the ocean. Stagnant and in some cases declining funding for ocean research cripples efforts to stem this degradation. "Chronic underinvestment has left much of our ocean-related infrastructure in woefully poor condition, management programs struggling to meet the information demands of decision makers, ocean scientists competing for a smaller percentage of the federal research budget and ocean science virtually absent from the education curriculum," (JOCI Report Card).

The challenges are certainly daunting, but the opportunities for involvement are broad. In ways small and large, TCS' diverse membership has a role to play. We need the idealism and energy of our student members, the enthusiasm of our educators, the wisdom of our scientists, the experiences of government officials and the perspective of the private sector.

We are a passionate, talented community. As individuals, we can vow to live and consume more consciously. As professionals we need to harness our energy and to focus our efforts to make a difference. We need to be involved. Our actions have consequences for sustainability. In the words of Oliver Wendell Holmes, "The great thing in this world is not so much where we stand, as in what direction we are moving…we must sail sometimes with the wind and sometimes against it, but we must sail, and not drift, nor lie at anchor."

We must shed light on the true costs and benefits of projects and decisions to ocean and coastal resources. We need to help the public understand the consequences of their actions, large and small. So many people go about their day-to-day unaware of the linkages between human health and the health of the ocean. From scientists to policy analysts, from educators to managers and decision makers we need to cooperate and collaborate. We must hold our elected officials feet to the fire; we need not just good laws, but the funding to make them work. The Coastal Society is a conduit for information transfer, for networking and for helping to ensure the truth about the coasts and the oceans is told. It was Margaret Mead who said, "Never doubt that a small group of thoughtful committed citizens can change the world; indeed it's the only thing that ever has."

Ellen Gordon (ellen@gordonballard.com) is Editor of the Bulletin and dusts off her soapbox only on rare occasions.

2005 ANNUAL REPORT

20th International Biennial Conference
Much energy was put into the planning of the upcoming conference to be held in St. Pete Beach, FL (St. Petersburg/Tampa Bay area) on May 14 - 17, 2006. The Conference co-chairs are Michael Henderson, NOAA Regional Coordinator in St. Petersburg, FL, and Mike Wascom, School of the Coast and Environment, Louisiana State University. Our theme, "A Call for Innovative Solutions" brought in a full schedule of sessions, while stimulating plenary sessions are also planned. Once again, educational field trips will be held in the middle of the conference to allow attendees to get out and enjoy the natural beauty of the area. The University of South Florida convention services was hired to work with the hotel and coordinate on-site logistics, and the Urban Harbors Institute at the University of Massachusetts, Boston was retained to layout the programs. TCS wishes to also acknowledge the contribution of support from the Urban Harbors Institute for assistance with the conference web site development and maintenance.

Support Given to Coastal Organizations
Between its own conferences, TCS continues to support the national Coastal Zone conferences. At CZ05 TCS jointly sponsored the Sunday evening reception with NOAA's NOS International Programs, held its Annual Meeting, and kicked off its publicity for TCS-20. In September, TCS was the sponsor of the reception at the Northeast Region's CZM Partners Workshop. The East Carolina University TCS Student Chapter received support for their evening of graduate presentations to faculty members in December. Throughout the year, TCS members and potential members in the Washington, DC area gathered for several brown bag luncheons with TCS member presenters Ariel Cuschnir, Paul Ticco, Tom Bigford, and Kristen Fletcher. Finally, several purely networking opportunities were attended by people from the DC Metro area, as well as TCS members who happened to be in town on business.

Member Communications
TCS members found the weekly communiqués from the TCS Office to be a valuable benefit of membership. The most popular was the listing of job openings, well supplied by other TCS members. The recognition of members for receiving awards or for publishing a book was another way to connect members. Responding to a survey about topics of interest for the conference, and voting for the TCS Board of Directors were ways to be involved in TCS, no matter where a member resides. But the most poignant communications were the ones received from TCS members in the Gulf Coast area following Hurricanes Katrina and Rita, letting other TCS members know they were all right, and helping all to realize the devastation to coastal resources there.

Elections to the TCS Board of Directors
TCS members elected to the TCS Board of Directors Patrick Christie, Assistant Professor in the School of Marine Affairs and the Jackson School of International Studies at the University of Washington, Ariel Cuschnir, Director for Coastal Programs at the Louis Berger Group in Washington, DC, and Laurie Jodice, Research Associate with the Clemson University Recreation, Travel and Tourism Institute. In addition, Gib Chase and Kimberly Lellis were appointed to ex-officio positions on the TCS Board as Co-Chair of the Education Committee and Special Projects Committees, respectively.

Committee Activities
Communications Committee
The Board of Directors reviewed responses to proposals for editing and publication, layout, and distribution of the TCS Bulletin, and decided to work with Ellen Gordon for editing and with the Urban Harbors Institute for publication, layout, and distribution. Four issues of the TCS Bulletin were produced in 2005. The Board of Directors renewed both of these contracts for a second year.

Website Subcommittee
The subcommittee worked with Dan Hellin at the Urban Harbors Institute to develop and maintain the TCS20 site, and to further develop and maintain the main TCS site as part of UHI's TCS Bulletin contract. This contract includes posting of electronic version of each issue of the TCS Bulletin. The subcommittee renewed the contract with Website Source, the company that provides our website server space, under a new plan that is less expensive but provides more space and potential for expansion. Additionally, the subcommittee made the membership application available online and allowed for credit card payment via PayPal.

Education Committee
TCS Education Committee continued its intense efforts this past year, in cooperation with TCS's Student Chapters, in providing a broad support to students nation-

wide. Activities included providing mentoring opportunities at NOAA and other government agencies as well as private organizations, assisting in job search, and supporting students attending our biennial conferences. The Education and Membership Committees also actively organized TCS's first Seminar Series, which included lectures by prominent scientists on a variety of emerging coastal issues. The first event took place at NOAA offices in Silver Spring, MD. The second one took place at the offices of The Louis Berger Group, in Washington DC. TCS will continue developing this seminar series throughout 2006. Most recently, the Education Committee initiated contacts with two Universities in Argentina (Universidad de Mar del Plata, and the Universidad de La Plata) to develop TCS's first international Student Chapters.

Membership Committee
The Membership Committee continues work on an overall plan for attracting and retaining members. This monumental task must be connected to the overall Society mission, its ability to provide full services, and its niche in the field. The Committee invites members to join its efforts to develop a plan for the coming year. In one aspect of that plan, the Committee worked with TCS leadership on the TCS Internship Program to expand the model to include another partner. The fourth TCS-NOAA intern was hired in 2005, and continues to work for the agency's Office of Habitat Conservation. The 2006 program will be expanded to include opportunities for one internship at NOAA and another at Surfrider Foundation.

Special Projects Committee
The Committee initiated a project called the Coastal Resource Recovery Fundraiser (CRRF) to allow TCS to contribute to coastal resource protection and restoration efforts currently underway in areas devastated by hurricanes Katrina and Rita. The Committee will continue planning and initiate fundraising and project support in 2006. Other Special Projects initiated by TCS in 2005 were a lecture series in Washington DC and planning for an upcoming field trip for TCS Members in the DC/VA/MD/DE area that will take place in 2006.

Membership 1/1/05	354
Assets 1/1/05	$53,455
Membership 12/31/05	338
Assets 12/31/05	$20,555

CHAPTER NEWS

University of Washington
The TCS-UW student chapter is busy working on fundraising efforts for students planning to attend the TCS 20 Conference. Ten abstracts from University of Washington, School of Marine Affairs students have been accepted with seven students scheduled to give oral presentations, most of whom are also TCS-UW chapter members. The UW chapter recently hosted a reception, following a panel of speakers with jobs in ocean science and policy, giving students the opportunity to get career ideas and advice. We also continue to host "Blue Drinks," a quarterly event bringing together students and professionals in water-related fields for an evening of networking. We are looking forward to the spring where our plans include a film fest, volunteering for a coastal restoration project, and of course, TCS 20.

University of Rhode Island
The URI chapter is getting ready to elect a new slate of officers at the end of March. Brown Bag presentations continue and are giving students a chance to hone their skills before presenting at TCS20 in May.

APPLYING THE TCS/NOAA INTERNSHIP MODEL

NOAA's National Marine Fisheries Service has hosted a TCS student member as a paid intern in its Silver Spring, Maryland office during each of the past four years. The program, hosted by the Office of Habitat Conservation, has proven to be immensely successful. Competition has grown each year and the interns have proven so valuable that each one has stayed longer than the intern from the preceding year. And all have stayed beyond the initial internship. Clearly, the basic objective of providing a stepping-stone to a coastal career has been achieved. In fact, the internships have contributed directly to a PhD by Becky Cooper (our 2002 intern, degree received in 2005 from East Carolina University), a contract position for Wes Patrick (2003), and longer-term NOAA/NMFS jobs for both Kim Lellis (2004) and Jeff Smith (2005).

Four years of experience has also dispelled fears that the time investment to host a short-term intern would over-shadow the potential contributions of a student or recent graduate. As evidenced by each intern, the agency's obligation to mentor a new colleague and the intern's effort to relocate to a new home have been eclipsed easily by impressive accomplishments and newfound friendships. Each intern and each of their colleagues readily attest to the fact that this program is a winner.

This intern program offers a simple model for other agencies, the private sector, and academic institutions. Using the initial search of interested TCS members, other hosts could search for potential matches, with little effort and great promise. NOAA joined with the Surfrider Foundation on the 2006 internship program, with each expecting to hire one intern. Judging by the response, TCS could easily place several more high-quality interns at other institutions.

If you have questions or are interested in joining the 2007 version of this solicitation, please contact Tom Bigford at thomas.bigford@noaa.gov or 301/713-4300.

CHARTING A NEW COURSE: SHAPING SOLUTIONS FOR THE COASTS

THE COASTAL SOCIETY'S 20TH INTERNATIONAL CONFERENCE
JOIN US IN ST. PETERSBURG, FL MAY 14-17, 2006

****TCS 20 will focus on how we develop innovative solutions for coastal problems****

- How do we change current patterns of behavior and decision-making in coastal development?
- What innovative tools should we use to balance competing ocean uses and adjust to new ocean governance principles?
- How can science be used more effectively to improve the quality of our coastal waters, lands, and living resources?
- How do we increase the ability of coastal leaders to be more critical, involved decision makers?
- What lessons can the United States learn about coastal disaster response from the experiences of other countries?

Concurrent sessions will encompass five themes:

- Solutions for Land Use Challenges
- Solutions for Governing Ocean Use Conflicts
- Solutions for Effective Integration of Science in Coastal Decision-Making
- Solutions for Innovative Training for Coastal Professionals and the Public
- Solutions for Mitigating Natural Hazards

Sitting upon a spectacular white sands beach, the **Tradewinds Resort St. Pete Beach, Florida** *http://www.tradewindsresort.com* offers a unique opportunity to explore this St. Petersburg/Tampa Bay region barrier island. Plan to network outside alongside one of the Resort's pools with the sound of the ocean in the background.

Interesting field trips before and during the conference.

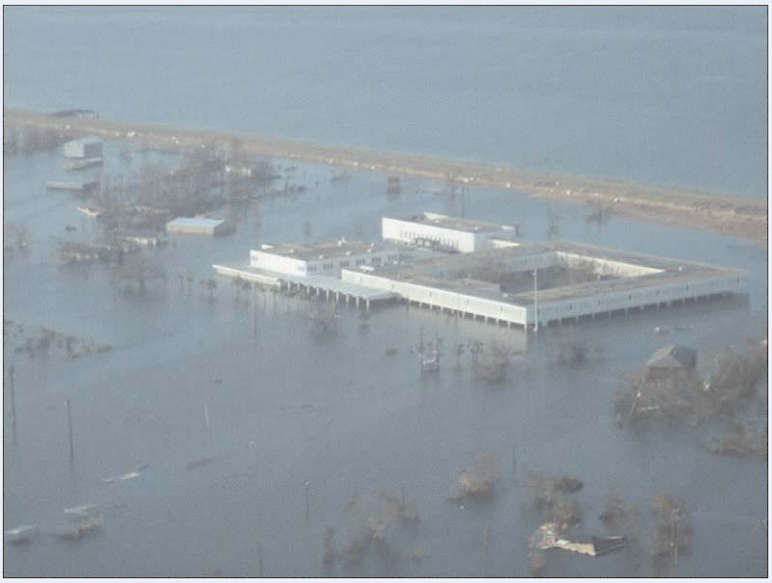
For detailed information on all aspects of the Conference, including how to register, visit: www.thecoastalsociety.org/conference/tcs20/index.html

THE COASTAL SOCIETY COASTAL RESOURCE RECOVERY FUNDRAISER

The Coastal Society (TCS) is embarking upon a new fundraising initiative that will contribute to coastal resource protection and restoration efforts currently underway in areas devastated by hurricanes Katrina and Rita. Funds raised during this effort will be used to sponsor some coastal resource protection and restoration projects in coastal communities in Louisiana, Mississippi, and Alabama.

TCS will be collecting tax-deductible donations for this Coastal Resource Recovery Fund (CRRF) until Fall 2006, after which TCS will issue a Request for Proposals that will aid in the selection of coastal resource recovery projects. Donations will be collected through the following means: 1) direct donations contributed at The Coastal Society's 20th Biennial Conference in St. Pete Beach, Florida from May 14-17, 2006; 2) direct donations contributed after TCS 20; 3) online donations through the TCS website; and 4) through regional chapter events.

Menhaden Boats on Highway 23. Photo credit: Philip Chandler, Louisiana State University



Boothville, LA High School. Photo credit: Philip Chandler, Louisiana State University

This timely fundraising initiative will assist communities and resources affected by hurricanes Katrina and Rita, as well as provide an avenue by which members and non-members can contribute to enhancing the lives of those affected by these natural disasters. The TCS fundraising initiative also provides an opportunity to improve the health of coastal resources and to educate the public on the importance of protecting and restoring our Nations' natural resources.

Detailed information about the TCS Coastal Resource Recovery Fund will be distributed in the next few weeks via postal mail, electronically and at TCS 20. If you have any questions, please contact Kristen M. Fletcher, Chair, Special Projects Committee, kfletcher@rwu.edu or Kimberly Lellis, Co-Chair, Special Projects Committee, Kimberly.Lellis@noaa.gov

Conference on Coastal Zone Management
April 12, 2006, Cardiff, United Kingdom
http://www.ice-wales.org.uk/news_events/events_view.asp?eventid=4701

Ocean Research Priorities Plan Workshop
April 18-20, 2006, Denver, CO
The goal of the workshop is to provide an opportunity for ocean science communities to interact and provide guidance on the development of the Ocean Research Priorities Plan. http://ocean.ceq.gov/about/jsost.html

Red Tide Symposium
April 18, 2006, MIT's Bartos Auditorium (building E15), Cambridge, MA.
MIT Sea Grant is hosting an all day symposium on harmful algal blooms. The purpose of this meeting is to bring together the scientific, regulatory, and fishing communities to share lessons learned from the 2005 red tide bloom and preparations for the 2006 shell fishing season. This meeting is open to the public, but preregistration is s required.
http://web.mit.edu/seagrant/rt06/

17th Global Warming International Conference and Expo
April 20-21, 2006, Miami, FL.
A sampling of session topics include the following: Sustainable Environment and Health for the 21st Century, Remote Sensing and Global Surveillance, Water Resources Management, Extreme Events and Impacts Assessment, and Global Warming and the Oceans. gw17@globalwarming.netvisit; http://globalwarming.net/

Marine Nature Conservation in Europe 2006
May 8-12, Stralsund, Germany
http://www.habitatmarenature2000.de/

FAMEast, Fisheries and Marine Ecosystems Graduate Student Conference
May 13-14, 2006, Tradewinds Resort Island Grand, St. Pete Beach, FL,
This conference is being held immediately prior to the TCS 20 conference in the same Tradewinds Resort Island Grand at St. Pete Beach, FL http://imars.marine.usf.edu/~cwall/FAMEast/home.htm

TCS 20, The Coastal Society's 20th International Conference, Charting a New Course: Shaping Solutions for the Coast
May 14-17, 2006, St Pete Beach, FL
www.thecoastalsociety.org/conference/tcs20/index.html

New Water Policies: the Framework Directive
May 17-18, 2006, Barcelona, Spain
http://www.ewaonline.de/downloads/Barcelona_programa%20defi.pdf

2006 Association of State Floodplain Managers Conference
Week of June 11, 2006, Albuquerque, NM.
30th annual conference theme: "Floodplain Management Crossroads-Where Route 66 Meets the Rio Grande."
http://www.floods.org/Conferences,%20Calendar/albuquerque.asp

Stream Restoration and Protection in the Mid-Atlantic Region, Annual Conference of the Mid-Atlantic Sections of the American Water Resources Association
June 14-16, 2006, Montclair State University, Branchville, NJ
www.awra.org/state/new_jersey/mac2006

16th World Conference on Disaster Management

June 18-21, 2006, Metro Toronto Convention Centre, Toronto, Canada
Annual event addressing issues common to all aspects of disaster/emergency management. The 2006 Conference is expected to attract over 1,500 delegates from Canada, the US and from around the world.
http://www.graphicmail.com/sendlink.asp?HitID=1128517398046&SiteID=9071&EmailID=1782436&Link=http://www.wcdm.org/

The Society of Wetland Scientists 27th International Conference and the Australian Marine Sciences Association Annual Meeting

July 9 - 14, 2006, Cairns, Queensland, Australia
http://www.catchments.org.au/

Arctic Change and Coastal Communities, An International Conference Sponsored by the Coastal Zone Canada Association

August 14 - 18, 2006, Tuktoyaktuk, Northwest Territories, Canada
To address the large-scale and pervasive changes taking place in the Arctic Ocean, and the unprecedented challenges its coastal people will face as they adapt to it. www.czc06.ca

5th European Conference on Ecological Restoration, Land Use Changes in Europe as a Challenge for Restoration: Ecological, Economical and Ethical Dimensions

August 22-25, 2006, Griefswald, Germany
http//www.uni-greifswald.de/SER2006/themes_coasts.html

The 17th International Sedimentological Congress

Aug. 27-Sep. 1 2006, Fukuoka, Japan
http://www.isc2006.com/

Wetlands 2006: Focus on the Great Lakes: Applying Scientific, Legal, and Management Tools to Restore Wetland and Watershed Functions

August 29-31, 2006, Grand Traverse Resort, Traverse City, MI
www.aswm.org/calendar/index.htm

California and the World Ocean Conference '06

September 17-20, 2006, Hyatt Regency, Long Beach, CA
With this event, California will bring together representatives from academia, government, industry, and the public to share ideas and to discuss how California can attain the goals of its strategic plan. Presentation abstracts may be submitted until April 14, 2006. http://resources.ca.gov/copc/strategicplan

North America Oceans Conference and Exhibition

September 18-21, Boston, MA.
Sponsored by the Marine Technology Society and the Institute of Electrical and Electronics Engineers, the technical program at this Oceans Conference will emphasize what's new and innovative in the field of marine science and technology.
http://www.oceans2006.org/

Restore America's Estuaries 3rd National Conference and Expo on Coastal and Estuarine Habitat Restoration: Forging the National Imperative for Restoration

December 9-13, 2006, New Orleans, LA
www.estuaries.org/conference

A Major Ecosystem Shift in the Northern Bering Sea
Until recently, northern Bering Sea ecosystems were characterized by extensive seasonal sea ice cover, high water column and sediment carbon production, and tight pelagic-benthic coupling of organic production. Research published in the journal Science shows that these ecosystems are shifting away from these characteristics. In the past decade, geographic displacement of marine mammal population distributions has coincided with a reduction of benthic prey populations, an increase in pelagic fish, a reduction in sea ice, and an increase in air and ocean temperatures. These changes now observed on the shallow shelf of the northern Bering Sea should be expected to affect a much broader portion of the Pacific-influenced sector of the Arctic Ocean.
www.sciencemag.org/cgi/content/abstract

Deeper Hooks Could Dramatically Reduce Sea Turtle Mortality
From Sea Span Marine Newsletter: Earthwatch-supported scientists say that the turtle mortality by longline fisheries in the Mediterranean Sea could be reduced by as much as 80 percent if fishermen bait their hooks with mackerel and fish at slightly deeper depths, while the target swordfish catch would remain the same. The experiment was modeled after a similarly successful study in the North Atlantic by the U.S. National Marine Fisheries Service, and was conducted with their assistance. The study was part of a long-term research project to find solutions to the bycatch problem. http://www.earthwatch.org

Invasion of the Habitat Snatchers
Excerpted from Habitat Hotline Atlantic: Two new invaders of the U.S. Atlantic coast, lionfish and sea squirts are now making headlines and may gain as much notoriety as zebra mussels, Asian oysters or snakeheads. Lionfish (Pterois volitans), native to the Indian and Western Pacific oceans fiercely defend their home ranges from other lionfish or other fish. Natural predators are virtually unknown in both native and introduced ranges. Notorious for their highly venomous spines, the sting is considered a health emergency and can potentially be fatal to humans. Experiments demonstrate that lionfish generally do not survive in waters with temperatures below 13 degrees C/55 degrees F. Hence the northern limit of their range is most likely Cape Hatteras, North Carolina.

Sea squirts, genus Didemnum, are tunicates. Adults have a firm but flexible outer covering, called a tunic. Tunicates may form dense mats made up of thousands of tiny individuals and attach to firm substrates such as gravel, sea scallops, mussels, docks and other structures. Sometimes they even attach to seaweed. Theory has it that these tunicates are Asian in origin, perhaps having hitched rides and oysters imported for aquaculture from Japan to New England. Didemnum sp. Can also heavily foul ships, which may facilitate its worldwide spread. The sea squirts thrive in a wide range of marine environments, though they prefer waters a temperature range of -2-24 degrees C/28-75 degrees F, and have been found inshore in tidal rivers as well as offshore on Georges Bank. A major concern is that these Didemnum sp. Squirts could change seabed communities by smothering finfish and shellfish grounds, thus having the potential to change the landscape of the seafloor, wreaking major changes in the ecosystem, with cascading economic impacts.
www.asfmc.org/habitatHotline.htm

Reference to Naval Sonar Deleted in Whale-Beaching Report
From EUCC Coastal News: Documents released under a court order show that a government investigatory studying the stranding of 37 whales on the North Carolina coast in the United States last year changed her draft report to eliminate all references to the possibility that naval sonar may have played a role in driving the whales ashore. The issue of sonar's effects on whales is a sensitive topic for the U.S. Navy. It has clashed with environmentalists in several court suits seeking to limit use of the technology because of its possible effects on marine mammals and other sea creatures. The January 2005 stranding occurred shortly after naval maneuvers in the area, which is off North Carolina and in the region where the Pentagon wants to build an underwater sonar training range.
www.washingtonpost.com/wp-dyn/content/article/2006/01/19/AR2006011902990.html

Floating Windmills
Excerpted from EUCC News: The Norwegian company Hydro, an offshore produced of oil and gas has developed a new concept; Floating concrete construction technology developed for the North Sea oil industry will be applied to offshore windmills. The placement of a windmill in the North Sea is now being evaluated to determine if it is possible to build offshore wind parks at sea depths of 200-300 meters. A demonstration project is currently being planned based on wind turbines with a power generation capacity of 3 MW. The windmills will reach 80 meters above the sea's surface and will have a rotor diameter of about 90 meters.
http://www.hydro.com/en/press_room/news/archive/2005_11/hywind_en.html

National Management Measures to Control Nonpoint Source Pollution from Urban Areas
Excerpted from CZ-Mail, a publication of the MA Office of CZM: The U.S. EPA has released a free guidebook for managing runoff pollution caused by urban activities. Designed as is an information source for states and cities to use in their pollution-management programs for protecting waterways. The guidebook contains 12 management measures to help establish performance goals for stormwater control programs, and to reduce the impacts of urban runoff. http://www.epa.gov/nps/urbanmm/

New Draft Watershed Handbook Released
From CZ-Mail: The Draft Handbook for Developing Watershed Plans to Restore and Protect Our Waters is aimed toward communities, watershed groups, and local, state, tribal, and federal environmental agencies. This handbook contains in-depth guidance on quantifying existing pollutant loads, developing estimates of the load reductions required to meet water quality standards, developing effective management measures, and tracking progress once the plan is implemented. EPA will be accepting comments and suggestions on the document to incorporate in the final version of the handbook. To view the draft handbook, go to http://www.epa.gov/owow/nps/watershed_handbook/. Address any comments to watershedhandbook@epa.gov by June 30.

U.S. Officials Learn From Dutch Flood Expertise
Excerpted from EUCC News: Officials from Louisiana visited the Netherlands in January to learn more about the prevention of future flood disasters. The Dutch stressed and their U.S. counterparts agreed that short-term measures could not protect low-lying lands from storms such as the two Category 5 hurricanes that devastated Louisiana and Mississippi last year. After suffering a similar calamity in 1953, when a massive North Sea storm breached the famed Dutch dikes in more than 450 places along the southwest coast, killing 1800 people, the Dutch spent nearly $15 billion over the next five decades improving flood defenses. One system alone, the Maeslant storm surge barrier coast $700 million to build and was completed only in 1997. The Louisiana visitors said they were struck by how the Dutch were constantly aware of the threat to their land and their lives reminding their visitors repeatedly that long-term thinking was crucial to preventing flood disasters, and that they themselves are working on plans to cope with rising sea levels, sinking land and increased rainfall. http://www.planetark.com/dailynewstormy.cfm?newsid=34476&newsdate=13-Jan-2006

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(Please print out and complete all blanks.)

Name: _____
Last First Middle Initial

Organization: _____

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_____

_____

Day Phone: (____)_____ E-Mail: _____

Present Occupation: _____

Primary Interest: _____

Sponsored/Referred by: _____

Signature: _____ Today's Date: _____

Type of Membership:

Individual Regular: __ $35 U.S. 1-year __ $68 U.S. 2-year __ $99 U.S. 3-year

Student: __ $15 U.S.

U.S. Library: __ $50 U.S.

Corporate/Agency: __ $250 U.S.

Dues Payment:

Select membership category and number of years (discount for 2 or 3 years).

To pay by check: Make check payable to: The Coastal Society. Please mail check and application to: PO Box 25408, Alexandria, VA 22313-5408.

To pay by credit card: We cannot accept credit card information other than through the PayPal option. Please go to the TCS online membership form if you wish to pay by credit card (http://www.thecoastalsociety.org/membersub.html).

Thank you for your support.

The Coastal Society is an organization of private sector, academic, and government professionals and students dedicated to actively addressing emerging coastal issues by fostering dialogue, forging partnerships, and promoting communication and education.