



Works in Progress

SPRING 2003

Center Helps Local Citizens Fight Asphalt Plant Permit

Brunswick, Georgia - Following a public hearing held here earlier this month, with the help of the Center for a Sustainable Coast, more than 150 property owners and residents have signed and submitted a petition unconditionally opposing an air quality permit being requested by Douglas Asphalt Company. At the hearing, the packed room heard informative testimony by Daniel Parshley with the Glynn Environmental Coalition, who explained that the plant would add toxic chemicals to air in an area of Brunswick that is already known to be in violation of state and federal standards. Hundreds of residences and at least five schools are in this area, potentially exposing thousands of people to serious health risks if state officials grant the permit. Applicant representatives gave no clear justification for the chosen site.

At issue is a section of the air quality regulations that requires Georgia's Environmental Protection Division, which administers the Federal Clean Air Act in this state, to consider "background contamination" caused by other sources of pollution that are already permitted in the area. EPD staff at the hearing admitted that they had never used that section of the regulations before.

In preparing the petition, staff of the Center for a Sustainable Coast used language taken from a legal complaint they had already filed with EPA in a related case, which challenges an air quality permit recently issued by EPD

Those of us in the impact area are grateful that the Center assisted by getting our concerns heard at EPD and made part of the official record in Atlanta.

Roger Browher, Concerned Citizen

for a neighboring chemical plant owned by Hercules, Inc. The complaint was sent to EPA at the end of January by the Legal Environmental Assistance Foundation (LEAF) on behalf of Glynn Environmental Coalition and Center for a Sustainable Coast. Like the permit being requested by Douglas Asphalt, in reviewing the Hercules air permit, EPD should have properly evaluated existing contamination in the area affected. But the Hercules permit was issued without EPD conducting the required assessment. Many people have testified

at public hearings about air quality concerns related to both permits.

"We are hopeful that our citizen petition will send a compelling message to EPD, convincing them to carefully review the applicable regulations in reaching a decision that protects the public by denying this permit," said the Center's executive director, David Kyler. "Those of us in the impact area are grateful that the Center assisted by getting our concerns heard at EPD and made part of the official record in Atlanta," added local resident Roger Browher, who was instrumental in getting the petition signed by many neighbors.

Interestingly, shortly after the public hearing, the Glynn County Board of Commissioners passed a motion to send a letter to EPD stating their objections about the asphalt plant permit, including added pollution problems at the proposed site and safety hazards introduced by truck traffic that could amount to as much as 150 trips a day. Although there is no set schedule for reaching a decision, it is likely that EPD will take action on the permit within 60 days, unless the applicant withdraws it.

URGENT! Action Needed NOW on the "Clean Water Authority Restoration Act of 2003"

Please, Write Your Congressional Representatives

Background

For 30 years, the Clean Water Act has provided a safeguard against dumping waste into waters and destroying wetlands, which provide habitat for wildlife, absorb floodwaters, and filter pollution from water. **These measures also help protect our marine and related coastal resources, which support some 40,000 jobs in coastal Georgia. And, unlike some states, Georgia has no separate state protection for freshwater wetlands, so the federal law is utterly essential.**

A 2001 Supreme Court ruling introduced questions about federal Clean Water Act protections applicable to all wetlands, streams and other waters that may be considered "isolated." In the wake of confusion created by the Court's opinion, varying interpretations have been applied by government agencies and in the courts. In some areas of the country, the ruling was seen as setting aside federal protection of waterbodies that are not immediately adjacent to rivers and

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Action: from pg. 1 streams used for navigation. In coastal Georgia alone, some 350 acres of isolated wetlands have lost protection and been approved for development in the first 18 months since the Supreme Court decision, due to misguided interpretation by the Savannah District Corps of Engineers.

On February 27th, 2003, the “Clean Water Authority Restoration Act of 2003” was introduced into Congress. This bill clarifies that Congress intends for Clean Water Act protection to extend to all of the nation’s waters, including the so-called isolated wetlands, streams, ponds and other waterbodies that play an integral role in our environment and the health of our communities. **This bill will prevent further damage to public resources of vital importance to coastal Georgia. Please take action now by writing a letter to your senators and congressman! Be sure to send a copy to the EPA.**

Sample Letter:

Please modify to reflect where you live, local issues, and your writing style.

Date _____

Dear Senator (or Representative) _____:

The “Clean Water Authority Restoration Act of 2003” (S. 473 or H.R. 962) is an important step for safeguarding wetlands, small streams and ponds from mining and other industrial waste dischargers and developers.

The Clean Water Authority Restoration Act is particularly essential in light the Bush Administration’s response to a Supreme Court ruling in 2001, which dealt a serious blow to the protection of the nation’s waters by narrowing federal authority to control water pollution in seasonal wetlands and other waters that lack permanent surface connections to flowing waters.

The Administration is using the Supreme Court ruling as justification for abandoning many small streams, wetlands and ponds. This action would leave communities at risk from increased flooding, degraded drinking water, exposure to bacteria, pathogens and toxics.

Moreover, it would harm our coastal estuaries, among the most naturally productive ecosystems, and which have great economic value in Georgia. Some 40,000 jobs here are derived from these ecosystems that vitally depend on protection of wetlands and other water resources. Our natural heritage, public health, and economic vitality depend on the protection of these ecosystems.

I urge you to cosponsor the Clean Water Authority Restoration Act of 2003 to ensure that the Clean Water Act will continue to keep all of our nation’s waters healthy and safe. I look forward to hearing your views on this matter.

Sincerely,

Your Name and
Mailing Address

cc: EPA
Attn.: Donna Downing
Office of Wetlands,
Oceans, and Watersheds
1200 PA Ave NW
Washington DC 20460
CWAwaters@epa.gov

Addressing Correspondence:

To Georgia Senators¹:
Honorable Zell Miller
Honorable Saxby Chambliss
United States Senate
Washington, DC 20510

To Georgia 1st District Representative²:
Honorable Jack Kingston
U.S. House of Representatives
Washington, DC 20515

¹ If you live outside Georgia, please write to your state’s senators using the same address.

² If you are outside the 1st district, please write to your own congressman using the same address.

Message from the Executive Director

WITH CLARITY AND PURPOSE IN A CHANGING WORLD

As this issue goes to press, we face an anxious future made more uncertain by world events and international conflict that profoundly threaten our security. Many of us are also wary that terrorism and its responses may impair our cherished civil liberties.

Despite these stressful preoccupations, we must not lose sight of the timeless importance of nature—in healing our spirits and nourishing our bodies, and in sustaining our communities. The natural beauty of our coast is more vital than ever as a source of great consolation in these troubled times. Seen in this perspective, we realize that our cultivation of a fulfilling life rests on more subtle aspirations than material comforts and well-defended security.

Ultimately, we must come to terms with the demands we place on nature – as individuals and communities, and as consumers, workers, and property owners. Throughout this period of greater uncertainty, we must resolve to focus on the things that matter most, taking suitable actions that will truly advance our shared values as a society.

While the world order confronts new threats, we must seek innovative opportunities for answering such fundamental questions in our own communities. In keeping a global view, we cannot afford to be overly distracted by transient political events, no matter how pressing. Nor can we revert to temporary economic remedies that provide deceptive, short-lived gains that we may soon regret. If history teaches us anything, it is that humanity is best served by the wisdom of perspective and moderation.

It is this truth that the Center pursues as we explore alternatives for achieving coastal Georgia’s potential—balancing human needs with those of nature, using resources wisely—guided by science to the extent possible, and exercising

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Water Policy Involvement

"Conservation potential of major user groups"—working paper promoting water conservation research, for the **State Legislative Water Study Committee**

"Water Conservation as Potential Supply Source" – paper for the 2003 **Georgia Water Resources Conference**

Editorial on pending state water legislation—*Darien News* and *Bryan County Times*

Action Alert to Center's network members (225 people) on pending state water legislation

Action Alert to Center's network members regarding **federal rules on isolated wetlands**

Presentation to Leadership Georgia Southeast on water issues and related legislation

Participation in Georgia Water Coalition in preparing recommendations for state water legislation

Commentary on Georgia water conservation feasibility potential – *Connect Savannah*

"Water Resource Issues & Local Land Use Decisions"—A Recommended Approach
" – Memo to elected and planning officials of Glynn County

Legal Actions & Formal Comments

Challenged Marshland Protection Permits with Southern Environmental Law Center (SELC): for Emerald Pointe (Chatham County; **appeal won** in Superior Court) and Manhead Marina (Glynn County; **appeal won** in Administrative ruling—much thanks to SELC for legal work in both instances).

Complaint filed with EPA objecting to air emission permit for Hercules, Inc., Glynn

WHAT HAS THE CENTER DONE FOR YOU LATELY?

It may not be obvious just how much the Center does in representing the public interest of coastal Georgia. The following list of our activities in recent months is compelling evidence of the Center's relevance.

For more explanation about any of these items, please visit our website (www.sustainablecoast.org), or call our office at 912.638.3612. We also welcome your suggestions for future work of the Center.

County – pending, thanks to expert assistance of Legal Environmental Assistance Foundation

Comments to Environmental Protection Division on state permits for Illuka Mining (Brantley County)

Comments filed with Corps of Engineers regarding Altamaha riverfront project (Darien, McIntosh Co.)

Comments to Department of Natural Resources on beach renourishment permit, Saint Simons Island

Comments to Nuclear Regulatory Commission on proposed plutonium processing operation at Savannah River Site (upriver from Savannah)

Comments and citizen petition filed with **Environmental Protection Division** in opposition to **proposed asphalt plant** (Glynn County)

Comments to EPD regarding rules for water withdrawal permits using the **Lower Floridan Aquifer** and on proposed **water withdrawal** from the **Lower Floridan Aquifer** in Richmond Hill

Comments to Glynn County planning and elected officials on **Live Oak Power Plant**

Comments to Liberty County planning and elected officials on proposed major development project

Comments to Department of Natural Resources on **Grover Island bridge permit** (Camden County)

Collaboration in Decision Processes

Ongoing comments on Savannah harbor expansion project, as member of the Stakeholder Evaluation Group.

Georgia Coastal Management Program – participating in steering committee, restructuring advisory council and developing work program.

Development of Glynn County greenspace program as member of the Greenspace Advisory Committee.

Coordination of Georgia environmental advocacy as contributor to the **Georgia Environmental Action Network – League of Conservation Voters**

Guidance of Georgia environmental information distribution and organizational networking as board member of the **Georgia Environmental Council**.

PLEASE, JOIN THE CENTER OR RENEW YOUR SUPPORT TODAY.

I would like to join the Center (please choose type).

- | | |
|--|---|
| <input type="checkbox"/> Family (\$40) | <input type="checkbox"/> Sponsor (\$250+) |
| <input type="checkbox"/> Individual (\$30) | <input type="checkbox"/> Patron (\$500+) |
| <input type="checkbox"/> Student (\$10) | <input type="checkbox"/> Investor (\$1000+) |
| <input type="checkbox"/> Business (\$100+) | |

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for \$ _____

☐ For a specific issue or activity \$ _____
(please describe) _____

Commemorative and issue specific contributions may be made in any amount.

☐ I prefer receiving the newsletter by e-mail.

☐ Please enroll me in the Center's **Coastal Action Advisory Network**

☐ Although I do not want to join the Center, I would like to make a contribution of \$ _____

☐ Although I do not want to join the Center, please put me on your mailing list (use form).

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

E-Mail _____

Please Complete, Print & Mail This Form with your **tax-deductible check**, made payable to:

The Center for a Sustainable Coast
221 Mallory Street Suite B
St. Simons Island, GA 31522

This form also available at our website **www.sustainablecoast.org**

GEORGIA AT THE EDGE

VALUE AND VULNERABILITY OF ESTUARIES

Ron Kneib, PhD, Senior Research Scientist
Univ. of Georgia Marine Institute

Estuaries are created when fresh and saline waters mingle to form a transitional zone linking processes and products of the land and sea. They provide ecological services and opportunities that contribute to the economic, recreational and culture resources required to sustain the quality of our lives—at no cost.

Most estuaries are located along coastlines where they persist in a dynamic balance influenced by both the sea and adjacent uplands. Experiencing the regular ebb and flow of ocean tides as well as episodic changes in the quantity and quality of freshwater entering the system from upland drainage basins, estuaries are defined by changing conditions that few species of plants and animals, including disease organisms, can fully tolerate. Those species that have adapted to this dynamic environment are exceptionally successful (e.g. shrimp), making estuaries among the most productive environments on Earth.

Where barrier islands, bays, sounds and other irregularities in the coastline buffer the erosive influence of ocean waves, estuaries can support expansive areas of intertidal plants found nowhere else. The emergent plants of temperate salt marshes and tropical mangrove forests sustain the coastal environment by contributing physical structure and food in the form of both living and dead plant biomass.

As long as conditions remain favorable for their growth, these plants stabilize shorelines and waterways because their roots hold soils in place and their above-ground structure slows water flows and captures suspended sediments. This helps to:

- buffer adjacent uplands from destructive forces of storms,
- maintain the elevation of the marsh against relative sea level rise,
- keep tidal channels open, and
- at the same time, the plants remove carbon dioxide from the atmosphere as well as nutrients and chemical pollutants from the water. These processes improve the quality of our air and water while producing food and shelter for coastal fishes, shrimps, crabs, birds and other wildlife resources.

Most of the vegetated estuarine habitat in the U.S. is in the Gulf of Mexico, but 39% of the country's salt marshes occurs along the Atlantic coast, with Georgia accounting for about 5%. Georgia's salt marshes contribute disproportionately to the total when one considers that this state represents only 0.8% of the coastline and 2.6% of the tidal shoreline of the country. **In other words, Georgia has around six times more tidal marsh in proportion to our ocean shoreline than is the average for coastal states, with corresponding responsibilities for protecting the marsh ecosystem,**

a challenge made more formidable by current rates of growth and land disturbance.

The historically low human population density along our coast has kept Georgia's tidal marsh estuaries among the least disturbed and most productive of the eastern U.S. seaboard. However, the free and self-sustaining ecological services provided by these estuaries to the citizens of the state and nation are not without vulnerability.

The most serious threats are usually associated with uncontrolled development, which often results in excessive extraction of key resources and over-burdens the capacity of the ecosystem to absorb change. Recent and projected unprecedented rates of development in Georgia, especially in coastal counties, pose a number of risks to the naturally free services provided by our tidal marsh estuaries.

Key among these risks are changes in the amount or timing of freshwater flows that disrupt the balance between the influence of the land and the sea on the character of the estuarine environment. The estuary is defined and sustained by seasonal variation in the availability of freshwater inputs. As a result, the life cycles of many estuarine-dependent species have evolved around the seasonal cycles of freshwater inputs to coastal wetlands.

Increased extraction and consumption of surface and underground sources of water for industrial and residential use lowers the water table and reduces the net input of freshwater, allowing the marine environment to have a greater influence on the character of the estuary. Marsh plants and certain life stages of species dependent on estuaries as nurseries do not survive or grow well in the saltier, fully marine, conditions, to which they are not adapted. Under these conditions, some species may become more susceptible to diseases or less resistant to the effects of invasive species from the marine environment.

Equally important are disruptions that favor greater influence from the land on the estuary. Development within the upland areas of an estuarine drainage usually involve the conversion of forests and fields into impermeable surfaces, such as

WE'RE LOOKING FOR A FEW GOOD BOARD MEMBERS!

If you or people you know are interested in coastal development issues, want more effective environmental safeguards, and would like to play an active role in helping our dynamic coastal group move ahead on these issues, please contact us!

Either call (912) 638-3612 or email us at susdev@gate.net for further information.

rooftops, paved roads and parking lots. Vegetated upland soils retain rainfall and regulate the delivery of freshwater to the estuary through filtered sub-surface flows, but impermeable surfaces allow rainwater to drain quickly into the estuary causing rapid reductions in salinity that alters or destroys desirable estuarine communities.

Freshwater runoff into the estuary from impermeable surfaces and residential areas also carries with it a variety of toxic compounds including refined petroleum products that leak from motorized vehicles as well as pesticides/herbicides from lawns, gardens and golf courses. Wastewater from residential sewage systems in coastal areas can also contain bacteria or viruses associated with human diseases.

These toxic compounds or disease organisms may accumulate in fish, shrimp, crabs or clams at sub-lethal levels and thus threaten the safety of the human food supply produced in estuaries. The effects of degraded water quality in the coastal ocean can also influence the functioning of estuarine eco-systems through direct toxic effects (e.g. oil spills or transport from toxic ocean dump sites) or through biological invasions of exotic species or diseases transported in the bilge water of ships entering ports.

Even if the quality and quantity of water entering estuaries from either the upland or the coastal ocean is maintained, development in and around estuaries almost always involves structural changes to the ecosystem (e.g. docks, canals, bulkheads, etc) that impact present and future processes crucial to the sustainability of ecological services.

Addition of such structures alters water flows and sedimentation that may result in the filling of tidal creek channels, subsidence and water-logging of marshlands, or interference with tidal movements of fishes, shrimps and crabs between the open waters of the estuary and productive foraging areas on the marsh plain. Such effects undermine the capacity of the marsh to support the growth and survival of fisheries species and also compromise the system's ability to maintain itself. The inappropriate location of artificial structures may also attract harvested organisms to areas where they are more likely to be exposed to toxic substances that accumulate in their tissues.

The protection of coastal property from erosion usually involves armoring the shoreline with rock (rip-rap) or bulkheading, which prevents the natural migration of wetlands inland with sea level rise. This interferes with the dynamic interaction between land and sea that characterizes the estuary and compromises the long-term future of wetlands by promoting their loss through conversion to open water.

Landscape-level impacts of many alterations associated with the development of estuarine areas remain poorly studied. These include the potential for increase erosion and alteration of creek edge habitat by motorized watercraft in the narrow channels of tidal marshes as well as the effects of changing light- and sound-scapes on the distribution of fish and wildlife in estuaries.

Rehabilitation of damaged estuarine ecosystems and the recovery of lost ecological services can be costly, as is being



discovered by those in more developed coastal states of the northeastern U.S. and in the Gulf of Mexico. Those responsible for environmental degradation of estuaries rarely pay the costs of recovering the free ecological services previously provided by unmanaged and undeveloped systems; costs of replacing or restoring those services generally are borne by the public at large through taxes or increased prices for consumer goods.

The slice of Georgia at the edge of the land and sea, loved by many and immortalized by Sydney Lanier in the "Marshes of Glynn", today teeters on the edge of decisions that will have profound consequences for the future of the coastal zone. The estuaries of coastal Georgia are already showing signs of degradation, particularly in and around the coastal cities of Savannah and Brunswick, but much of the middle coast remains among the least disturbed in the nation.

We have the benefit of hindsight in seeing what poorly planned development has done in estuaries of other coastal states and have first-hand knowledge of the costs of urban sprawl and unconstrained development in and around our own state capitol. What should we expect from Georgia's estuaries in the future? Will we live within the capacity of the system to provide free ecological services in perpetuity or force future generations to pay for what we now enjoy at no cost? We must do everything possible to avoid unwise actions that could jeopardize our estuarine resources by promoting, adopting, and implementing sustainable public policies.

Dr. Kneib is one of the Center's advisors whose opinions are crucial in our analysis of coastal issues.



JUDGE SUSPENDS PERMIT FOR MAJOR MARINA EXPANSION

Center succeeds again in taking legal action to protect coastal environment

For the second time in two years, a judge has suspended a permit for the proposed expansion of a commercial marina on a small island on the Mackay River due to the serious lack of information about the project's impacts on the surrounding fragile marshlands. On March 13, Glynn County Superior Court Judge Amanda Williams sent the Manhead Marina permit back to the Coastal Marshlands Protection Committee, which issued the permit in 2001, with instructions to "properly consider traffic, waste, and run-off concerns and their potential impact to the public interest."

"This project is clearly outside the boundaries of what most people would consider a reasonable balance of environmental protection and economic development. It is most certainly outside the boundaries of the Coastal Marshlands Protection Act," said Derb Carter, a senior attorney with the Southern Environmental Law Center, a regional non-profit organization which

"It is not the legislative intent to narrowly construe the function of the committee ... to preclude them from considering the effects of an applicant's proposal as a whole."

JUDGE AMANDA WILLIAMS

appealed the permit on behalf of local conservation groups, including the Center, which was the lead appellant.

The permit would allow Manhead Marina to add 109 boat slips, a 785-foot fueling dock, an 11,000-square foot dry dock and boat maintenance yard, a storm drainage system that would discharge directly into the marsh, a store and office building, a septic system, and a 42-space paved parking lot. The facility would cover an entire 1-acre upland area, called a marsh hammock, leaving no buffer between the development and the marsh. The permit also includes a lease for 10.5 acres of publicly owned marshlands adjacent to the island.

Conservation groups have grown concerned in recent years over the increasing development of marsh hammocks, identified by Scenic America as one of America's 10 most endangered landscapes. In 2000, on behalf of the Center for a Sustainable Coast, Georgia Chapter of the Sierra Club, Altamaha Riverkeeper, Glynn Environmental Coalition, and Residents

United for Planning and Action, SELC challenged the Manhead Marina permit.

They showed that the developer had failed to submit an adequate plan to handle sewage from boats and from the facility itself, and had no plan for dealing with traffic to and from the marina. An administrative law judge last year reversed the committee's decision to issue the permit. The Department of Natural Resources appealed that ruling in Glynn County Superior Court.

In her ruling, Judge Williams said the committee erred by not "fully considering all issues" and weighing such concerns as potential traffic and waste effects to the marsh and surrounding area when deciding whether or not to issue the permit.

The ruling states that "it is not the legislative intent to narrowly construe the function of the committee so as to preclude them from considering the effects of an applicant's proposal as a whole." To find otherwise "would render the function of the Committee...ineffective and meaningless."

This ruling, coupled with another ruling from Fulton County Superior Court shelving a permit for three bridges connecting three remote marsh hammocks near Savannah for the Emerald Pointe residential development, sets a strong precedent requiring Georgia's Coastal Marshlands Protection Committee to change its practice of issuing permits without considering cumulative impacts to the marsh hammocks and surrounding waters, Carter said.

Please join us for an important
Community Conference

**THE RESTORATION
ECONOMY**

with

Storm Cunningham

Author & Expert on
Restorative Development and
Consultant to Corporations and
Governments Worldwide

April 25 & 26 at
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With Related Events on
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For more about
Storm Cunningham
and his work, please visit his website:
www.stormcunningham.com

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634-9527

Clarity: from pg. 2

responsible precaution otherwise. We will continue educating the public as new information reveals how these challenging goals may be accomplished. And the Center will persist in taking appropriate steps to control or prevent unwise actions that stray from vitally needed balance, objectivity, and restraint

With your renewed support, we will work to develop approaches that honor our region's natural heritage through responsible policies that protect the public interest—in the use and conservation of our shared public wealth to realize healthy communities and fulfilling opportunities. As our endeavors succeed, together we will emerge from this troubling era with renewed vigor, strengthened by the resolve of our proven convictions. We need your support and involvement to stay on course through these uncharted waters. Please join with us now in navigating toward that promising future by making a tax-deductible contribution or volunteering your valuable skills to the Center.

April 3, 2003

OUR MOMENT IN TIME

COMMENTARY

Leon E. Panetta, Chair, Pew Oceans Commission

When Rachel Carson wrote *Silent Spring* 40 years ago, she battled more than just powerful polluters and skeptical scientists. She challenged the very notion that humans could control nature, insisting instead that we must learn to live with nature. As a marine biologist, she extended this ethic beyond our shores and into the seas. She knew that the oceans nourished not only our bodies but our souls as well.

Yet 40 years later, we find ourselves further out of balance with the 70 percent of Earth that is our oceans. Our coastal waters are clearly straining from the effects of pollution, development, and overfishing. We must summon the national commitment to restore and protect them.

Beach closures, seafood advisories, and the collapse of fisheries are all too common. Whales, turtles, and sea otters cling to survival. All along the coasts, we continue to pave over the very places we love. A fishing heritage that goes back hundreds of years—and lured my Italian grandfather to California—is slipping away.

Consider some of the changes in the oceans over just the past 40 years.

- In the late 60s, the UN's Food and Agriculture Organization estimated that five percent of the world's commercial fisheries were "fully exploited, over exploited or depleted." Today that number is 67 percent, causing not just hardship for fishing families but serious disruption to the oceans' web of life.
- Our industries, cars, and farms have doubled the amount of fixed nitrogen in the environment, much of which flows into the oceans. The result is more than 40 "dead zones" around the world—areas of the ocean devoid of life—including one at the mouth of the Mississippi River that has grown to the geographic area of Massachusetts.
- Fifty-four percent of us now live along the coasts, which comprise just 17 percent of the nation's land. As we crowd along the coasts, sensitive habitats such as marshes and wetlands disappear at an alarming rate.

For the past two years, I have enjoyed the privilege of leading the Pew Oceans Commission in the first independent review of national ocean policy in over 30 years. Along with leaders from the worlds of science, fishing, conservation, business, and politics, I have traveled to coastal communities to talk to people about the problems facing our oceans and explore new ways to address them. Our efforts are complemented by the work of the U.S. Commission on Ocean Policy.

Early next year we will present our recommendations to Congress and the nation for a new national ocean policy.

After speaking with thousands of Americans—most of who live and work along the coasts—the Commission saw a major shift taking place in our attitudes toward the oceans. For centuries, we have treated the oceans as an infinite resource beyond our capacity to overexploit or harm. We now know that this is not true. Our oceans are more vulnerable—and more valuable than we ever imagined. And we are just beginning to fully appreciate their benefit to our physical, economic, and spiritual well-being.

"These changes are taking place in individual communities across the nation. Together they add up to a crisis in our oceans. By any measure, and despite many good intentions and modest successes, ocean governance is failing."

There is potentially good news on the horizon for America's oceans. Scientists tell us that it is not too late to act. The oceans can recover. But time is running out. What can we do to restore and maintain the oceans?

We can begin by developing a greater appreciation for the connection between the land and the sea. Polluted runoff from city streets and farm fields ultimately finds its way to the coast, and poorly planned development only magnifies the problem. Forty-four percent of the nation's estuaries are currently unfit for swimming and fishing.

We must adapt our management of the oceans to respect the complex relationships among living things and the marine environment. Our primary goal must be to restore and maintain the health of ocean ecosystems—such as coral reefs, kelp forests, and seagrass beds. Without healthy, functioning ecosystems we cannot enjoy the oceans' ecological and economic benefits.

Finally, we must embrace our oceans as a public trust, and accept responsibility for their stewardship.

Theodore Roosevelt said, "the nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, not impaired, in value." We owe it to our children to turn over clean beaches, abundant marine life, and healthy oceans.

Can we get the nation to pay attention to the fate of our oceans at a time when we are fighting terrorism and securing our homeland? My response is that protecting our oceans and their resources are also vital to our national security. We

cannot afford to defend our interests abroad while sacrificing our interests here at home. Rachel Carson spoke out against the use of toxic pesticides at the height of the Cold War, and the nation responded.

Our oceans are our national trust and are calling out for our help. This generation has a duty as good stewards to respond to this challenge for the sake of our children.

This is our moment in time.

EDITOR'S NOTE:

This article speaks to the global consequences of our local actions, which are accumulating in the rapid decline of priceless ocean resources—the foundation of worldwide biological stability and health. One of the keys to reversing these adverse trends is under our very own influence—reducing the impacts of land-based activities, especially in coastal areas.



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**Your support
is important!**

Unless you are a current Center member, this may be your last issue of Works in Progress. Beginning with our next issue, we will limit distribution of our newsletter to current members, volunteers, selected public officials, and collaborating organizations.

If you are in doubt about your membership status, please check your mailing label above. If it indicates that you are a non-member, an expired member, or says nothing about your membership, according to our records, you are not a current Center member.

Please call the Center if you have any questions about your membership or you believe our records are incorrect. If you are not a current member, please complete the enclosed membership form and return it with your **tax-deductible membership contribution** using the enclosed envelope.

COASTAL GEORGIA INDEX : F A C T S ESTIMATES PROJECTIONS

*Natural resources are
our most irreplaceable
form of public wealth.
Use them wisely for the
lasting benefit of this
and future generations.*

- Percent of Georgia land area that drains into coastal Georgia's five rivers: **63%**
 - **Doubling** rate of coastal population growth: **35 years** (population predicted to be one million by 2030)
 - Number of jobs derived from coastal Georgia's natural resources: **40,000**
 - Percent of coastal Georgia employment derived from natural resources: **20%**
 - Annual business volume generated by coastal Georgia's natural resources: **\$1 billion+**
 - Percent of state & local government budgets spent on resource management: **0.2%**
 - Number of people who could be supported by 10% savings in industrial (includes power production & manufacturing) water use on coast: **500,000**
 - Water used by industry & energy producers in the region as percent of coastal total: **86.4%**
 - Share of state fish consumption advisories in coastal waters: **50%**
 - Most common contaminant of fish in Georgia and coastal Georgia: **mercury**
 - Single largest source of mercury contamination: **coal burning power plants**
 - Percent of Georgia's waters sampled: **10%**
 - Percent of Georgia's sampled waters that are impaired: **60%**
 - Current blue crab population as percent of 45-year average: **25%**
 - Loss of "isolated" freshwater wetlands on Georgia's coast since Jan '01: **350 acres**
-