



**Gulf of Mexico Alliance - Upper Texas Coast Community Workshop
Texas A&M University at Galveston - September 20, 2005
Summary Report**

I. Group Brainstorming – Issues of Concern Related to Gulf and Sources of Information

A. Identify issues of concern related to the health of the Gulf of Mexico

- Non-point source pollution
- Water quality
- Wetland loss
- Contaminated seafood
- Relative sea level rise
- Land use planning
- Off shore liquid natural gas (open systems/open loop)
 - Pollution
 - Population growth
 - Gulf hypoxic zone
 - Invasive species
 - Habitat loss
 - Coastal sprawl – second homes
 - Freshwater in-flows
 - Recreation and fisheries
 - Sea-level rise
 - Mean temperature rise
 - Loss of sediment input
 - Anemic funding for all of the above (lack of funding)
 - Subsidence
 - Pathogens and other human health
 - Coral bleaching
 - Lack of contingency planning
 - Over fishing
 - Air deposition
 - Public access
 - Navigational hazards to/for recreational boating
 - Erosion
 - Spills – toxic chemicals, oil..
 - International cooperation – working with Cuba, Mexico
- Seafood safety
- Oil rigs
- Waste dumping
- Federally subsidized flood and wind insurance
- Inconsistent Clean Water Act enforcement
- Public Education
- Army Corps of Engineers
- Mosquito Control Board – poisoning environment
- Upstream land management – liquid landfill
- Freshwater inflows
- Fish and shrimp farming – aquaculture
- Lack of understanding of relationships of ecosystems
- Prairie pot holes – isolated wetlands on the prairie
- Dredging and spoils management – channel maintenance, public input, when to dredge, depth, impacts on environment, what do we do with material
- Agriculture runoff
- Coastal stream degradation through drainage improvement projects
- Contact recreation – access and risk
- Marsh restoration or preservation
- Habitat fragmentation
- Lack of knowledge of issues in the Gulf – such as upstream residents

- Challenge of implementing plans to address contact recreation (TMDL)
- By catch
- Status and trends of our coastal and natural resources
- Coastal erosion
- Upland habitat loss
- Estuarine salinity intrusions
- Restocking of Bays
- Loss of biodiversity
- Invasive species

B. Sources of Information and Assistance

- Gulf of Mexico Program website
- Bruce Moulton
- Non profits – Gulf Restoration Network, Marine Fish Conservation Network, National Sierra Gulf listserve
- Academic community
- Sea Grant extension
- Local resource agents – all of them
- The restocking program
- Email newsletters
- Federal agencies, EPA, NOAA, Mineral Management Service, USFWS
- Local planning organizations
- Scientific literature databases
- Generic media – newspaper, media, television, newsgroup
- Water Keepers Program
- Environmental Defense
- US Commission on Ocean Policy
- Agency databases, various
- Fisherman’s groups
- Coastal politicians campaign speeches
- Google
- Scientists
- Rumors!
- Alliance Community workshops
- Everyone in this room – people, friends, colleagues
- Emails from Mom and Friend

II. *Case Study – Habitat Conservation and Restoration Panel Discussion*

Jarrett “Woody” Woodrow, Program Director for the Texas Parks and Wildlife Department Coastal Habitat Program, led a panel discussion on Habitat Conservation and Restoration. Panelists included:

- Bill Baker, Environmental Manager, Reliant Energy
- John Jacob, Director, Texas Coastal Watershed Program (Texas Sea Grant/Texas Cooperative Extension)
- Linda Shead, Program Manager – Houston Field Office, The Trust for Public Land

A. Habitat Conservation and Restoration with Respect to the Health of the Gulf of Mexico

The panel noted that our estuaries are the critical link between the riverine systems of the Gulf Coast States and the Gulf of Mexico. These valuable systems of open water, oyster reefs, and intertidal marsh perform an incredible service, including serving as nursery habitat for numerous marine species, providing a source of income for local commercial fishing interests, providing a source of seafood for a hungry public, providing a source of income from a host of recreational activities, providing a pathway for marine commerce, improving water quality, and buffering impacts of tropical storm systems.

Linda Shead highlighted the ecological, economic, and human health-related importance of coastal habitats:

- Land use affects water quality, and preservation/restoration of coastal habitats can prevent or mitigate water quality impacts.
- Every 2 miles of intertidal marsh can reduce the storm surge by 0.5 foot.
- Galveston Bay fisheries (commercial + recreational) are reported to provide \$1 billion/year to the Texas economy.
- 90% of commercially important Gulf fisheries species depend on estuarine habitat during life cycle.
- Nature tourism is one of the fastest growing sectors of the tourist economy.

B. Sources of Information and Assistance on Habitat Conservation and Restoration

The panelists highlighted sources of information on habitat conservation and restoration. John Jacob pointed out that the Texas Coastal Watershed Program has developed a habitat monitoring program and has updated data on freshwater wetlands. The Galveston Bay Estuary Program has also teamed with Texas A&M University at Galveston to provide an updated data on estuarine wetlands.

Linda Shead recommended four sources of information on habitat conservation and restoration: the Trust for Public Land website, Galveston Bay Foundation website, Houston Wilderness website, and the Hays County, Texas book on funding sources.

C. Constraints on Habitat Conservation and Restoration

The panelists noted a common constraint: the lack of funding, including state and local funding to match federal funding grants. Bill Baker also noted that, at times, there are also constraints that come with funding that hinder restoration efforts. Some funding is so highly restricted in its use (i.e. funds must be spent by a certain date, intertidal marsh only, construction only, education only, etc.) that it creates complex issues that will very often hinder progress, and may even end up adding to the cost and extending the schedule of a project.

D. The Role of Public and Private Interests in Habitat Conservation and Restoration

Linda Shead stated that there is a need for the public to inform decision-makers about the benefits of coastal habitats, and about the role of quality of life issues for economic competitiveness. There is a need to communicate to elected officials that conservation is a priority. However, politicians will do what they believe their constituents will support. Bill Baker stated that we are beginning to make some progress in this area, especially with local officials such as mayors and city councilmen. In reality, if the constituents of an elected official can emphasize to that official the importance of these issue to them that elected official will more likely support these efforts.

Ms. Shead gave an example of the importance of the public's understanding and input on conservation: Coastal Louisiana's restoration plan, which may have ameliorated some of Hurricane Katrina's storm surge impacts, had an estimated cost was \$14 billion. Now, hurricane response will cost more than \$200 billion.

Bill Baker stated that industry needs to recognize their role in habitat preservation and restoration. Many are users of the system and users only and compliance, while necessary and worthwhile, is sometimes the only goal. He stated that we need more “Reliant Energies” in the Galveston Bay community and across the country: industries and businesses that take a pro-active role in managing their lands, preserving vital habitats, and restoring what has been lost. While many are doing their part, others continue to operate in the “business as usual” mode. Mr. Baker stated that one group he would like to see take an active role in this process is the commercial fishing industry. This group, although included in the planning and evaluation process, has primarily chosen to avoid participation in many worthwhile projects that directly benefit them.

Mr. Baker also noted the need to expand the role of the public in habitat conservation. He stated that although we have numerous success stories regarding the ability to educate the public to the need of habitat restoration and preservation, there is still a long way to go; this is an area that could use additional funding.

E. Role of Government at Local, State, and Federal Level in Habitat Conservation and Restoration

Linda Shead pointed out that there are distinct differences among cities in their recognition of their role in habitat conservation and restoration. An example is the City of Pasadena's active protection of its floodways vs. the City of Houston's lack of, or minimal protection of, floodways. Bill Baker provided constructive criticism on some levels of government in regards to habitat conservation and restoration. He stated that they should avoid meaningless and burdensome regulations that hinder the preservation and restoration of native habitats and furthermore they should provide rules and regulations that offer avenues for business and industry to participate in such projects. He stated that there is a need greater awareness and involvement in habitat conservation. Finally, he noted that there is a need for land use planning.

John Jacob further discussed the role of government in land use planning. He noted that Hurricanes Katrina and Rita have changed the terms of the discussion about land use on the Gulf Coast. Dr. Jacob stated that land use planning is a responsibility that local governments and their citizens cannot avoid. Dr. Jacob stated that local governments need to take action to preserve important remaining habitat, and avoid building on hazardous areas. Therefore, local governments and citizens urgently need access to tools and information to help them plan for future growth.

Mr. Baker noted that collaboration is a vital key to the long-term success of all habitat preservation and restoration projects. Mr. Baker stated that he constantly refers to the incredibly successful partnerships that have developed in the Galveston Bay and Upper Texas Coast regions in his efforts to restore and preserve habitat in 11 different states across the country. He noted that while there are numerous restoration and preservation success stories across the country, they do not compare to the long-term successes of the mature partnerships we have here. The successful habitat restoration partnerships are due primarily to:

1. A sound restoration plan developed by stakeholders. (primarily developed through the Estuary Program and the Galveston Bay Foundation)
2. A very high understanding of the funding mechanisms available through Federal, State, and Private Foundations and a willingness to share this knowledge among partners.
3. The ability to successfully leverage funds to the maximum extent possible.
4. A common goal and intense willingness among agency – industry – advocacy groups to succeed.
5. A high level of trust that has developed over time among agency – industry – and advocacy groups.
6. A long-term consistency of personnel over time among the numerous partners.
7. Ownership of projects among all who participate.
8. A sharing of success among partners and strong recognition program.
9. Individuals who work above and beyond, who are dedicated and do not quit until the project is successfully completed.
10. The flexibility of the partners to make changes during the course of a project to ensure its success; then apply lessons learned to following projects.

III. Individual Participant Issues, “Bin” Categories, Top 5 Priority Issues

A. Individual Participant Issues (with number of identical answers)

- Pollution
- Water condition (quality, pollution, hypoxic zone)
- Non-point source pollution – 4
- The “Dead Zone”
- Nutrient runoff
- Nutrient loading
- Contaminated seafood
- Offshore open-loop LNG terminals
- Oil rigs and LNG – impact on Gulf health and recreation
- Coastal habitat degradation or destruction (primarily wetlands loss)
- Wetland loss – 6
- Wetland protection/restoration
- Habitat loss – 4
- Habitat loss/destruction
- Wetland and habitat loss
- Habitat loss (specifically estuarine nursery losses)
- Habitat loss (estuary, deep water, upland, etc.)
- Habitat fragmentation
- Habitat restoration
- Habitat preservation
- Loss of biodiversity – 2
- Overfishing
- Bycatch
- Invasive Species (plants, habitat degradation)
- Government indifference

- Population growth - 3
- Coastal sprawl – second homes, vacation rentals, habitat loss, failing/non-functioning septic systems
- Coastal development/urban sprawl
- Coastal over development promoted by federally subsidized flood and windstorm insurance
- Land use planning – 3
- Land use planning – not enough habitat/wetlands/coastal prairie set aside
- Lack of planning authority
- Lack of coastal land use planning – 2
- Reactive planning instead of proactive planning in regards to upstream land management practices that impact coastal areas and Gulf of Mexico
- Funding
- Lack of funding – 2
- Unbalanced funneling of funding instead of investing in prevention and research
- Serious underfunding of ocean sciences – specifically in the Gulf of Mexico
- Lack of understanding of ecosystem processes and relationships
- Lack of education on ocean issues
- Lack of awareness
- Lack of awareness of connectivity to Gulf
- Ecosystem understanding
- Public education – 2
- International cooperation
- Recreational access – public access points
- Freshwater inflows (and non-point source pollution)
- Dredging and spoil management
- Coastal erosion – 2
- Pollution control
- Enforcement to control/manage non-point source pollution
- Sporadic Clean Water Act enforcement (lack of regulation of “isolated” wetlands)

B. “Bin” Categories

| Category | Number of Votes |
|--|------------------------|
| Land Use Planning/Lack of Land Use Planning | 15 |
| WQ Pollution (Non-Point Source/Nutrient Loading/Hypoxia) | 14 |
| Habitat Loss/Habitat Fragmentation/Preservation | 7 |
| Population Growth and Development (including Sprawl) | 5 |
| Lack of Knowledge/Awareness/Education | 4.5 |
| Lack of Funding/Funding by Crisis | 4 |
| Freshwater Inflows | 2 |
| Fisheries (Overfishing and By-catch) | 1.5 |
| Coastal Erosion | 1 |
| Oil and Gas (LNG, Open Loop, Rigs) | 1 |
| Invasive Species | 1 |
| Government Indifference | 1 |

| Category | Number of Votes |
|--------------------------------------|-----------------|
| Public Access | 1 |
| Contaminated Seafood | 1 |
| Dredging and Dredge Spoil Management | 1 |
| Loss of Biodiversity | 0 |
| Enforcement | 0 |
| International Cooperation | 0 |

C. Top 5 Priority Issues

1. Land Use Planning/Lack of Land Use Planning
2. WQ Pollution (Non-Point Source/Nutrient Loading/Hypoxia)
3. Habitat Loss/Habitat Fragmentation/Preservation
4. Population Growth and Development (including Sprawl)
5. Lack of Knowledge/Awareness/Education

IV. *Summary of Breakout Sessions*

A. Land Use Planning

See attachment

B. Water Quality

See attachment

C. Habitat Loss

See attachment

D. Population Growth and Development

Due to lack of attendance, this breakout was combined with Land Use Planning

E. Awareness and Education

Due to Hurricane Rita, the workshop did not have enough volunteer facilitators and note-takers to hold a fifth breakout session

V. *Summary of Workshop Evaluation* – number of evaluations received = 25

A. Answers to Questions

1) *How did you learn about this workshop?*

Mailed Announcement = 7

E-mailed Announcement = 14

Word of Mouth = 3

Telephone call from hosts = 3

Website = 0

Other = 3 (GBEP, Gulf of Mexico Alliance)

2) *Which of the following best describes your organization or company?*

Federal Government = 2

State Government = 6
 Local Government = 3
 Non-Profit = 8
 Private Business = 4
 Citizen/No Affiliation = 1
 Other = 4 (GBEP funded project, regional planning agency, COG)

3) *What is your level of understanding of issues that affect a healthy Gulf?* (number of responses)

| Low | | | High |
|-------|-------|-------|--------|
| 1 = 0 | 2 = 1 | 3 = 6 | 4 = 18 |

4) *How helpful was the overview of white papers in understanding the Gulf States' issues?* (number of responses)

| Low | | | High |
|-------|-------|--------|-------|
| 1 = 0 | 2 = 0 | 3 = 16 | 4 = 6 |

5) *How helpful were the case studies in understanding the complexity of issues and possible solutions?* (number of responses)

| Low | | | High |
|-------|-------|--------|-------|
| 1 = 1 | 2 = 1 | 3 = 13 | 4 = 5 |

6) *Was the format of the workshop conducive to discussing your issues with respect to the health of the Gulf of Mexico?* (number of responses)

| | | |
|----------|--------|------------|
| Yes = 22 | No = 0 | Unsure = 1 |
|----------|--------|------------|

Why or why not? (comments)

- Allowed close interaction with presenters.
- O.K. Time constraints but facilitation was excellent.
- Break and groups best.
- Need an additional day where experts could bring everyone up to speed on issues.
- Opportunity for discussion.
- Excellent forum.
- Good group of people – breakout sessions were useful.
- All the participants were able to voice their thoughts and opinions.
- It is great to discuss these issues with other interested individuals.
- A forthright discussion...
- My main issues are fisheries and by-catch, including open loop offshore LNG.
- I felt like we were all preaching to the choir – the problems are understood by this group, but the funding to fix the problems is not there at either state or federal level.
- Opened the dialogue; encouraged group interaction and involvement.

7) *If you could accomplish one thing under each of the five priority issues, what would it be?* (comments)

Reductions in nutrient loading:

- Start on difficult issues – many NPS/individual homeowners.
- Regulate “isolated” wetlands.

- Establish consistent criteria between each state.
- Teach homeowners about non-point pollution.
- Building of vegetative buffers to filter nutrients entering into the water.
- Better research on connections between hypoxia and nutrient levels.
- Keep living in my town home and not use fertilizer – talk to others about it.
- Effective enforcement.
- Non-point source pollution control.

Improving Gulf water quality, emphasis on beaches and shellfish beds:

- Reduce NPS
- Formal acknowledgement that land use planning is necessary to control NPS (whether farming , highways, urban areas). Buffers and filters required.
- Regulate “isolated” wetlands.
- Re-establish oyster reefs within the Galveston Bay system to the maximum extent practicable.
- Develop real-time bacteria tracking and monitoring to guide responses (i.e. beach closures, harvest closures, etc.)
- Improve water quality of Galveston Bay.
- Improved wastewater treatment – regionalization – less septic systems.
- Don’t trash beaches.
- Better NPDES/TMDLs.
- Managing coastal development.

Restoration of coastal wetlands:

- Increase state/federal funds.
- Fully fund existing state and federal (USACE ecological restoration, etc.) programs to accomplish this.
- Get more money.
- Attract/provide more funding to coastal wetland restoration projects.
- Honor the contribution of isolated wetlands.
- Restrict building in floodplains – don’t insure beach homes.
- Restore upland wetlands, too to help protect downstream.
- Barrier island restoration.
- Managing coastal development.

Identification of Gulf habitats to inform management:

- Ensure protection of all functioning ecosystems.
- This is not difficult – strategies, NOAA, USFWS, the Nature Conservancy have done near shore and estuarine habitats. NOAA and the Nature Conservancy have done some deep water work. It is a mistake to delay action until “everything” is understood.
- Fund status and trends.
- Provide GIS mapping of marine habitats throughout the Gulf.
- ID and promote the importance of Gulf habitats.
- Determine best land to preserve and protect.
- Acquisition.

- Add habitats to our web pages.
- Mapping/data analysis.

Gulf of Mexico environmental education:

- Much needed. However, education should translate to increased knowledge and to action.
- Use resources better.
- Ensure inner city kids spend field trip time in the field in coastal areas.
- Establish environmental science curriculum for secondary schools in the Gulf states.
- Develop a recognizable brand for GOM – something that resonates across the beer halls and school rooms of our nation – like the “Everglades.”
- Get all students in the Greater Houston-Galveston area to visit Galveston Island State Park for a guided tour with educational preparation in the classroom before and after the field experience.
- Educating students at a young age. Reaching grade school students w/ Gulf of Mexico lesson plans.
- Schools need more hands-on science. Need better science education for all ages.
- Have one source. Spend all resources on all media resources for a single watershed.
- Improve funding to Sea Grant and National Estuary Programs.
- If you don’t educate public and government officials, you can’t do any (education).
- Integration into curriculum.

8) *Any additional comments?* (comments)

- Surprised to find no representatives of Flower Garden Banks NMS, nor from private recreational and commercial fisheries.
- Very disappointed that fisheries and open-loop offshore LNG did not make the top priorities (for breakout).
- Thanks for letting us leave early in anticipation of personal commitments in preparing for Rita.
- Good job!
- Make it happen!
- Thank you.
- Good first step. Keep up the momentum.
- Give businesses incentive to cooperate with solving issues and include them; be cooperative and compromise to get their cooperation.
- I attended because of my involvement in the Galveston Bay Council, but are any other citizens ever informed of these workshops?

VI. *Agenda, List of Attendees, Participant Quotes, Photos*

Attached (Participant quotes are noted in the case study and breakout session summaries)