



# WATER LOG

A Legal Reporter of the Mississippi-Alabama Sea Grant Consortium

## Grand Bay Nominated Estuarine Research Reserve

*Kristen M. Fletcher, J.D.*

This summer, Mississippi's Grand Bay estuary in eastern Jackson County came one step closer to gaining protected status in the National Estuarine Research Reserve System. In November of 1996, Mississippi Governor Kirk Fordice submitted a formal nomination of the 15,000 acre Grand Bay estuary. The National Oceanic and Atmospheric Administration (NOAA), the federal agency responsible for the Reserve System, approved the nomination in June.

Governor Fordice designated the Mississippi Department of Marine Resources (DMR) to work

with NOAA, the business community, and environmental groups to develop the final Grand Bay reserve proposal. Upon completion next July, NOAA will review the proposal and make a final designation decision. As part of the Reserve System, Grand Bay will house educational programs and trails, a research laboratory, and a research fellowship program.

Congress created the Reserve System in 1972 under the Coastal Zone Management Act.<sup>1</sup> The system is designed to study the effects of increased use and development of coastal regions on the country's estuaries.<sup>2</sup> The Reserve System accomplishes what its name promises: it reserves an area to

maintain it as a conservation, education, and research area while promoting beneficial public use. Currently, twenty-one research reserves exist from the coast of Maine to the Gulf of Mexico to the coast of Washington state. Research reserves provide a means for states to contribute to national research and for federal agencies to provide information to local and state policy makers responsible for the health of the estuaries.

Thirty-one percent of the U.S. gross national product is produced in the nation's coastal counties as a result of recreation, fisheries, manufacturing, and commerce. As a result, estuaries have a high economic value as well as ecological

*See Grand Bay pg. 2*

## Paper Mill Prevails in River Dioxin Suits

*John A. Duff, J.D., LL.M.  
and Michael L. McMillan, 3L*

### Background

A Mississippi paper company continues to fend off legal claims regarding its operations on the Leaf River and the effect of those operations on downstream residents. In 1984, Leaf River Forest Products, Inc. began operating a pulp mill on the Leaf River in Perry County. In the mid 1980s, the Environmental Protection Agency discovered that dioxin, a by-product of the pulp-bleaching process, was being released in the

sludge and effluent of some paper mills in Maine. The discovery prompted environmental officials around the country to begin testing for the presence of dioxin in the vicinity of mills employing chlorine to bleach pulp.

Tests conducted in the late 1980s indicated dioxin in the effluent and sludge of the Leaf River mill. Scientists also detected dioxin in the river's fish. Based on these results, the Mississippi Department of Fish and Wildlife closed the Leaf, Pascagoula, and Escatawpa Rivers to commercial fishing from October 1990 to

*See Paper Mill pg. 5*

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value. Estuaries represent a unique mix of saltwater and freshwater habitat, sustaining a wealth of plant and animal species. They also improve water quality by filtering sediment and pollution, as well as providing barriers against storm waves and floods.

The Mississippi DMR proposed the Grand Bay area for a

**An estuary  
under federal law is :**

*"that part of a river or stream or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh water derived from land drainage."*

16 U.S.C. § 1543(7) (1997).

number of reasons. First, Grand Bay has a unique ecosystem of estuarine tidal marsh, shallow-water open bay, wet pine savanna, and coastal swamp habitats. Second, the reserve represents a unique partnership opportunity among the DMR, the Mississippi Secretary of State's Office, the Mississippi State University Extension Service, the U.S. Fish and Wildlife Service, and The Nature Conservancy. These partners will share management responsibilities. Each will hold a position on the Reserve Management Board, the decision-making body for the reserve.

The third reason the DMR chose Grand Bay is that the lands comprising the reserve have several overlays of protections already in place. The state currently main-

tains 9,600 acres of the proposed area as the Grand Bay Preserve. As a state preserve, Grand Bay serves to mitigate non-point source pollution. The U.S. Fish and Wildlife Service manages the remaining 5,400 acres of the proposed area as the Grand Bay Savanna National Wildlife Refuge. Refuges are areas set aside for wildlife management.

The Nature Conservancy also monitors the Grand Bay reserve acreage as part of its Grand Bay Savanna Bioreserve project. The project represents an effort by The Nature Conservancy to develop conservation strategies to lessen impacts of human activities. While not legally "set aside" like the state and federal areas, bioreserve monitoring is one more example of the conservation efforts in practice at Grand Bay.

Finally, Grand Bay's location represents a rare coexistence of industry and conservation. To the west of Grand Bay sits a large industrial area, complete with the Chevron oil refinery. To the east stretches one of the last largely uninterrupted coastlines in the country. The endurance of this pristine area depends upon cooperative efforts between the coastal industries and the managers of the lands.

Like any proposed site, the Grand Bay estuary must climb a number of rungs in order to ascend to reserve status. Grand Bay has passed through the *site selection process*. Mississippi is in the early stages of the *site designation process*. (see *process outline pg.3*)

On August 6, 1997, the DMR

held the first Draft Environmental Impact Statement and Draft Management Plan scoping meeting at the East Jackson Community Center in Pascagoula.<sup>3</sup> Peter Hoar of DMR serves as the Grand Bay Reserve Coordinator and led the scoping meeting with the support of E.G. Woods, the Executive Director of the DMR, Nathalie Peter of NOAA, Dave Ruple of The Nature Conservancy, and Mark LaSalle of the Mississippi State University Coastal Research Extension Center. The speakers outlined the history of Grand Bay and priority issues in the designation process. These include citizen and community participation as well as resource decisions regarding the type of compatible activities that might be on the reserve. Hoar, LaSalle, Ruple, and Peter then answered questions from attendees including some on research priorities for the reserve, acquisition of extra lands, and public access to the reserve.

Hoar explained that the DMR is open for research ideas from citizens. Grand Bay has specific features not present in any other reserve, making the research potential in the area unique. In addition, the Grand Bay reserve will build on other completed research and will forward this data to coastal decision makers so that the research from the Grand Bay reserve will be of value to the public.

Hoar explained that, like other reserves, the Grand Bay reserve will have a designated "core area." The core area is that portion of land so vital to the functioning of the estuarine ecosystem that the

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## National Estuarine Research Reserve Process

### First Phase: Site Selection Process

1. Governor sends a letter to NOAA stating:
  - a. interest in nominating a site for a reserve;
  - b. the proposed state oversight agency; and
  - c. request for funds for the site selection process.
2. NOAA allocates funds for site selection process.
3. State selects a site according to NOAA guidelines; recommends site for nomination.
4. NOAA approves site selection if the state meets the following:
  - a. area is a representative estuarine ecosystem suitable for long-term research contributing to the balance of Reserve System;
  - b. state law provides long-term protection for reserve resources;
  - c. reserve enhances understanding and education of estuaries; and
  - d. coastal state has complied with federal regulations.

### Second Phase: Site Designation Process

1. State agency prepares draft EIS and draft management plan. State may hold a scoping meeting for businesses, environmental groups, and citizens to discuss issues for the draft EIS.
2. Release of published draft EIS.
3. 45 day period for public comment.
4. Formal public hearing.
5. State agency prepares and releases final EIS.
6. 30 day period for public comment.
7. NOAA approves final EIS.
8. State prepares Final Management Plan, incorporating concerns and solutions from the EIS.
9. NOAA reviews Final Management Plan.
10. NOAA designates the estuary a Reserve System member.
11. State appoints Reserve Manager, Research Coordinator, and Education Coordinator as the reserve team.
12. NOAA conducts management reviews every 3 years evaluating adherence to:
  - a. approved Final Management Plan;
  - b. terms of federal financial awards; and,
  - c. required actions from previous evaluations.

reserve team must manage it "to ensure long-term viability."<sup>4</sup> The land immediately surrounding the core area is the "buffer zone" which is designed to protect the core from outside effects such as pollution. It also provides additional protection for estuarine-dependent species. The core area of the proposed Grand Bay reserve requires no additional acquisition of land. The buffer zone of the proposed reserve may require acquisition of some additional property. Alternatively, the management team may simply assist adjacent landowners in managing their land to achieve to the buffer zone needs.

Grand Bay promises to be a significant addition to the Reserve System. NOAA devised a classification scheme to ensure that the reserve system represents all regions and habitat types of the coastal United States.

Mississippi's and Alabama's coasts fall within the Louisianian region which stretches from Cedar Key, Florida, to the Mexican border. The reserves in this region contain unique ecosystems not found elsewhere in the U.S. This region is divided into subregions in order to incorporate subtle changes in the ecosystem along the coast. For instance, the Weeks Bay Reserve in Alabama represents a different subregion than Grand Bay. Grand Bay will represent the "Mississippi Delta" subregion while Weeks Bay represents the "Panhandle coast" subregion. Thus, Weeks Bay provides different research than Grand Bay might even though less than 50

*cont.*

### From the Editor's Desk . . .

It has been two years since I came on board at the Mississippi-Alabama Sea Grant Legal Program, and took the helm of WATER LOG. Since then, I've had an ever-increasing opportunity to direct the overall research and operations of the Legal Program. This summer, after an exhaustive search, the Legal Program hired Ms. Kristen Fletcher as a staff attorney. In that capacity, Kristen will serve as Associate Editor through the last two issues of Volume 17 and take over as the Editor, as the publication begins its eighteenth year in 1998.

In the next few months Kristen, Publications Assistant Dawn Jeter and I will also be working to put WATER LOG on the World Wide Web. As always, we encourage you to let us know how we might better serve you. Please feel free to contact us with comments, questions, suggestions or article contributions.

You can reach us at: [waterlog@olemiss.edu](mailto:waterlog@olemiss.edu) or

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We look forward to working with you and serving you in the future.

Sincerely,

*John Alton Duff*  
John Alton Duff, Editor

#### *Grand Bay cont. from pg. 3*

miles actually separate the two estuaries. By classifying the reserve system in this way, each reserve contributes distinct research and furthers the purpose of the system. Grand Bay will be the first reserve in the Delta subregion and will join the Weeks Bay reserve as the second reserve in the Louisianian region.

The Weeks Bay reserve, established in 1986, is located in Baldwin County, Alabama, located thirty miles southeast of the city of Mobile. Weeks Bay collects saltwater from the Mobile Bay and freshwater from the Magnolia River and Fish River. It encompasses over 3,000 acres and provides habitat for as many as 19 threatened or endangered species, including the bald eagle, gulf sturgeon, alligator snapping turtle, and the Florida black bear.

Managed by the Alabama Department of Economic and Community Affairs, Weeks Bay conducts research on nonpoint source pollution, estuarine biology, and water quality.

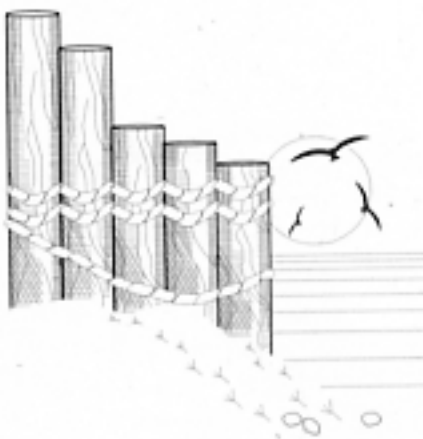
To maintain the strength of the Reserve System, NOAA conducts continuing reviews of the management of each reserve, typically every 3 years. NOAA staff evaluate each site according to adherence to the approved Final Management Plan, adherence to the terms of federal financial awards, and adherence to required actions from previous evaluations.

Hoar notes that the Grand Bay reserve represents a cooperative effort at the local, state, and federal levels. He emphasizes the importance of the Citizens' Advisory Board and the community-based approach the management team will take.

Ultimately, the Grand Bay reserve represents an important step in managing Mississippi's coast. ■

#### Endnotes

1. 16 U.S.C. § 1461 (1997).
2. 15 C.F.R. § 921 (1997).
3. Meeting Notice and Intent to Prepare EIS, 62 Fed. Reg. 38,520 (1997).
4. 15 C.F.R. § 921 (1997).



*Paper Mill cont. from pg. 1*

January 1991. They also issued consumption advisories for fish caught from the Leaf and Pascagoula Rivers.

Litigants lined up with claims against the mill for its production practices and discharge into the river. At one point over 8,000 plaintiffs were involved in 160 cases seeking a total of \$30 billion in damages.<sup>1</sup> These "toxic tort" cases relied on traditional legal theories ranging from negligence to nuisance. Leaf River consistently contends that it was not the sole contributor of dioxin into the river and that any discharge from the pulp mill was insignificant.

In the last two years, three cases have come before the Mississippi Supreme Court regarding the evidence necessary to support certain tort claims brought against Leaf River, Inc. In the 1995 case of *Leaf River Forest Products v. Ferguson*,<sup>2</sup> the state Supreme Court overturned a jury verdict and held that a claim for emotional distress could not be upheld where plaintiffs exhibited no physical manifestation of harm, especially where they refused to be medically tested for any physical harm or illness. (Editor's note: for a full briefing of the *Ferguson* case, see *Fear of Contaminated Fish Verdict Overturned*, 15:4 WATER LOG 9 (1995)).

Two recent cases constitute further victories for the paper company. A case last December (*Simmons* below) relied on the *Ferguson* ruling to overturn a circuit court verdict in a personal injury and property damage case,

while a March 1997 high court decision (*Beech* below) upheld a decision favoring the pulp mill's right to have a suit against it heard in a county where the number of tort claims and the publicity were not potentially prejudicial. The *Beech* decision also ruled in favor of Leaf River regarding the inadmissibility of certain purported expert testimony regarding the effects of dioxin.

**I. Leaf River Forest Products, Inc., v. Simmons, 1996 Miss. LEXIS 682 (Dec. 12, 1996).**

As outlined above, Leaf River Forest Products operates a facility on the Leaf River where timber is processed into pulp and bleached for use in various paper products. Under state permit the mill was allowed to pump twenty-five million gallons of water per day from the Leaf River for use in the plant upon the condition that the water be returned to the river after being cleaned and returned to its natural state. However, scientists found dioxin in the plant's sludge and effluent discharge in the mid 1980s. By 1988, the paper mill had switched to using chlorine dioxide upon discovering that it had been releasing dioxin into the Leaf River.

Wesley Simmons, a retired commercial fisherman, owned property forty miles down river from the paper mill. Simmons filed suit against Leaf River for trespass and nuisance. He claimed that he observed the river grow darker in color in the mid-to-late 1980s and that he noticed a strong odor coming from the river water.

He also claimed to have observed the appearance of blisters and lesions on the heads of fish caught downstream from the Leaf River mill. Simmons subsequently claimed that as a result of these observations, and the fact that he and his family had eaten fish from the river, he feared for his personal safety as well as that of his family. He also secured a real estate agent's estimate that his property value had declined by over \$27,000 in the late 1980s.

At trial, Simmons introduced evidence of the detrimental effects of dioxin on the human body, including its potentially carcinogenic characteristics as well as its adverse effects on the central nervous system. Simmons, however, refused to be tested for dioxin nor would he test his property for the dioxin. Leaf River, Inc. introduced evidence that municipal solid waste incinerators might be the main source of dioxin in the river and its fish. The company also showed that its tests of Simmons' property indicated no dioxin (although these tests were deemed inadmissible because they were conducted after the discovery deadline).

Nonetheless, the trial judge issued a directed verdict in favor of Simmons on the trespass and nuisance claims and submitted the case to a jury for a determination of damages. On November 16, 1990, a Greene County jury awarded Simmons \$20,000 for nuisance and trespass damages, \$20,700 for the loss of value to his property, and \$1 million in punitive damages. Leaf River appealed.

*See Paper Mill pg. 6*

*Paper Mill cont. from pg. 5*

The Mississippi Supreme Court reviewed the case on appeal and applied the standards set forth in its earlier decision in *Leaf River Forest Products v. Ferguson*.<sup>3</sup> The state Supreme Court reversed the circuit court's decision based on Mr. Simmons' failure to produce evidence supportive of his legal theories of trespass and nuisance. Here, just as the plaintiffs in the earlier *Ferguson* case, Simmons failed to present any physical evidence that dioxin had ever entered his property or his body. The high court stated that without any evidence supporting the existence of dioxin upon Simmons property, the legal basis for the circuit court's directed verdict must fail and be reversed. The Court stated that trespass "requires the actual physical invasion of the plaintiff's property," and that evidence to such ends was not demonstrated by the plaintiff in this case.<sup>4</sup>

## II. *Beech v. Leaf River Forest Products, Inc.*, 691 So.2d 446 (Miss. 1997).

Odis and Lurvia Beech lived on the Pascagoula River. Upon issuance of a 1989 Mississippi Department of Environmental Quality report showing that both the Leaf and Pascagoula Rivers contained dioxin, the Beeches filed this lawsuit against Leaf River, Inc. in George County Circuit Court. Their complaint alleged that the mill polluted the rivers and that Leaf River, Inc.'s activities constituted public and private nuisance, negligence, absolute liability for ultrahazardous activity, tres-

pass, and outrageous conduct.

Two years after the complaint was filed and three months before the trial was scheduled to begin, the paper company filed a change of venue motion, based on its concern that it could not get a fair trial in George County.

The motion was granted based on "the large number of plaintiffs involved in similar actions residing in the county and the substantial media attention generated by the case in George County."<sup>5</sup> The venue was changed to Harrison County Circuit Court. The Harrison County court ultimately ruled in favor of the defendant paper mill. Beech appealed to the state Supreme Court arguing that the change of venue had been improper and that the circuit court had also improperly excluded testimony from witnesses regarding the effects of dioxin.

### Venue

The Beeches claimed the trial court erroneously changed venue from George County to Harrison County. They argued that the trial court had granted the motion based on defendant's "untimely" filing of the motion, lack of defendant's personal signature on the agreement to change of venue, and failure to conduct preliminary jury hearings (*voir dire*) to determine the amount of actual bias present in George County.<sup>6</sup>

In reviewing the lower court's decision on this issue, the state Supreme Court noted the motion for a change of venue three months before the trial date was reasonable so long as it was not merely a

delaying tactic. The high court also dismissed the plaintiff's arguments that the motion must be signed personally by the defendant rather than by the representing attorney. While the plaintiffs pointed to state law that requires certain affidavits and motions to be signed personally by the parties involved rather than by the representing attorney, the attorney's signature in this case was allowable in light of the fact that the defendant in this case was a corporation incapable of actually "signing" a court document by any means other than through its legal representatives.<sup>7</sup>

The court also rejected the claim that *voir dire* must be used to determine if potential jury pool bias justifies a change of venue request. In citing previous case law, the Court held such action was not required because of the "ineffectiveness of *voir dire* in detecting juror bias created by pre-trial publicity."<sup>8</sup> The state high court was likely convinced of the propriety of the change of venue decision based on the evidence that Leaf River had presented in support of its motion.

In its ruling, the court noted that, "the evidence showed that of the 8,909 residents of George County eligible for jury duty, 750 were plaintiffs in dioxin cases brought against [Leaf River and that] even more were potential class members in a class action [against Leaf River]."<sup>9</sup> The Supreme Court also relied on the fact that over three hundred news articles had been published regarding the dioxin cases in local newspapers in the three and a half year

*cont.*

period prior to the trial date. "Taking these numbers into consideration," said the state Supreme Court, "the trial court reasonably determined that the pre-trial publicity and the large number of potential jurors involved in similar litigation would prevent the defendants from receiving a fair trial in George County."<sup>10</sup>

#### *Witness Qualification*

With respect to each of the four witnesses whose testimony was limited by the trial court, the Mississippi Supreme Court found that their background, experience, and understanding of dioxin's effects, did not rise to the level of expertise that would assist the jury. The state Supreme Court held that the trial court did not abuse its discretion by refusing to allow all or part of these individuals' testimony.

Based on the reasoning outlined above, the state Supreme Court deferred to the trial court's ruling on venue and admissibility of evidence and affirmed the lower court's decision in favor of Leaf River, Inc.

#### **Conclusion**

The Leaf River dioxin cases have given the Mississippi Supreme Court an opportunity to articulate the procedural and evidentiary requirements involved in toxic tort litigation in the state. These recent cases constitute a valuable primer for those who are looking for a road map to successful plaintiff actions. The high court has rather firmly established the legal lanes and traffic signs that must be complied with in hopes of successfully reaching a destination favorable to plaintiffs. ■

#### **Endnotes**

1. See *Perry County v. Ferguson*, 618 So.2d 1270, 1273 (Miss. 1993).
2. *Leaf River Forest Products v. Ferguson*, 662 So.2d 648 (Miss. 1995).
3. *Leaf River Forest Products v. Ferguson*, 662 So.2d 648 (Miss. 1995).
4. *Leaf River Forest Products, Inc., v. Simmons*, 1996 Miss. LEXIS 682 (Dec. 12, 1996) citing *Leaf River Forest Products v. Ferguson*, 662 So.2d 648 (Miss. 1995).
5. *Beech v. Leaf River Forest Products, Inc.*, 691 So.2d 446, 448 (Miss. 1997).
6. *Beech v. Leaf River Forest Products, Inc.*, 691 So.2d 446, 449 (Miss. 1997).
7. See *Vance v. Vance*, 20 So.2d 825, 825-827 (Miss. 1945).
8. *Beech v. Leaf River Forest Products, Inc.*, 691 So.2d at 450 (Miss. 1997), citing *Fisher v. State*, 481 So.2d 203, 220-221 (Miss. 1995).
9. *Beech v. Leaf River Forest Products, Inc.*, 691 So.2d at 450.
10. *Id.*

## **Alaska Loses Battle for Submerged Lands** **United States v. Alaska, 117 S. Ct. 1888 (1997).**

*Kristen M. Fletcher, J.D. and Richard Brownlow, 3L*

#### **Overview**

In June, the U.S. Supreme Court ruled that certain submerged lands in the Beaufort Sea off Alaska's Arctic coast belong to the U.S. and not to the state, ending the 18-year dispute between the federal government and Alaska. Both the government and Alaska sought to secure the billions of dollars in revenues from mineral leases on the lands.

#### *Special Master's Findings*

In 1979, after the U.S. filed suit to claim the submerged lands once and for all, the Supreme Court appointed Special Master J. Keith Mann of Stanford

University to gather the facts and offer recommendations, a procedure commonly used in cases between the federal government and a state that are based on complex factual issues. Mann held extensive hearings and delivered 600 pages of recommendations to the Court in April of 1996.

The Master first found that Alaska's coastline should be defined in such a way as to give the government ownership to certain pockets of submerged lands even though they may be surrounded by state-owned lands. Second, the Master proposed that an ice formation off the Arctic coast called Dinkum Sands should not be treated as an island for purposes

*See Alaska pg. 8*

*Alaska cont. from pg. 7*

of measuring Alaska's coastline. Third, the Master found that submerged lands located within the boundaries of Alaska's National Petroleum Reserve did not pass to Alaska when it became a state. Fourth, the Master concluded that those submerged lands within the boundaries of the Arctic National Wildlife Refuge did pass to Alaska at statehood.

Alaska objected to three of the Master's findings and the U.S. objected to one. The Court reviewed the Master's findings and the parties' objections and decided in favor of the federal government on all issues. *United States v. Alaska*, commonly called the Dinkum Sands case, reviews the detailed history of submerged lands ownership. But, it also represents the complex application of international and domestic laws that ultimately allocate billions of dollars worth of unique land and mineral resources.

**Who Owns Submerged Lands?****Who Owns Alaska's Submerged Lands?**

Prior to 1953, the federal government claimed the submerged lands off the coasts of states.<sup>1</sup> In 1953, Congress enacted the Submerged Lands Act, transferring title in certain submerged lands from the federal government to the states.<sup>2</sup> The Act granted title of those submerged lands extending three miles from a state's coastline. This grant of title begs the question of what constitutes a coastline. How is the three-mile measurement made? If the state has islands, is the measurement from the far side of an island or from the uplands? The Act also grants title to the three miles around offshore islands such as barrier islands. But, what is an island? If there is a chain of islands located close together, should we simply connect them with a line, using it as the state's coastline? Finally, if an island is located more than six miles from the coast, should the lands between the upland three-mile belt and the island three-mile belt pass to the state or remain under federal title?

These issues arose in *United States v. Alaska* and as the Supreme Court answered the above questions, it determined the law that affects numerous states which have island chains along their coasts. Alaska's position, however, is unique for a number of reasons. First, portions of the disputed submerged lands are

located within two federal reservations of land. In 1923, President Harding created Alaska's National Petroleum Reserve by setting aside 23 million acres of land in northwest Alaska for their oil and gas potential. In 1960, the Secretary of the Interior approved the withdrawal of 8.9 million acres in northeast Alaska for the creation of the Arctic National Wildlife Refuge.<sup>3</sup> These federal reservations of land prohibit Alaska from claiming title to submerged lands within the reservations' boundaries.

Alaska's position is also unique because of its Arctic coastline. For instance, one coastal feature which raises questions in the case is Dinkum Sands, a gravel and ice formation in the waters of the Stefansson Sound. Like barrier islands, Dinkum Sands is subject to daily shifts in tide and seasonal shifts in sea level. Because it is an arctic formation, it is also subject to changes in height due to ice melt, causing the feature to slump in elevation, often to be submerged below the Arctic waters, raising the question of its status as an island. Alaska also has numerous island chains with various sizes, numbers of islands, and distances between islands. The Court considers these unique qualities in its opinion.

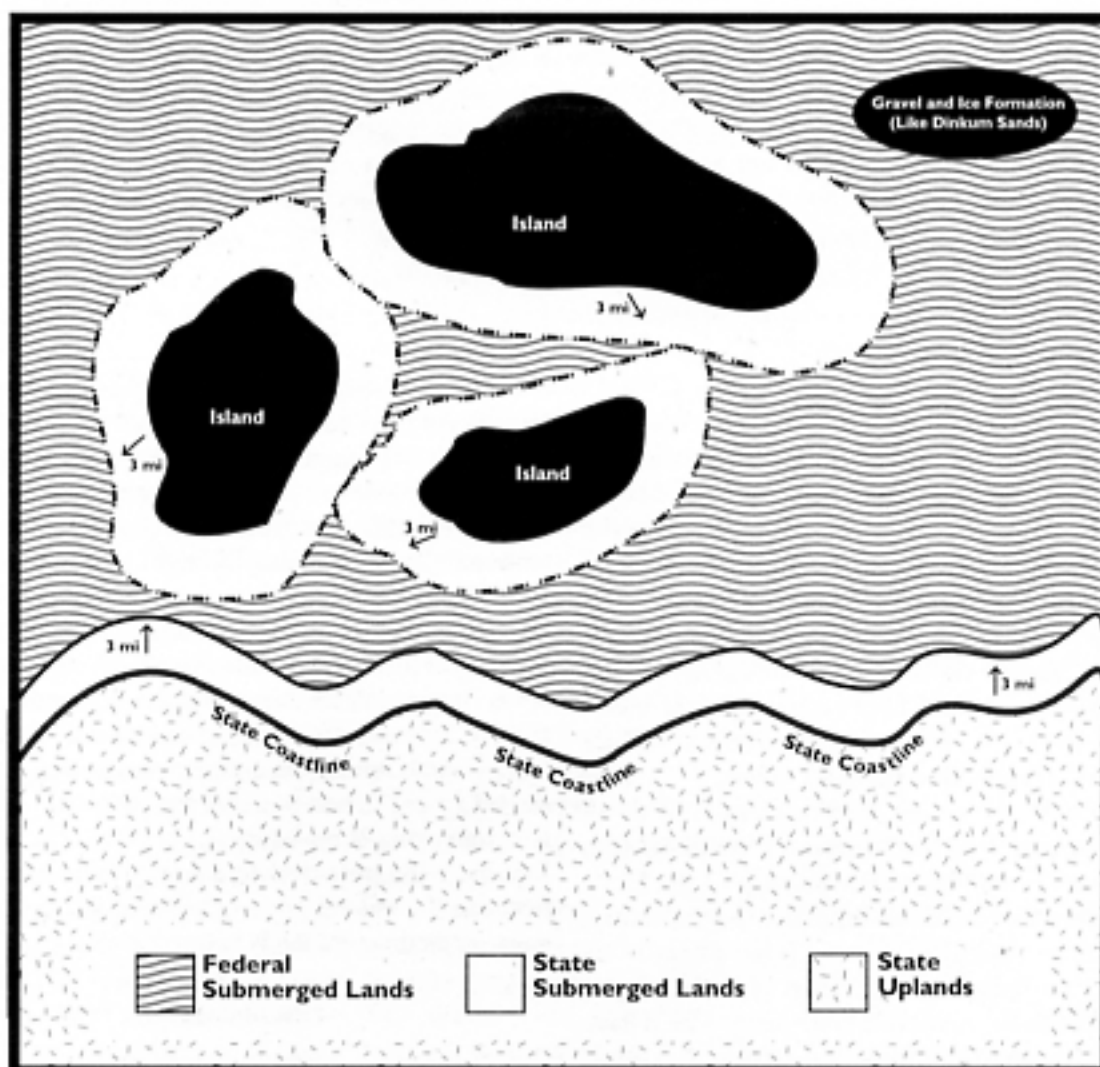
**Parties' Objections & the Court's Review***A. Finding #1: Alaska's Barrier Islands*

The Special Master found that in defining the coastline of Alaska, the measurement begins at the mainland, not at a line connecting offshore islands. Alaska objected arguing that in previous disputes, with islands located within ten miles of each other, the U.S. had drawn such a line.<sup>4</sup> If the islands along the Arctic coast were connected, the lands shoreward of this connecting line would belong to Alaska. If no connector existed between the islands, then lands between the uplands belt and island belt remain under U.S. title and these federal lands would be surrounded by state lands (see illustration, page 9).

The Court agreed with the Master because Alaska failed to show that connecting islands in this way is a well-established practice of the U.S. The Court distinguished the Dinkum Sands case by noting that in the disputes which Alaska relied upon, such a line was a result of historical treatment of the waters between the uplands and islands and foreign travel within

*cont.*





This is a simplified illustration of state and federal ownership of submerged lands.

those waters. Neither of these factors exist in the Alaskan waters. Therefore, the Court concluded that the upland, as well as each island, retains its three-mile belt of Alaska-owned submerged lands. Therefore, according to the Court, the federal government holds title to lands between these two belts of state territory.

#### B. Finding #2: Dinkum Sands Not an Island

The Special Master found that Dinkum Sands does not qualify as an island for the purpose of determining Alaska's coastline. The Court applied an internationally recognized definition that an island is a "naturally-formed area of land, surrounded by water, which is

above water at high-tide."<sup>5</sup>

Alaska claimed that a feature such as Dinkum Sands must only be above water occasionally to qualify as an island. Dinkum Sands would meet the definition of an island under this standard. Again, the Court followed the Master's recommendation and found that the international standard requires a formation to be above water at all times except in abnormal circumstances. Measurements of Dinkum Sands taken between 1949 and 1983 revealed that it is frequently below the water line. Thus, Dinkum Sands is not an island and may not be used to claim title to additional submerged lands.

Alaska offered an alternative argument that  
See Alaska pg. 10

*Alaska cont. from pg. 9*

Dinkum Sands be considered an island during those times when it occurs above water. The Court noted that no precedent exists for treating a formation which fluctuates above and below the water line as an island. The Court ruled that such a definition is not practical. Alaska's ownership would appear and disappear periodically and would lead to costly and time-consuming monitoring efforts.

*C. Federally Reserved Lands**Finding #3 - Petroleum Reserve*

The Master found that the federal government retains title to those submerged lands within the boundaries of the Petroleum Reserve. Alaska argued that the U.S. did not show the required clear intent to maintain title of submerged lands when it set aside the Petroleum Reserve. In 1923, the government included Arctic waters within the boundaries of the Petroleum Reserve but Alaska claimed that the inclusion of waters does not show a clear intent to include the submerged lands beneath these waters.

The Court dismissed Alaska's claim to these lands explaining that the purpose of the Petroleum Reserve was to retain U.S. ownership of the lands with potential petroleum deposits. Specifically, Justice O'Connor stated that "[t]he purpose of reserving in federal ownership all oil and gas deposits within the Reserve's boundaries would have been undermined if those deposits underlying lagoons and other tidally influenced waters had been excluded."<sup>6</sup>

*Finding #4 - National Wildlife Refuge*

The Special Master proposed that submerged lands within the boundaries of the Arctic National Wildlife Refuge passed to Alaska when it became a state in 1959. He resolved that because the federal government had not yet created the refuge in 1959, that the U.S. did not show the intent to keep these lands from Alaska when it became a state. The government objected to this finding. A federal agency had applied for withdrawal of these lands in 1957 as part of the Wildlife Refuge. The government reasoned that even

though the Refuge was not created until 1960, a year after Alaska became a state and took title to its three mile belt of submerged lands, the 1957 application shows the requisite intent to prevent passage of these lands to Alaska. The Court agreed with the federal government, rejecting the Master's finding, leaving title of the submerged lands within the Wildlife Refuge to the U.S.

**Conclusion**

In the Dinkum Sands case, the Supreme Court drew lines in the sand between the federal government and the states on the mineral-laden submerged lands. The fact that the lands at issue in *United States v. Alaska* are rich in petroleum made this case particularly contentious. By recognizing the right to reserve federal submerged lands, the Court reaffirmed the federal right to withdraw and use these lands for the public interest. However, by allowing federal ownership between state island chains and the state uplands, the Court effectively drew a circle in the sand, carving out federal lands which are entirely surrounded by state-owned lands. While based in law, these circles seem to counter simple boundary delineation. They may in fact have the potential to cause greater squabbles between the federal government and the states, both eager to claim more lands below the sea. ■

**Endnotes**

1. *United States v. California*, 332 U.S. 19, 67 S. Ct. 1658 (1947) (Court determined that the United States held title to submerged lands seaward of the low-tide water line).
2. Submerged Lands Act, 67 Stat. 29, 43 U.S.C. §§ 1301-1315 (1997).
3. The lands were originally designated as the Arctic National Wildlife Range but were renamed the Arctic National Wildlife Refuge in 1980 with the addition of 9.2 million acres. See *United States v. Alaska*, 117 S. Ct. 1888, 1892 (1997).
4. *United States v. Alaska*, 117 S. Ct. at 1897.
5. Convention on the Territorial Sea and the Contiguous Zone, Apr. 29, 1958 [1964] 15 U.S.T. 1606, at Article 10(1). Because the Submerged Lands Act does not define island, the Court looks to international law for guidance.
6. *United States v. Alaska*, 117 S. Ct. at 1909.

# From Space Age to Ocean Age at Stennis

by Heath Franklin, 3L

When you think of oceanography and marine sciences study, you probably think of institutions such as Woods Hole in Massachusetts and Scripps in California. But, few people are aware that Stennis Space Center in Mississippi actually houses more oceanographers than any other institution in the world. According to Julie Cox, a U.S. Navy public relations officer at Stennis, up to 500 civilian and military oceanographers are conducting research from the center on any given day.

According to NASA lore, in 1961 it was said that "[i]f you want to go to the moon, you first have to go through Hancock County, Mississippi." In October of that year, the federal government chose Hancock County for the site of a test facility for launch vehicles that would later be used in the Apollo 11 mission that landed the first men on the moon. Since then, Stennis activities have evolved from those early rocket tests to include ground-breaking research in environmental sciences including oceanography and marine sciences. The space center houses 23 agencies including the Environmental Protection Agency, U.S. Geological Survey, and state educational institutions. It maintains a multi-disciplinary mission ranging from testing large rocket propulsion systems to developing remote sensing technology.

Much of the research at the center focuses on the ocean.

National Marine Fisheries Service researchers use satellite images to map daily sea-surface temperatures over the Gulf of Mexico to determine conditions for Red Tide outbreak. They also monitor the numbers and movements of marine mammals in the Gulf. The center's National Data Buoy Center uses data collection stations and drifting buoys to conduct climate research world-wide. The U.S. Navy maintains a significant presence at Stennis, including the Naval Meteorology and Oceanography Command Center. Utilizing one of the most powerful supercomputers in the world, the command center provides meteorologic, oceanographic, and mapping support services to every submarine, ship, and aircraft in the U.S. Navy.

The U.S. Geological Survey maintains two key research and monitoring centers at Stennis. The Water Resources Division uses river simulation facilities and computer modeling to study river behavior. The National Mapping Division's Earth Science Information Center makes aerial and space photographs, digital and topographic maps, and other cartographic data available to the public. The Environmental Protection Agency maintains its Environmental Chemistry Laboratory in the center. This lab analyzes samples from across the world to identify and quantify pollutant concentrations.

Stennis contributes non-marine research as well. An impor-

tant program is a joint project between the Department of Agriculture's Soil Conservation Service and the Space Remote Sensing Center (SRSC). Together, these agencies are developing wetland mapping techniques using remote sensing and geographic information system technology. These techniques map wetlands and identify areas of potential wetland loss. Mississippi has contracted with SRSC to conduct the Mississippi Land Cover Project to protect and manage state wetlands. The state has over four million acres of wetlands which constitute about 13.5 percent of Mississippi's total acreage. According to SRSC statistics, Mississippi has lost about 60% of its wetlands. However, it remains one of the top ten states in terms of percentage of land area covered by wetlands.

SRSC also coordinates the Private Lands Conservation Program with Ducks Unlimited. This pilot project is designed to promote cooperation between private landowners and Ducks Unlimited for the benefit of migratory waterfowl. Under the proposed arrangement, Ducks Unlimited would assist in the construction and upkeep of temporary ponds and other impoundments as long as they contained water during certain months of the year. Finally, SRSC is researching methods to measure water quality and detect pine beetle infestation before significant damage occurs to forests.

Stennis also contributes educa-  
*see Stennis pg. 12*

*Stennis cont. from pg. 11*

tional services to state institutions. The Center of Higher Learning at Stennis is a joint effort between the University of Southern Mississippi, Mississippi State University, the University of New Orleans, and Pearl River Community College to allow Stennis employees to augment their education and training. In addition, Stennis houses the University of Mississippi's Center for Marine Sciences offering graduate degrees in Marine Science. In fact, this spring, the Mississippi legislature has appropriated three million dollars for the renovation of a building to be used as a permanent home for the center. With the presence of scientists and oceanographers from seventeen federal agencies and one of the largest oceanographic libraries in the world, faculty and students have on-site access to technologies and research facilities few university campuses can match. ■

#### Endnotes

1. Telephone conversation with Julie Cox, U.S. Navy public relations office, Stennis Space Center, September 3, 1997.
2. See <http://www.ssc.nasa.gov/~pao/htmls/overview/history.html> August 29, 1997.
3. <http://www.srsc.org:80/Projects/MSEPA/overview.html> September 3, 1997.
4. <http://www.srsc.org:80/Projects/ducks/index.html> September 3, 1997.

## The *Titanic* Reaches the Mississippi

*Kristen M. Fletcher, J.D.*

They called her "unsinkable." The ship which raises emotions ranging from fascination to devastation docked in Memphis this year, 85 years after she sank in the icy waters of the north Atlantic. "*Titanic! The Exhibition*" was on display at the Pyramid in Memphis through September. From November 15 until May of 1998, the exhibition will be on display at the Florida International Museum in St. Petersburg.

The exhibition leads its guests through the *Titanic's* history, from 1907 when she was still a dream of the White Star Line to the 1985 discovery of her resting place 400 miles off the coast of Newfoundland. Equipped with headphones and a tape of recreated voices of the past, guests descend an escalator into the Pyramid, designed like the bowels of the ship. Guests first meet the ships designers Lord Pirrie and J. Bruce Ismay who planned the *Titanic* to stand over eleven stories high, the largest of her kind in 1912. A model of the *Titanic* and actual sketches of her composition introduce her size, her girth, and her four trademark funnels. Guests may enter the simulated deck of the *Titanic* and experience the elegance of the main staircase, the first class deck, and cabins as they existed on April 10, 1912 when the *Titanic* set out on her maiden voyage from Southampton, England, to New York.

Paintings by Ken Marshall memorialize the voyage including the moments immediately before the vessel hit an iceberg to the hor-

ror of over 1,500 passengers realizing their destiny: to go down with the *Titanic*. The vessel sank on April 11, 1912. Only 705 passengers and crew survived.

The *Titanic* sat peacefully for 73 years until Robert Ballard of the Woods Hole Oceanographic Institution found her resting place. With sonar and photographic equipment which could withstand the 6,000 pounds per square inch of pressure at 12,000 feet below the sea, Ballard and his team explored the *Titanic* but left the vessel as they found it except to add a plaque in memory of those who died. Other expeditions plucked hundreds of artifacts from the site, resulting in U.S. efforts to designate the site an international maritime memorial and institute guidelines for recovery of artifacts. The exhibition displays some of those artifacts such as remarkably preserved newspaper articles, bank notes, clothing, jewelry and china.

The discovery of the *Titanic* marked an achievement for salvage activities introducing innovative equipment to explore shipwrecks in depths never before considered reachable. It also highlighted the ethical struggle between the study of an historical site and the recovery of artifacts for profit. The exhibition concludes with banners of the passengers' names, reminding exhibition guests that the resting place is a grave site marking the end of over 1,500 lives. "*Titanic! The Exhibition*" provides a memorable journey to 1912 and the amazement of the discovery in 1985. ■

## Shipwreck Management in Mississippi and Alabama

John Braley, 2L

On June 9, 1997, the United States Supreme Court decided to review the Ninth Circuit's ruling in *Deep Sea Research v. Brother Jonathan*<sup>1</sup> to determine who owns the shipwreck found off the coast of California: the State of California or Deep Sea Research, Inc. (DSR), the salvage company who found the wreck. With a decision expected in 1998, thirty states, including Alabama and Mississippi, await the decision which may alter the application of their historic preservation statutes managing shipwrecks.

Although shipwrecks have always been of interest to coastal residents and treasure hunters, the recent discoveries of the *Brother Jonathan*, the *La Belle* and the *Titanic* grabbed the attention of the whole nation. The public remains fascinated by each ship's tragic yet unique tale. For instance, the *Brother Jonathan*, a 220 foot wooden steamship, which sank off the coast of California in 1865 occupied the attention of the Deep Sea Research salvage group for 19 years. The *Brother Jonathan* supposedly carried gold and other valuable cargo when it collided with a submerged rock and sank in less than 60 minutes. Tragically, just 16 of the 163 passengers and crew survived the disaster. In 1993, after years of exploration, DSR discovered the wreck lying on the ocean floor in 250 feet of water.<sup>2</sup>

Closer to home, the Gulf of Mexico is the site of another intriguing historical shipwreck. The discovery and current salvage of the *La Belle*, a ship belonging to French explorer La Salle which sank in Matagorda Bay, Texas, over 300 years ago, has gathered the attention of reporters nationwide as well as the Texas Historical Commission and Texas A&M's Nautical Archaeology Program.<sup>3</sup> In fact, the state of Texas allocated \$5.5 million for the salvaging, researching, and cataloging of the *La Belle* and her artifacts.<sup>4</sup>

However, both of these wrecks pale in comparison to the shipwreck mania created by the *Titanic*.<sup>5</sup> The recent exhibition of *Titanic* artifacts greatly renewed interest in shipwrecks. The *Royal Mail Steamer Titanic* which sank in international waters is one of the world's most famous shipwrecks and is the subject of two traveling museum exhibits, a Broadway musical and an upcoming motion picture.

One of the first questions asked after the location of

any wreck is - who owns it? The law which applies to sunken ships and cargo derives from federal and state sources. The foremost federal law is the Abandoned Shipwreck Act of 1987 (ASA).<sup>6</sup> The ASA authorized the federal government to assert ownership over abandoned shipwrecks when they occur: (1) embedded in submerged state lands; (2) embedded in coral on submerged state lands; or (3) located on submerged state lands while eligible for inclusion in the National Register of Historic Places.<sup>7</sup> The ASA then transfers ownership of these specific "embedded" or "historic" shipwrecks to the appropriate state<sup>8</sup> unless the shipwreck is located on federal lands or Indian lands.<sup>9</sup> Further, the ASA requires the Department of the Interior to develop guidelines to aid the states in developing shipwreck management programs to protect natural resources, guarantee public access to shipwrecks, and allow historically and environmentally conscious shipwreck salvage.<sup>10</sup>

In addition, the ASA replaces any other federal admiralty laws which might define ownership of the embedded or historic wrecks.<sup>11</sup> But the ASA does not alter the admiralty laws, such as the law of salvage and finds, applied to non-ASA shipwrecks.<sup>12</sup> The Supreme Court may soon address the ASA's relationship with other federal and state laws in the *Deep Sea Research* case. In this case, DSR filed a federal admiralty suit asking for exclusive salvage rights to the *Brother Jonathan*. When DSR sought the salvage rights, the State of California intervened and claimed ownership to the wreck under the ASA and state historic preservation statutes which vest in California "the title to all abandoned shipwrecks . . . on or in the tide and submerged lands of California."<sup>13</sup> The Northern District of California awarded DSR exclusive salvage rights and held that the ASA preempted California's claim to ownership.

The Ninth Circuit affirmed the district court's decision in favor of DSR because "[in] adopting the ASA, Congress preempted state laws which purported to take title to all shipwrecks on their submerged lands, at least to the extent that such laws took title to shipwrecks that did not meet the requirements of the ASA."<sup>14</sup> The court held that the California historic preservation statutes took title to non-ASA shipwrecks which are governed only by federal admiralty law. The Ninth Circuit

see *Shipwreck* pg. 14

*Shipwreck cont. from pg. 13*

then determined that the *Brother Jonathan* did not meet the "abandoned" requirement of the ASA. Thus, California had no claim of ownership under its historic preservation statutes.

The outcome of this case is important to Mississippi and Alabama because each has asserted ownership over shipwrecks in a manner similar to California. In fact, Mississippi and Alabama joined thirteen other states in submitting to the Supreme Court a supporting brief indicating that the Ninth Circuit's ruling "made it infinitely more difficult for the states to manage historic, abandoned vessels on their property."<sup>15</sup> The states argue that the Ninth Circuit's ruling contradicts the purpose of the ASA and turns the issue of shipwreck ownership over to the federal admiralty courts. Both Mississippi and Alabama have statutes reserving some ownership of antiquities to the states.

**Mississippi**

If a vessel such as the *Brother Jonathan* is discovered by a private salvage company in state waters off the coast of Mississippi, the state may contract with the company to salvage the wreck. The salvage company is entitled to fair compensation in the form of a portion of the artifacts recovered or a portion of the artifacts' cash value. If the state discovers the wreck independently, it may issue a permit to a salvage company to investigate the site. After contract or permit issuance, the Mississippi Department of Archives and History (DAH) supervises the salvage operation to maximize recovery of historic and scientific information.

The find of such a vessel triggers the derelict vessel statute<sup>16</sup> and the Antiquities Law of Mississippi.<sup>17</sup> If a vessel is found in coastal wetlands, the Department of Marine Resources (DMR) must determine if the vessel is derelict. A vessel is derelict, and therefore abandoned, if it has been "submerged in or on coastal wetlands" for more than 90 days.<sup>18</sup>

However, if a vessel has been submerged for 100 years or longer, the vessel is not declared derelict but instead it potentially takes on historic value. If a shipwreck is found in Mississippi tidelands, submerged lands, or beds of the sea, then the state retains jurisdiction over the site and designates it a Mississippi landmark. Under the Antiquities Law, the state then takes sole title to the wreck and automatically declares the site a Mississippi Landmark.<sup>19</sup> Upon determining that the

vessel is not derelict, the DMR notifies the DAH which assesses the vessel's archaeological, historical or architectural significance, using the Antiquities Law. The DAH determines if the vessel possesses information about the state's pre-history or history, information or artifacts related to important events in state or national history, unique artistic value, or a demonstration of special shipbuilding methods. If the DAH desires to preserve the vessel, it must notify the DMR within thirty days.

While the Mississippi courts have not interpreted the Antiquities Law in the shipwreck context, the DAH is investigating a potential shipwreck site in Biloxi Bay.<sup>20</sup> In fact, the legislature in the 1997 session earmarked \$40,000 from the DMR's budget for an underwater archeological investigation of this site.<sup>21</sup> The DAH will coordinate the investigation to determine the ship's age, condition and cultural affiliation.<sup>22</sup> The DAH will contract with a private salvage firm to recover artifacts at the site and then the agency will analyze the artifacts in-house.

By design, the derelict vessel statute and the Antiquities Law are quite broad. The statutes do not differentiate between historical and nonhistorical shipwrecks.<sup>23</sup> The legislature has left the statutes broad in order to cover all shipwrecks while giving the DAH discretion to determine which ones have significance. Moreover, the decision to issue permits or contracts for salvage of significant shipwrecks lies solely with the DAH. However, the legislature was quite clear regarding penalties. Any violation of the Antiquities Law, such as removing artifacts from a shipwreck within the DAH's jurisdiction without a permit, is a misdemeanor punishable by a \$500 - \$5000 fine and/or jail time not more than 30 days.<sup>24</sup>

**Alabama**

If a vessel like the *Brother Jonathan* were found off the coast of Alabama, it would trigger several historic preservation statutes. These laws reserve to the state an exclusive right to antiquities, create an historical commission to conduct salvage and excavation, and provide criminal penalties for violation of Alabama excavation laws.<sup>25</sup> The Alabama Historical Commission determines which sites have historic, archaeological or architectural significance. The Commission acquires the site and preserves, improves or protects it.<sup>26</sup> If the Commission discovers a significant shipwreck, it may

*cont.*

contract with a salvor to recover the ship or the contents and pay fair compensation.<sup>27</sup> Alabama reserves the exclusive right to explore the potential site and to take ownership of all artifacts on public lands or on private lands with the owner's consent.<sup>28</sup> Additionally, the state has jurisdiction over sunken or abandoned ships and their contents which occur on state owned lands or, with consent of a private owner, on private lands.<sup>29</sup> Violation of an historic preservation statute is a misdemeanor in Alabama punishable by a \$1000 fine.<sup>30</sup>

### Conclusion

Mississippi and Alabama have chosen to manage shipwrecks in their waters through a combination of statutes. While there is little judicial interpretation to guide government officials or commercial salvors and recreational divers, both Mississippi and Alabama have established foundational management programs which will aid future shipwreck discoveries and salvage operations. However, the Supreme Court's decision in *Deep Sea Research* may require both states to alter their management programs.<sup>31</sup> If the Supreme Court affirms the Circuit Court, Mississippi and Alabama could be barred from asserting ownership over shipwrecks in their territorial sea. The states will own only those wrecks which meet ASA requirements. The ownership of the remaining wrecks will be determined in the federal courts.<sup>32</sup> ■

### Endnotes

1. *Deep Sea Research, Inc. v. Brother Jonathan*, 89 F.3d 680 (9th Cir. 1996), cert. granted, 65 U.S.L.W. 3809 (U.S. June 10, 1997) (No. 96-1400).
2. For details of the vessel's demise and discovery, see *Deep Sea Research, Inc. v. Brother Jonathan*, 883 F. Supp. 1343, 1346-47 (N.D. Cal. 1995).
3. Allan Turner, *Belle's Bounty*, HOUSTON CHRONICLE, May 4, 1997, available in 1997 WL 6554988.
4. *Id.*
5. James T. Yenckel, *Let the Sights Sink in at These Shipwreck Exhibits*, DALLAS MORNING NEWS, May 25, 1997, at 5G, available in 1997 WL 2672196.
6. 43 U.S.C.A. §§ 2101-2106 (West Supp. 1997).
7. 43 U.S.C.A. § 2105(a).
8. 43 U.S.C.A. § 2105(c).
9. 43 U.S.C.A. § 2105(d).
10. 43 U.S.C.A. §§ 2103-2104.
11. 43 U.S.C.A. § 2106(a).

12. 43 U.S.C.A. § 2106(b).
13. *Deep Sea Research*, 89 F.3d at 685 & n.4.
14. *Id.* at 686.
15. Brief for Amici States of Florida, Alabama, Alaska, Georgia, Idaho, Illinois, Louisiana, Maryland, Michigan, Mississippi, New York, North Carolina, South Carolina, The Commonwealths of Massachusetts and Virginia, and Territories of Guam and the Virgin Islands at 1, *State of California v. Deep Sea Research, Inc.*, 65 U.S.L.W. 3809 (U.S. June 10, 1997) (No. 96-1400).
16. Act of Apr. 24, 1997, ch. 600, 1997 Miss. Laws 600 (to be codified at Miss. Code Ann. § 49-15-13).
17. Miss. Code Ann. §§ 39-7-1 to -41 (1996).
18. Act of Apr. 24, 1997, ch. 600, 1997 Miss. Laws 600 (to be codified at Miss. Code Ann. § 49-15-13).
19. Miss. Code Ann. § 39-7-9.
20. Richard McLaughlin & Laura S. Howorth, *Mississippi Ocean Policy Study 3.2* (1991) (citing *United States v. Louisiana*, 470 U.S. 93 (1985)).
21. Telephone Interview with Sam McGahey, Chief Archeologist of the Historic Preservation Division, Miss. Dep't. of Archives and History (July 11, 1997).
22. H.B. 1797, 1997 Regular Sess. (Miss. 1997) (enacted).
23. Telephone Interview with Sam McGahey, Chief Archeologist of the Historic Preservation Division, Miss. Dep't. of Archives and History (July 11, 1997).
24. *Sunken Vessels*, 90 Op. Att'y Gen. No. 0019 (Jan. 24, 1990) (This is cited as No. 0016 in Miss. Code Ann.).
25. Miss. Code Ann. §39-7-35.
26. Ala. Code §§ 41-3-1 to 41-9-249.1 (1996).
27. Ala. Code § 41-9-242.
28. Ala. Code § 41-9-249.1.
29. Ala. Code § 41-3-1.
30. Ala. Code § 41-9-249.1.
31. Ala. Code § 41-3-6.
32. WATER LOG will cover the Supreme Court's decision in 1998.



## Salvors Must Pay For Damaging Sea Grass

United States v. Fisher, No. 92-10027 (S.D. Fla. July 30, 1997).

Kristen M. Fletcher, J.D.

A federal court in Florida recently fined a marine salvage company over half a million dollars for damage it caused in the Florida Keys National Marine Sanctuary. On July 30, the U.S. District Court for the Southern District of Florida fined Salvors, Inc. \$589,331 for destroying sea grass within the boundaries of the protected area.<sup>1</sup> The court also upheld an injunction prohibiting the company from using destructive salvage techniques in the sanctuary and from removing artifacts from the area. Salvors is a treasure hunting operation well-known for its discovery of the *Nuestra Senora de Atocha*, a Spanish vessel which sank in 1622 off Key West. The vessel rested in its watery tomb until Salvors owner Mel Fisher and son Kane Fisher recovered the valuable cargo of gold, silver, and gems in 1985. Since that discovery, Salvors has continued its search for sunken treasures throughout the Gulf of Mexico, resulting in numerous artifact finds and legal battles. The most recent battle marks the first violation in the Florida Keys National Marine Sanctuary to go to trial.

Under authority of the Marine Protection, Research and Sanctuaries Act<sup>2</sup> (MPRSA), Congress designated a 2,800 square nautical mile area in the Florida Keys as the Florida Keys National Marine Sanctuary in 1990.<sup>3</sup> The MPRSA protects the

unique habitat of coral reef, sea grass, and shoreline from destruction or injury. Coffins Patch, an area off the coast of Grassy Key, east of Marathon, Florida, is located in the sanctuary and houses unique sea grass beds. The beds are distinctive because they are subject to high energy waves which keep sands in motion. As a result, sea grass does not grow easily here.

In 1992, Salvors operated three vessels throughout Coffins Patch in an effort to unearth buried items. The vessels displaced sediment on the ocean floor using "mailboxes," pipes mounted from the transom of a vessel which, when turned at a ninety degree angle, direct the thrust of a ship's engine towards the sea bottom. The directed thrust creates "blowholes" in the sea bottom up to five feet deep and thirty feet wide.<sup>4</sup> Salvors used mailboxes for years to unearth sunken shipwrecks. The technique in Coffins Patch left over 600 blowholes from January to March of 1992, damaging a total of 1.63 acres of sea grass beds.

Keys Sanctuary biologists and divers witnessed and recorded the blowhole damage attributed to Salvors' activities. According to court records, environmental biologist Curtis Kruer observed "hay-

bale-sized chunks of sea grass lying in the blowholes and up to three feet of sediment on top of dead sea grass."<sup>5</sup> Kruer likened the damage to that of "bombs dropped from airplanes onto a bombing test range."<sup>6</sup> In 1996, the National Oceanic and Atmospheric Administration (NOAA) began test projects for reconstruction of the area but determined that sea grass restoration at Coffins Patch was impossible. Instead, the agency will restore an off-site area previously scarred by boat impacts.

Restoration is necessary because sea grass serves an important role in the sanctuary ecosystem. It stabilizes the sea bottom, prevents erosion, and provides a link in the food chain. Most importantly, sea grass beds provide habitat for young fish and shrimp species furnishing food and providing shelter from predators.<sup>7</sup>

The congressional findings in the Keys Act stress that "nationally significant marine environments, including sea grass meadows" need protection.<sup>8</sup>

The MPRSA defines a sanctuary resource as "a living or nonliving resource . . . that contributes to the conservation, recreational, ecological, historical, research, educational, or aesthetic value of the sanctuary."<sup>9</sup> The Act prohibits the

*According to the court, testimony from biologist Curtis Kruer likened the sea grass damage to "bombs dropped from airplanes onto a bombing test range in waters near Puerto Rico."*

habitat for young fish and shrimp species furnishing food and providing shelter from predators.

cont.



destruction or injury of a sanctuary resource such as sea grass. Salvors argued that because the sea grass suffered no permanent damage, it is not liable for the restoration of the beds. Noting that the Coffins Patch sea grass beds may take up to 100 years to recover and that artificial restoration is impossible, the court found that sea grasses had been injured and destroyed.

Salvors also claimed it is not liable because other salvage boats were conducting similar searches in the Coffins Patch area. The court dismissed this argument relying on testimony from divers who saw Salvors' vessels create the blowholes. In addition, scientific evidence proved that the blowholes were created between January and March of 1992, the months that Salvors searched Coffins Patch. Finally, testimony from Kane Fisher himself showed that his boats were the only ones using mailboxes in Coffins Patch during that time period. With this evidence, the court found Salvors responsible for the destruction of the beds and then turned to the question of damages.

The MPRSA provides damages for the cost of replacing or acquiring the equivalent of a sanctuary resource and the value of the lost use of a sanctuary resource pending its replacement. In determining damages under the MPRSA, the court assessed fines and forfeiture of the artifacts uncovered by the mailbox technique. The fines assessed against Salvors include the cost of the restoration project, the costs to respond and assess damage to the sanctuary, and interest on these latter costs. The court also

compelled Salvors to forfeit the artifacts recovered in the sanctuary to the United States. Salvors must hand over the iron anchor, silver coins, bronze medallions, and cannonballs thought to be from a Spanish galleon that sank during a hurricane in 1733. Because these artifacts constituted "nonliving resources" under the MPRSA, Salvors violated the Act by removing them.

Finally, the court upheld a magistrate's injunction preventing Salvors from using mailboxes in the sanctuary or removing artifacts from the sanctuary in the future. Salvors claimed that the injunction was adverse to the public interest since it shut down many treasure-hunting operations throughout the sanctuary, effectively putting those salvage operations out of business. The court dismissed this argument by finding that the injunction actually served the public interest since it protected the sanctuary resources.

Restoration of the sea grasses is in its early stages. After determining that Coffins Patch will not sustain the artificial addition of sea grass, NOAA found a nearby area with sea grass injuries similar to those found in Coffins Patch. The agency determined that restoration of 1.55 acres of sea grass habitat in this new area will compensate for Salvors' injuries to Coffins Patch. The restoration project includes photographing selected sites, installing sea grass units, and monitoring the project. A Keys Sanctuary manager reports that the Coffins Patch sea grass has not recovered since the injuries sustained by Salvors' actions. ■

## Endnotes

1. *U.S. v. Fisher*, No. 92-10027 (S.D. Fla. July 30, 1997).
2. 16 U.S.C. §§ 1431 - 1445 (1997).
3. Pub. L. No. 101-605, § 5 (a), 104 Stat. 3089 (1990) (referred to as the Keys Act). For a review of the Sanctuaries Act and the Keys Sanctuary, see *National Marine Sanctuaries Act*, 17:1 WATER LOG 7 (1997) and *Sanctuary Law and Florida Keys Area Timeline* 17:1 WATER LOG 6 (1997).
4. *U.S. v. Fisher* at 4.
5. *Id.* at 6.
6. *Id.* at 7.
7. Interview with Cynthia Moncreiff, Marine and Estuarine Botanist, Gulf Coast Research Laboratory (Aug. 26, 1997).
8. Keys Act at § 2.2.
9. 16 U.S.C. § 1432 (8) (1997).



## Book Review - John M. Barry, *Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America*

Simon & Schuster, New York, N.Y. \$27.50. 524 pp.

*Richard Brownlow, 3L*

John Barry's *RIISING TIDE: THE GREAT MISSISSIPPI FLOOD OF 1927 AND HOW IT CHANGED AMERICA* is an excellent examination of a dramatic event in American history. The flood of 1927 highlighted futile attempts to control nature, ended a way of life in the Mississippi-Yazoo delta, and marked an end of the driving force behind New Orleans, the powerful banking establishment.

Barry successfully describes efforts to control the Mississippi River, explains the connection between the Mississippi delta culture and the river, and examines the enormous influence powerful banking families had over decisions affecting New Orleans. Barry tells each story against the powerful backdrop of the Great Mississippi Flood of 1927, one of the most devastating natural events of this century. The Mississippi River flood of 1993 which devastated the Midwest carried one million cubic feet of water per second while the 1927 flood carried an excess of three million cubic feet of water per second. Extreme amounts of rain throughout the Midwest in the Fall of 1926 followed by record setting snowstorms that resulted in drifts ten feet tall set the stage for the flood to come. On April 21, 1927, these forces came to bear at Mounds Landing, a ferry station on the Mississippi, north of Greenville, MS.

Barry quickly grabs the reader's attention with a brief but haunting glimpse of Greenville, just days before the flood. In the 1920's, Greenville was the center of the delta planters society, a loose knit group of families with large plantations that employed thousands of people on their farms.

*Barry describes and contrasts two engineers who competed for control of the river during the late 19th century.* James Buchanan Eads is portrayed as a brilliant engineer who built the first bridge across the river below the mouth of the Missouri. Andrew Atkinson Humphreys, chief of the U.S. Army Corps of Engineers, competed with Eads for control over the river. Barry favors Eads for his business ventures and engineering feats, while he portrays Humphreys as a scientist overwhelmed by a drive for power. In describing Humphreys' rise to become chief of the Corps of Engineers, Barry notes, "[B]y then there was no scientist

left within him. He cared now only about obedience, power and rank."

After describing the drive to engineer the river, Barry examines the result of this struggle, the levee-only policy adopted by the Mississippi River Commission, the leading government agency on river policies. This policy represented a compromise of Eads' theories regarding the channelization of the river and Humphrey's theories about levee size even though neither engineer supported the levee-only policy. Although both men had experimented with the idea of using levees only, they agreed that the levee-only policy used by the Commission was not adequate. Unfortunately, the levee-only policy actually increased the power of the river during flood season. Barry concludes this section by ominously stating, "[N]o reservoirs were built, [n]o outlets were built, [n]o cutoffs were built. Only levees were built."

In 1922, the river flooded but the levees held most of the waters at bay. This containment led the engineers to believe their efforts would prevent future floods. As a result, the Mississippi River Commission decided to upgrade all levees and close the final and greatest outlet of the Mississippi, the Atchafalaya River. These decisions led directly to the conditions of the 1927 flood and challenges that river engineers face today.

In the second part of *RIISING TIDE*, Barry describes changes in the culture of the Yazoo-Mississippi delta brought about by the flood by tracing the history of the influential Percy family from Greenville. Barry notes the arrival of Charles Percy near Greenville and describes the future lineage of his family. "There, over the next century, the Percys became giants, generations of men who led *both the South and the nation.*" While attempting to control both the river itself and social forces such as race relations and state politics, the "Percys built upon what Eads and Humphreys had done by transforming the potential that the river had created into an entire society, extending far beyond their own holdings, and by making it conform to their own special vision." It was this planters society that the flood threatened to destroy.

Barry then focuses on events surrounding the levee collapse at Mounds Landing. When the levee broke, General Edgar Jawdin, head of the Corps of Engineers at the time of the flood, indicated that the river would over-

*cont.*

flow the entire Mississippi delta. Barry quotes Jawdin's explanation:

"Quickly the crevasse widened, until a wall of water three-quarters of a mile across and more than 100 feet high . . . raged onto the Delta."

In the wake of the flood, all of the plantation labor, in particular racial minorities, were left with few possessions or reasons to stay, eventually altering the economic and societal structure of the delta. According to Barry, "By early 1928, the exodus of blacks from Washington County, and likely the rest of the Delta, did reach 50 percent." In the past, blacks had migrated to the north and west, but that was a slow drain with the South losing about 200,000 blacks between 1900 and 1910. In the 1920s, 872,000 blacks left the South. Although the flood was not the only reason to leave, for many it was the final reason.

In the final part of *RIISING TIDE*, Barry explores the role of powerful New Orleans families during the 1927 flood. Entitled the "The Club," Barry conveys a sense of mystery surrounding both the city and the men that controlled it. Barry notes that three men controlled the newspapers in the city and they cooperated in suppressing news unfavorable to the city's business interests. But membership in the all-male social clubs of New Orleans determined who the real insiders were and who made the important decisions. The driving force behind these clubs was the New Orleans banking establishment. Barry writes that the city had nearly twice the economic activity of Dallas and between double and triple that of Houston, Atlanta or Memphis. This power led to these clubs having immense control over economic and political decisions of New Orleans.

In the late 1920s, New Orleans was controlled by powerful banking families who exerted enormous control over business and political decisions affecting the city. As a result of having this power, members of these clubs decided to intentionally dynamite the levee to lower the flood level in New Orleans and protect the city. The Corps originally proposed destroying the levee in the wake of the 1922 flood when they advised the New Orleans financial community that, if the city was ever seriously threatened with a flood, blowing a hole in the levee would save the city. In the end, the decision to dynamite the levee was made by three New Orleans banking leaders in the boardroom of the Canal Bank. Unfortunately, the result was the flooding of St. Bernard and Plaquemines parishes. Barry sadly notes, as two engineers had predicted, the destruction of the parishes

was unnecessary and one day's wait would have shown it to be so.

*RIISING TIDE* is a well written work that shows how the Great Mississippi Flood of 1927 changed America. First, this flood marked the end of the delta planters society of the Mississippi-Yazoo delta. It was a defining moment in the exodus of racial minorities from the South to places in the north and west. Second, the activities of the New Orleans clubs brought an end to their dominance of Louisiana politics and led to the rise of populists such as Earl and Huey Long. Finally, the simple fact that a flood of this magnitude occurred shows that we can never truly tame the river. What the outcome would have been if Eads' or Humphreys' ideas had been followed exactly, we will never know. But we do know that the engineers mistakenly thought they had the river under control. In fact, even today the river is a mystery to the engineers who attempt to manage it.

The current Corps' plan to protect the lower Mississippi River valley is called "Project Flood" and is designed to protect the valley from a flood considerably stronger than the 1927 flood. These measures include floodways, cutoffs and spillways. The key protection measure in the system is the Old River Control Structure which is a concrete structure located on the river between Natchez and Baton Rouge. When Project Flood occurs, the Corps plans to split the floodwaters at Old River, a place that used to be a natural outlet of the Mississippi. The Corps plans to divide the maximum flow of project flood (3,030,000 cubic feet per second) between the Atchafalaya and Mississippi Rivers, exactly reversing the Corps policy prior to the 1927 flood. Challenges facing the Corps are sub-standard levees, cutoffs not operating properly, and most importantly, the physics of the Atchafalaya itself. The 1927 flood sent vast amounts of water down the Atchafalaya which has a much shorter route and steeper slope to the sea than the main channel of the Mississippi. By allowing more water to continue down the Atchafalaya during Project Flood, the Corps could be helping nature change the course of the Mississippi. Project Flood may actually contribute to the Atchafalaya becoming the main stream of the mighty Mississippi River, an outcome the Corps has been trying to prevent for the last forty years.

Overall, *RIISING TIDE* is an important read for anyone concerned with the history of the events of the 1927 flood and anyone who is interested in current Mississippi River policies. Barry successfully illustrates the historical significance of the river, the attempts to control it, and the culture the river has fostered in the delta region. ■

# ALABAMA LEGISLATIVE UPDATE 1997

by *Kristen M. Fletcher, J.D.*

The following is a summary of coastal, fisheries, marine, and water resources related legislation enacted by the Alabama legislature during the 1997 regular session.

## **1997 Alabama Acts 66.** (HB 36)

*Approved February 25, 1997. Effective upon passage of federal legislation.*

Consents to the creation of the Alabama-Coosa-Tallapoosa River Basin Compact between Alabama, Georgia, and the United States to promote interstate cooperation, planning, and development of the Alabama-Coosa-Tallapoosa (ACT) river basin resources. Specifically, it provides for:

- Creation of the ACT Basin Commission, made up of one member representing each state and one non-voting member representing the United States, to meet at least once each year;
- Development of a formula to allocate the surface waters of the ACT basin between Georgia and Alabama with increases allowed under specific circumstances and with some allocation to federal water projects in the basin.
- Protection of water quality, ecology, and biodiversity of the ACT basin;
- Preservation of each state's right to regulate the use of water resources within its boundaries; and
- Creation of a dispute resolution procedure and the termination of the compact by Alabama, Georgia or the United States.

Both Alabama and Georgia have approved individual bills creating the compact but to take effect, the U.S. Congress must also approve the compact. Federal bills consenting to this compact are in the U.S. Senate Judiciary Committee and the U.S. House Judiciary Committee.

## **1997 Alabama Acts 67.** (HB 35)

*Approved February 25, 1997. Effective upon passage of federal legislation.*

Consents to the creation of the Apalachicola-Chattahoochee-Flint River Basin Compact between Alabama, Florida, Georgia, and the United States to promote interstate cooperation, planning, and development of the Apalachicola-Chattahoochee-Flint (ACF) river basin resources. Specifically, it provides for:

- Creation of the ACF River Basin Commission, made up of one member representing each state and one non-voting member representing the United States, to meet at least once each year;
- Development of a formula to allocate the surface waters of the ACF basin among the states with certain increases available and some allocation to federal water projects in the basin;
- Protection of water quality, ecology, and biodiversity of the ACF basin;
- Preservation of each state's right to regulate use of water resources within its boundaries; and
- Provides a dispute resolution procedure for all parties and the termination of the compact.

Alabama, Georgia, and Florida have approved individual bills creating the compact but to take effect, the U.S. Congress must also approve the compact. Federal bills consenting to this compact are in the U.S. Senate Judiciary Committee and the U.S. House Judiciary Committee.

**1997 Alabama Acts 142.** (SB 63)

*Approved March 17, 1997. Effective March 17, 1997.*

Amends Section 33-1-5.1 of the Code of Alabama to create a retirement program for employees not currently eligible and a retirement incentive program providing for all employees of the State Docks Department who may retire from state service and do so prior to September 30, 1997.

**1997 Alabama Acts 249.** (SB 541)

*Approved May 1, 1997. Effective August 1, 1997.*

Exempts the following persons from the requirement of a state veterinary license or temporary permit to practice veterinary medicine:

- fishery biologist when actively employed by Alabama or the U.S.; and
- any person in the production or management of commercial food or game fish while in the performance of official duties including collecting samples, diagnosing, relieving, preventing, or testing for diseases.

**1997 Alabama Acts 301.** (HB 1012)

*Approved May 7, 1997. Effective retroactively for this tax year.*

Exempts the following transactions from the Alabama use tax if a sales tax has been paid:

- Fuel and supplies for use aboard vessels engaged in foreign or interstate commerce and aboard commercial fishing vessels; and
- Storage, use, or consumption of all devices used for the control, reduction, or elimination of air or water pollution.

**1997 Alabama Acts 415.** (SB 351)

*Approved May 14, 1997. Effective May 14, 1997.*

- Authorizes the incorporation of the Alabama Drinking Water Finance Authority, made up of the Governor, Director of Alabama Department of Environmental Management, and the Director of Finance; and
- Creates the Drinking Water Revolving Loan Fund under the Finance Authority to provide money to assist public water systems in the state in meeting the requirements of the federal Safe Water Drinking Act, such as technical additions to water systems.

**1997 Alabama Acts 527.** (HB 973)

*Approved May 22, 1997. Effective August 1, 1997.*

Provides for renewal by mail of boat licenses and tags in Dale County.

**1997 Alabama Acts 645.** (SB 564)

*Approved May 29, 1997. Effective May 29, 1997.*

Provides new standards and additional funds for grants requested by any port authority for improvements to structures or general site preparation.

*See Alabama Legislative Update pg. 22*

*Alabama Legislative Update cont. from pg. 21*

**1997 Alabama Acts 668.** (SB 465)

*Approved May 29, 1997. Effective May 29, 1997.*

Permits cooperative corporations (organized under Article 9, Chapter 4, Title 10 of the Code of Alabama) to form an independent corporate instrumentality of the state to provide water or sewage services.

**1997 Alabama Acts 669.** (SB 579)

*Approved May 29, 1997. Effective May 29, 1997.*

Increases the compensation paid by the owner or operator of a vessel to a pilot when:

- pilot conducts a vessel into or out of the bay or harbor of Mobile; or
- pilot conducts services to vessels which are connected or incidental to the owner's vessel.

Vessels trading between a domestic port in the Gulf and the port of Mobile, drawing seven feet or less of water do not have to employ a pilot; if such a vessel does, the owner must comply with this act.

**1997 Alabama Acts 712.** (SB 168)

*Approved May 29, 1997. Effective August 1, 1997.*

Amends the Criminal Code to include the following acts in the offense of criminal littering:

- Negligent discharge of glass or a pointed object into or adjacent to water, open to the public; and
- A person discharges sewage, oil products, or litter from a vessel of more than 25 feet into a river, lake, or stream within Alabama or within 3 miles of Alabama's shoreline.

Presumes that a person knowingly deposited the litter if items found in the litter bear the person's name.

**1997 Alabama Acts 715.** (HB 823)

*Approved May 29, 1997. Effective August 1, 1997.*

Enacts the Uniform Conservation Easement Act providing that an easement may be created on real property to preserve the land for conservation, recreation, agriculture, forest, archaeological, or cultural purposes. This supplements provisions of Alabama's "Forever Wild Amendment," Constitutional Amendment No. 543, by adding the following:

- Holder of the conservation easement may be a governmental body or a charitable association or trust;
- A third party right of enforcement exists when expressly provided in easement; and,
- Owner of the property, the holder of the easement, and the holder of a third party right of enforcement may bring an action affecting a conservation easement.

## Lagniappe *(a little something extra)*

### *Around the Gulf...*



In September, Tulane Law School in New Orleans hosted a two day seminar on the recently amended Magnuson-Stevens Fisheries Act. Fishermen, scientists, lawyers, government officials, students, and teachers gathered to examine social, economic, and legal issues associated with implementing the new federal fisheries law and its call for sustainable fisheries policies.

In August, Mississippi Secretary of State Eric Clark filed suit against Imperial Palace Casino for failing to enter into a tidelands lease agreement for state owned land in Biloxi. Imperial Palace contended that the proper state authority for the lease site is the Biloxi Port Commission. The Port Commission however, has indicated that the Secretary of State's office is in fact the proper authority.

The Gulf of Mexico Fishery Management Council recently announced its 1997 appointees: Robert Shipp, a professor from the University of Southern Alabama; charterboat owner and operator Myron Fischer of LA; Karl Lessard, owner/operator of Captain Bee Fisheries, FL; Albert King, Sr. of AL; and, H.K. Williams of MS.

On August 27, the U.S. Minerals Management Service held a lease auction of federally controlled offshore oil and gas development sites in the Gulf of Mexico. The auction garnered \$616 million in bids for 804 tracts.

On July 2, NMFS published its proposed rule to implement bycatch reduction regulations aimed at reducing the bycatch of juvenile red snapper in the Gulf of Mexico shrimp trawl fishery.

Florida Department of Environmental Protection Secretary Virginia Wetherell called for a \$4.3 billion bond from a company that proposed to conduct exploratory oil and gas drilling off Florida's gulf coast. On a separate matter Wetherell also proposed a state-constitution-based "environmental bill of rights" that would ensure the public's right to a healthy environment, preservation of pristine natural resources, and access to outdoor recreation.

An oceanographic research ship built by Halter Marine, Inc. of Gulfport, MS, that bears the name of Senator Trent Lott (R-Miss) on its keel was recently commissioned and welcomed by Commerce Secretary William M. Daley into the NOAA fleet of oceanographic research ships.



### *Around the Nation and the World...*



In August, a slumbering shrimp fishing crew delayed a \$200 million NASA rocket launch when their boat strayed into the launch danger zone off the coast of Cape Canaveral.

On July 21, the U.S.S. Constitution, the nation's longest serving commissioned warship that will celebrate its 200 years of service this September, set sail for the first time in over 60 years. "Old Ironsides" sailed under her own power outside Boston Harbor and her home port at the Charlestown Navy Yard.

In July, President Clinton appointed former EPA Administrator William Ruckelshaus to lead the U.S. effort to restart negotiations with Canada over the Pacific Salmon Treaty. Earlier failed negotiations led angry Canadian fishermen to blockade a U.S. ferry in the port of Prince Rupert, B.C. for 2 days.

**WATER LOG** is a quarterly publication reporting on legal issues affecting the Mississippi-Alabama coastal area. Its purpose is to increase public awareness and understanding of coastal problems and issues.

If you would like to receive future issues of **WATER LOG** free of charge, please send your name and address to: Mississippi -Alabama Sea Grant Legal Program, University of Mississippi Law Center, University, MS 38677, or contact us via e-mail: [waterlog@olemiss.edu](mailto:waterlog@olemiss.edu). We welcome suggestions for topics you would like to see covered in **WATER LOG**.

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