

WATER LOG



**A Legal Reporter of the
Mississippi-Alabama Sea Grant Consortium**

Contents:

- **Environmental Policy, Practice, and Problems of the Department of the Navy — Cheri L. Spossey**
- **Environmental Regulation of Lead — A Shot in the Dark? — Bill Young**
- **Can You Bank on Wetlands Mitigation? New Developments in Wetland Mitigation Banks — William "Chris" Harrison**
- **What Will Become of the Environment Under the New Republican Congress? — William "Chris" Harrison**

And more . . .

**Volume 15, Number 1, 1995
Mississippi-Alabama Sea Grant Legal Program**

WATER LOG

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. We welcome suggestions for topics you would like to see covered in WATER LOG.

This work is a result of research sponsored in part by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce under Grant Number NA16RG0155-02, the Mississippi-Alabama Sea Grant Consortium, the State of Mississippi, and the University of Mississippi Law Center. The U.S. Government and the Mississippi-Alabama Sea Grant Consortium are authorized to produce and distribute reprints notwithstanding any copyright notation that may appear hereon. The views expressed herein are those of the author(s) and do not necessarily reflect the views of NOAA or any of its sub-agencies.

Editor:

Laura Howorth

Associate Editor:

William "Chris" Harrison

Production Assistant:

Niler P. Franklin



Writers:

Bill Young

Cheri L. Spossey

University of Mississippi Law Center - University, MS 38677

The University complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, creed, color, national origin, race, religion, sex, handicap, veteran or other status.

MASGP-95-002-01

This publication is printed on recycled paper

Editor's Note:

The following two articles are a continuation of last issue's presentation of the best four papers taken from Professor Casey Jarman's Hazardous Waste Law Class.

Environmental Policy, Practice, and Problems of the Department of the Navy

by Cheri L. Spossey

INTRODUCTION

The mission of the Department of the Navy (DON) is to defend our national interest by projecting military power from the sea to the land. In support of this mission, the Navy and Marine Corps occupy nearly four million acres of land in the United States. Much of this land is ecologically valuable and located in coastal areas. Thus, military readiness and the protection of the environment are closely linked.

Navy and Marine operations involve the use of many hazardous materials. Until recently, the proper handling of hazardous materials and hazardous waste was nonexistent on Navy and Marine installations. Although environmental problems on these bases are now being addressed, the task of correcting these past wrongs is immense. Costs are astronomical and the cleanup will take many years to complete. But the more frightening problem is the number of ongoing violations affecting the environment and public health and safety.

ENVIRONMENTAL POLICIES GOVERNING DON OPERATIONS

Upon enactment of the Federal Facilities Compliance Act in 1992 (42 U.S.C. section 6961 (c)(3)), the DON became subject to the same federal environmental regulations regarding hazardous waste as private parties. These regulations fall into two categories: 1) hazardous waste management and disposal (RCRA) and 2) environmental restoration and cleanup (CERCLA). These statutes ensure proper handling, disposal, and cleanup of hazardous waste through a system of permits, inspections, licensing, civil liability, and penalties.

The DON's environmental policy is found in two sources: 1) article 0765 of the Navy regulations and 2) Secretary of the Navy Instruction 6240.6E. Article 0765 addresses the responsibility of commanding officers. It provides that the commanding officer shall cooperate with any other governmental authority in the prevention, control, and abatement of environmental pollution to the extent resources and operational considerations allow. Instruction 6240.6E is more specific. It provides a comprehensive policy for environmental protection and natural resource conservation within the DON. Beyond these directives, the DON has many policy programs in place to deal with hazardous waste.

One program is the Installation Restoration program, designed to discover, investigate, characterize, and clean contaminated sites according to applicable laws and regulations. CERCLA efforts are the primary focus of the IR program, but investigation and cleanup of site contamination under RCRA are also a major part of the cleanup effort. Since the IR program began in 1980, the DON has examined 272 installations and has identified more than 3,400 sites on these installations.

Another DON program is the Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP). This program provides for lifecycle control and management of hazardous waste and centralizes control of all hazardous material. CHRIMP reduces the amount of hazardous material requiring treatment or disposal.

The DON also addresses the issue of base disclosure. Section 120 of CERCLA requires that all remedial actions necessary to protect human beings and the environment be taken before disposal of real property. To ensure compliance with CERCLA, the DON began the Base Realignment and Closure Environmental Program (BRAC). BRAC costs include planning, compliance, and cleanup. A BRAC Cleanup Team (BCT) (comprised of a Navy, state, and EPA representative) ensures early compliance with CERCLA regulations. The BCT is also responsible for developing the cleanup plan for the installation.

Another effort by the DON to help with environmental cleanup is the creation of Restoration Advisory Boards (RABs). These groups involve citizens from the affected community. The RABs have the duty of reviewing the status of cleanup at the installation and ensuring the cleanup plan developed by the BCT supports the reutilization plan developed by the local community.

DON POLICY IMPLEMENTATION

In 1993, the DON successfully completed a major bioremediation project at Craney Island Fuel Terminal in Portsmouth, Virginia. Bioremediation is a process using naturally occurring organisms to consume the soil contamination. During this project, one thousand cubic yards of petroleum-contaminated soil were treated at a cost of thirty-five dollars per cubic yard. In comparison, thermal treatment costs fifty-five dollars per cubic yard and off-site disposal costs 150 dollars per cubic yard. Test results showed that the average concentration of five thousand parts per million of petroleum product was reduced to 325 parts per million during the three-month test. This is well below the risk-based cleanup level of one thousand parts per million set by the state of Virginia.

The DON is also looking at other technological developments to ensure future compliance with environmental regulations. To meet its plastic discharge prohibition by the end of 1998, the DON is installing plastic processors on all ships. These devices heat and compress plastics into bricks for onboard storage until docking. Over the past five years, the DON has invested two million dollars in a bilge water membrane treatment project in New Jersey. Oily waste from ships is usually disposed of as hazardous waste. Now the effluent is so clean it can be discharged in the local sewage treatment plant.

But perhaps more important than all of these technological advances is the DON's commitment to better environmental practices. Since 1990, the DON's environmental program has grown 230 percent, at a time when its overall budget declined 22 percent. In fact, one out of every six dollars spent by the Navy today on its domestic bases is for environmental projects. The DON's environmental budget for FY 1995 is 538 million dollars, a big change from 1988 when the Navy spent less than twenty million dollars annually on environmental projects.

INCIDENTS OF ENVIRONMENTAL VIOLATIONS BY DON

Even with a more environmentally conscious Navy, however, wrongdoing is widespread and ranges from shore activities to shipboard disposal. Aaron Aheern made headlines in May of 1993 by charging the Navy with environmental violations. Aheern, a twenty-year old welder on the USS Abraham Lincoln, claims that his superiors ordered him to help dump two hundred plastic bags full of garbage into the ocean every day. In addition to the garbage, Aheern says the crew dumped old computers and desks, hazardous solvents, and raw sewage, all in violation

of environmental laws and the Navy's own rules.

Aheern's revelation spurred other sailors to come forth. Former Petty Officer third class Jason Girard also served on the Abraham Lincoln. He claims that broken furniture, paint, solvents, and other waste were routinely dumped overboard. Ken Current, a sailor on the USS Whidley, claims the ship dumped sewage within fifty miles of land. Peter DeAula, who served on the USS Juneau, says he had to dump empty paint cans, solvents, and other wastes that should have been disposed of ashore.

Shipboard dumping is not the only violation. Incidents of illegally dumped hazardous waste are rampant. Industrial processes at installations continue to pollute water supplies with hazardous wastes such as spent oil, lubricants, paints, solvents, mercury, lead, and pesticides. These wastes leak into coastal waters that are home to all types of marine life. This waste also poses a serious threat to the seafood industry. A study done at Jacksonville University showed that 50 percent of sea trout and flounder caught near Jacksonville Naval Air Station had large open sores. The fish also contained high levels of petroleum, heavy metals, and other substances. More serious, however, is the threat to human health and safety. These wastes are contaminating water supplies and have already caused some people to develop ailments ranging from cancer to birth defects.

Even the Navy's own auditors do not dispute the seriousness of the problem. In a 1993 study of the Navy's eight shipyards, the auditors found that of the eight, not one was in total compliance with federal environmental regulations. The auditors discovered that the shipyards had hazardous waste stored in excessive amounts, beyond required time limits, in open containers, without secondary containment, without proper labels, and without safety or emergency equipment.

PROBLEMS BETWEEN POLICY AND PRACTICE

The DON has in place environmental policies and programs that comply with federal environmental regulations. Yet the DON is continuing to receive reports of environmental violations within its own operations. Why is this happening?

One problem is that the cleanup effort may be thwarted due to the waste, fraud, and abuse of the tens of billions of dollars paid to private contractors who are to carry out the actual cleanup work. Another problem is that the discovery of new sites is growing rapidly. Each of these sites requires studies, sampling, and cleanup that will cost DON millions

of dollars for each site. In fact, up to half the cleanup cost of a site is spent in sampling, preparing applications for state and federal permits, computer time to design cleanup strategies, public relations, and other office work.

With each new site, the DON must treat the situation as if it were the first site ever cleaned. Since the vast majority of contaminated sites involve ordinary fuels and solvents, the DON would like to adopt a single strategy toward this type of contamination. The EPA, however, claims this approach violates federal regulations. They seem to effectively deny a good faith effort by the DON. Thus, the EPA bears a share of the fault for problems in cleanup efforts due to their inflexibility.

Military officials believe that the scattered environmental offices are duplicating efforts, not sharing information well, and poorly supervising research and contractors. There is no consistent priority system for deciding which of the thousands of contaminated sites will be addressed first, and there is a lack of qualified people to supervise cleanups once they are targeted. There are also many ongoing violations caused by burying hazardous waste in landfills and shipboard dumping. It appears that commanding officers are not willing to adopt sound environmental practices even in the face of DON's own rules.

SOLUTIONS TO THE CONFLICT BETWEEN POLICY AND PRACTICE

In a memorandum, the Secretary of the Navy expressed concern over the poor reputation of the naval services regarding hazardous wastes. In that memo, the Secretary identified several actions to improve environmental compliance. These actions included providing commanders with legal and technical resources, identifying pollution abatement projects in reports to ensure funding, and securing funding to ensure day to day compliance of hazardous waste.

These actions may aid compliance needs, but they will not solve the problem. Secrecy and neglect of base commanders are major contributors to the Navy's continuing environmental problems. However, the carelessness of base commanders may be ending since the Aberdeen case of 1989. In this case, three civilian employees of the Army were successfully prosecuted for environmental violations involving hazardous waste. This case means that any base commander can be threatened with legal action for improper environmental activity.

The best result of the Aberdeen case would be the development of a sound working relationship between base

commanders and the EPA. Perhaps the EPA and the DON should station a representative onboard all ships as a civilian employee of both departments. By giving both agencies authority over the employee, both the DON and the EPA would be assured a fair and impartial perspective on environmental regulations at sea. Of course, funding for such an employee could be a problem.

A solution to the problem of inadequate funding would be to reduce the use of outside contractors. The DON has adequate resources and personnel to develop its own cleanup teams. The DON can provide education and training for its own personnel. To curb a high turnover rate after the expense of training, the DON can offer an incentive to enlist for a tour of ten years. This could be encouraged through education and education loan repayment.

DON can also be more selective in their recruitment process by upgrading enlistment requirements for service in environmental areas. The private sector is gaining the qualified chemists, geologists, engineers, attorneys, environmental consultants, and technicians by monetary incentives. To compete, DON could offer comparable packages by including benefits such as insurance, low cost housing, early retirement plans, and student loan repayment. If the military could build its own environmental division, it might save millions of dollars wasted by employing private consultants.

The DON also needs to cooperate with the EPA, the Air Force, and the Army to eliminate duplicate efforts and research programs. A committee of representatives forms each military branch and the EPA could work together on preventing such duplication. The committee could coordinate joint efforts when possible to complete cleanups. It could work on research efforts as well, reducing the overall cost to each branch. The EPA representative could advise the committee to ensure compliance with federal regulations, reduce the threat of fines and penalties, and offer guidance on creative solutions to cleanup problems. Finally, the committee could establish a much needed priority list of contaminated sites.

The committee could also adopt a generic approach to cleanup where the contaminated sites involve the same pollutants. This generic approach can be a cost-effective way to reduce excessive study and planning requirements, although it would not eliminate the need for site-specific testing to determine the danger of each particular site.

Meeting the environmental needs of the DON within the budget approved by Congress is nearly impossible. But through the establishment of an Intra-Services Environmental Committee that works with the EPA and Congress, the DON can meet cleanup needs cost-effectively.

CONCLUSION

The effective cleanup of hazardous waste sites by the DON depends on a variety of factors. These include cooperating with the EPA and state regulators, training and educating personnel with environmental regulations, sharing technology with other branches, developing creative solutions to environmental problems, working with Congress and the EPA to ensure adequate funding, and policing base activities to ensure against future violations.

The DON has a sound policy in place. However, due to a slow bureaucratic process, successful implementation of these policies will take time. Navy personnel should be aware that hazardous waste laws exist and they should take it upon themselves to learn the regulations if their duties involve the handling of such wastes. It is inadequate at this point to place the entire burden on base commanders. Every person employed by the DON should be responsible for complying with environmental regulations. The ignorance of such regulations can no longer be an excuse for improper handling of hazardous waste, and it should no longer be tolerated. With the help of all parties concerned, perhaps the DON can get on the right track toward a healthier environment. □

Cheri L. Spossey is a third year law student at the University of Mississippi School of Law.

The views expressed in this article are those of the author and do not necessarily represent the view of the editors or the Mississippi-Alabama Sea Grant Consortium.

Environmental Regulation of Lead — A Shot in the Dark?

by Bill Young

INTRODUCTION

The two hunters crouch low behind the blind's wall they had built a week earlier. Clothed in their camouflaged parkas, both men strain their eyes into the lifting fog as the sun begins to climb above the flooded land known as Wildcat Bottom. Tension mounts as the whooshing of ducks in flight roars out of the mist above their heads. Their trusty black lab lets out an anxious whimper as a dozen teal descend into the spread of decoys in front of the blind. The thunderous retort of 12-gauge shotguns tears the chilly morning air. Three birds cartwheel into the muddy water. Seconds later, the dog charges into the near freezing marsh to retrieve the ducks. Congratulations are exchanged. The hunters are pleased with the day's successful hunt, but neither of them consider the environmental consequences of what they have done.

Millions of American sportsmen enjoy the thrill of duck hunting. The endeavor early Native Americans engaged in to supply food has blossomed into a multi-million dollar business and recreational activity. Duck and goose hunting has done a lot to preserve American's rapidly dwindling resources by generating badly needed revenues through license purchases and permits. Hunter special interest groups raise millions of dollars annually for the preservation of wetlands. But despite the good deeds done by waterfowlers, ignorance of the relationship between science and nature has brought the curse of lead poisoning to America's wetland environments.

THE PROBLEM WITH LEAD

With the advent of the gun, man began to hunt with lead shot. Due to its abundance, malleability, and heavy weight, lead became man's primary choice of projectile. The soft metal is easily shaped into small pellets which hold their shape in flight, provide a high impact, and insure clean kills at long ranges.

By itself, lead does not cause serious health problems. A natural element, lead reacts rather slowly and harmlessly with the environment. The real danger posed by lead comes from when it is ingested by living organisms and enters the bloodstream. Ducks and geese, like many types of birds, utilize an organ known as a gizzard. The gizzard serves as

a waterfowl's first step in the digestion process. Food items devoured by the bird first enter the gizzard where they are ground by muscular action. Without the crushing process, a bird could not digest hardened food such as seeds and small fish. However, the muscle action off the gizzard cannot sufficiently grind up feed without the aid of small grinding stones called "Pick Grit". Under natural conditions, the bird will purposely eat small pebbles to serve this purpose. To the bird, spent lead shot makes an ideal crushing tool.

Once inside the bloodstream of the duck, lead slowly poisons the bird. Experts estimate that of a fall flight of one hundred million waterfowl, two to three percent of them will die from lead poisoning. The percentages may seem low, but the numbers are great. Lead poisoning accounts for up to 2.4 million bird fatalities per year.

The introduction of lead into the food chain of a wetland generates even more concern. First, the mortality rate of other biological species climbs, destroying the delicate natural balance of the system. The effects are particularly prevalent among predators that use waterfowl as a primary food source. In 1986, the National Wildlife Health Center announced that lead poisoning contamination through duck ingestion had afflicted one hundred and twenty five American Bald Eagles, a predator protected by the Endangered Species Act.

Second, lead poisoning in an ecosystem, though primarily affecting waterfowl, may also be apparent in other organisms which have economic value. For example, aquatic mussels in Long Island Sound retained such a high level of lead that they could not be harvested by commercial fishermen. The excessive damages caused by spent lead shot are intolerable and steps must be taken to remedy their impact.

THE GOVERNMENT RESPONDS

In 1976, the United States Fish and Wildlife Service published a Federal Environmental Impact Statement which closely examined the dilemma posed by lead shot accumulation. The study concluded that unnecessary migratory waterfowl deaths could be greatly reduced by banning the use of toxic lead shot. Spurred forward by environmentalist outcries and legislative mandates, the Secretary of the Interior proposed a regulation which would require waterfowl hunters to use a non-toxic shot. The suggested plan offered a program where lead shot would gradually be phased out by first targeting wetlands exhibiting the highest levels of lead contamination. The Atlantic Flyway, composed of the eastern seaboard states, was the first area dubbed as a "hotspot". The plan would terminate with a

nationwide ban on the use of lead shot by the 1991-92 hunting season.

Any seasoned politician knows that a proposed rule rarely meets automatic acceptance by the public and special interest groups. The biggest challenge to the nationwide plan to ban lead shot came in a 1976 suit filed by the National Rifle Association. In *NRA v. Kleppe*, the NRA argued against the validity of the impact statement prepared by the Fish and Wildlife Service. But the United States District Court for the District of Columbia validated the procedure of the Fish and Wildlife Service and approved the ban on lead shot.

Despite clearing its legal hurdles, the ban on toxic shot continues to meet resistance from the public. Individual hunters voice many complaints regarding the new law. For example, many sportsmen claim that steel shot lacks the "knock down" power of lead, resulting in fewer clean kills and more crippled birds. Although initially the use of steel resulted in more unretrieved birds, the problem seemed to be with the hunter, not the shot composition. Steel shot demands that the hunter make adjustments in his technique. By using a wider barrel and taking shots when birds are within closer range, kill statistics should return to previous levels. In fact, there has been a steady decline in the amount of unretrieved birds from the first year of the ban to the present. Even if steel use produces more crippled birds, the number of lost waterfowl pales in comparison to those previously lost to lead poisoning.

CURING THE PROBLEM OF EXISTING LEAD SITES-ENVIRONMENTAL ACTS

The ban on lead shot will prevent the further accumulation of lead in America's wetlands, but millions of tons of lead lie on the bottoms of marshes as the result of past hunting seasons. Although many of the wasted pellets no longer threaten migratory waterfowl, other areas still have high concentrations of lead.

The solution to cleaning up the wetlands is not easy. The most popular way to solve this ongoing problem is to try to utilize existing environmental laws such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Resource Conservation and Recovery Act (RCRA). However, these laws are poorly suited as a solution to the problem of lead contamination.

CERCLA

CERCLA's proponents envisioned the act as a tough, no nonsense law which would provide for the cleanup of toxic

waste sites with a minimum of legal resistance--a shovel first, lawyers later attitude. CERCLA established a "Superfund" earmarked to pay for the neutralization of hazardous waste sites. It is supplemented by those designated as Potentially Responsible Parties (PRPs). Application of CERCLA to the wetlands problem may sound good but a close study of the regulations shows otherwise.

Assuming the shot in a single shell weighs only one and a half ounces, a hunter would only have to fire twelve rounds before he fell under the reporting regulations described in CERCLA. These numbers may look promising for the proponents of wetland cleanup, but there is a catch. According to the EPA's own publication, called the List of Lists, spills of lead for CERCLA purposes do not need to be reported if the pieces of lead exceed .004 inches in diameter. Because shotgun pellets used in waterfowl hunting are considerably wider than the reportable size, waterfowlers can deposit tons of lead into America's marshes without notifying anyone.

Another problem arises in determining who should foot the bill under CERCLA. Section 9607 of CERCLA identifies the PRPs as the owner and operator of a facility, the generator of a substance, and those who agree to transport or dispose of the substance. Two problems arise when this section is applied to wetland contamination through the use of lead shot. First, the states own much of the nation's hunting land. Although state governments may be found liable under CERCLA as owner/operators, it would be economically unrealistic for them to pay for all wetlands cleanup. Second, the class of generator is hard to define. Under a strict interpretation of the statute, every duckhunter in the United States could be identified as a PRP for the area in which he hunts. Such a wide class of PRPs would be almost impossible to trace.

If the EPA considered lead shot a reportable CERCLA substance and the logistical problems of PRP identification were gone, CERCLA would still be a poor tool to combat lead poisoning of migratory waterfowl. In order to receive any of the money provided under CERCLA, a site must first undergo a rigorous examination to determine how bad the problem is. EPA investigators assign a Hazard Ranking System (HRS) score by assessing factors such as toxicity of a substance, waste quantity, surrounding population, and migration pathways. If the score is high enough, the EPA puts the site on a National Priority List where it receives government funding to aid cleanup. Since spent lead shot does not readily dissolve into the environment, lead contaminated wetlands receive a low HRS score.

RCRA AND SWDA

Congress envisioned the RCRA (an amendment to the Safe Water Drinking Act) as a cradle to grave system for regulating treatment, storage, and disposal of solid and hazardous waste. When applying RCRA, one must first decide whether the material in question exhibits the characteristics of a solid waste. Next, the material has to be a hazardous substance. This question can be determined by checking under the EPA regulations. If a substance falls under the scope of RCRA, its handling must meet strict federal guidelines.

However, there are problems with applying the RCRA to wetland cleanup. As with CERCLA, it is very difficult to pinpoint waste generators. Also an individual hunter does not really meet the RCRA requirement that the pollution be a commercial or community activity. Only guide services or hunting clubs would satisfy this requirement. Even if the RCRA does apply, individuals would rarely generate enough lead to become a hazardous waste generator under the EPA regulations.

Although the RCRA has been successfully applied to lead shot contamination, it focuses more on waste site permitting and dumping prevention. There is little guidance on what to do with the lead already on the ground. Because the ban on lead has been in place since 1992, the RCRA's application is limited.

CURING THE PROBLEM — AVAILABLE ALTERNATIVES

It is obvious that there are no adequate legal tools to combat lead contamination of wetlands. Although the ban on lead shot should curb future lead contamination, problems still remain. There are many spots remaining where the soil is dense and the shot remains on the surface, within easy reach of feeding waterfowl. Also, hunters do not always take care of the environment. Some unscrupulous waterfowlers, believing lead to be more efficient, continue to pollute marshes by firing lead shot. Since CERCLA and RCRA cannot really rectify these problems, one must explore alternatives in the fight against pollution.

One way to clean up existing concentrations of lead is to till the soil. This process works as a short term solution for high concentrations of lead, but there are drawbacks. Tilling often destroys plants and nesting areas, disrupting the delicate balance of the wetland. The lead might also come back to the surface through erosion. In addition, tilling is expensive, costing about thirty dollars per square yard.

Another way to mitigate lead contamination is through the regulation of water levels. In an area with high concentrations of lead, the Corps of Engineers could drain off the standing water to keep waterfowl away. Although one wetland would be destroyed, it could be replaced by the creation of another flooded area. This drainage, however, leads to problems of habitat destruction and wetland mitigation.

The root of lead poisoning is the actual lead shot itself. Although a ban might solve the problem, the federal government cannot ban all lead shot because states have control over upland game that is not migratory. Most hunters still use lead shot to hunt animals such as deer and turkey. These same shells can also be used to hunt waterfowl. One solution is to work with the ammunition companies in developing safer and more effective alternatives to lead such as bismuth. The federal government has taken steps towards this goal by supporting the development and approval of shot alternatives.

Enforcement of the existing laws also needs to be stepped up. The main arm of law enforcement in hunting is the Fish and Wildlife Service. With increased funding through government support and higher hunting license fees, this agency would be better equipped to regulate waterfowl hunting.

The most effective way to stop lead pollution is for individuals to take responsibility for their actions. Hunters need to realize what immense harm can be caused by simply firing lead into a marsh. Environmental knowledge should be stressed as part of the hunter education curriculum required by many states. Special interest groups such as the National Rifle Association and Ducks Unlimited should use the influence of their large memberships to help out in the battle against lead contamination of the wetlands.

American waterfowlers did not realize the effects of shooting lead until recently. As a result, widespread distribution of spent lead shot has caused harm to waterfowl and other animals. Now that the problem has been identified, it remains in the hands of private citizens to set things right. Although the legal tools available are largely inadequate, efforts to mitigate lead contamination can work. Future waterfowlers, however, must recognize their responsibility to the environment and to one another. Education coupled with a respect for natural resources are the keys which will preserve America's wetlands and guarantee the health of waterfowl populations for many years to come. □

Bill Young is a third year law student at the University of Mississippi School of Law.

The views expressed in this article are those of the author and do not necessarily represent the view of the editors or the Mississippi-Alabama Sea Grant Consortium.

Can You Bank on Wetlands Mitigation? New Developments in Wetland Mitigation Banks

by William "Chris" Harrison

INTRODUCTION

The rate of wetlands loss in the United States is alarming. Estimates show that our nation has lost over fifty percent of its existing wetland resources. Without governmental intervention, development would ravage one of our nation's most valuable ecological resources. The intervention finally came in the shape of section 404 of the Clean Water Act. The first real regulation of wetlands, this legislation banned the dispersal of dredged or fill material into United States waters without a Corps of Engineers permit. This permit system was designed to weigh the benefits of filling in wetlands with the potential loss of marine ecology.

One major problem, however, with the section 404 permit process was what to do about the unavoidable loss of wetlands. During the Presidency of George Bush, our country announced a no net loss policy on wetlands. To further this goal, a system of mitigation banks was established to help replenish the destroyed wetlands. Whenever wetlands were taken away, they could be replaced at another site.

The system looked great on paper, but in reality it did not work very well. Developers often put little effort into the program and thus many of the newly created wetlands failed. Poor communications between federal agencies, the developers, and wetland managers caused many problems. Small, scattered mitigation sites were costly and difficult to manage. All of these problems put a damper on the public perception of mitigation program.

On March 6, 1995 five federal agencies issued a proposed guide regarding wetlands mitigation in an effort to reduce the uncertainty of the various rules and regulations dating back to the Rivers and Harbors Act of 1899. Among these rules are Section 404 of the Clean Water Act, EPA guidelines, and the "Swampbuster" provisions of the Food Security Act. (60 FR 12286). This suggested guidance is only meant to clarify existing mitigation requirements, not change the present system.

The current program requires a development targeted for a wetland area to go through the United States Army Corps of Engineers' (Corps) rigorous permit process. The applicant must first try to avoid any adverse effects the development will have on wetlands. If the negative impact

cannot be prevented, the applicant must take all steps necessary to minimize the potential impact on the environment. Such steps include restoration, rehabilitation, and reparation of the affected area.

As a last resort, the developer can compensate for the impact by creating, enhancing, restoring, or preserving other wetlands. The Corps prefers this "mitigation" to take place onsite, or in the same location as the development. This tends to improve the bank's chances of success as well as preserving the existing aquatic life. Mitigation can also be done off-site, but this process is more complex and has been controversial in its implementation. There can even be a combination of on-site and off-site mitigation to compensate for the loss of wetlands.

The guidance recommends the conglomeration of mitigation bank resources into one large bank. Small mitigation sites scattered about have not met with much success. By pooling the assets of several individual sponsors, the new site will have a much better chance of success. Resources (both financial and ecological) can be used much more efficiently.

An off-site mitigation bank is sponsored by either a public or private entity. It needs to have a banking instrument to provide documentation of the physical characteristics, the legal aspects, and an explanation of how the bank will be started and operated. The new guidance recommends the inclusion of certain information in the banking instrument such as: the goal and objective of the bank, the ownership of the bank, information concerning its geography, the accounting procedures, a financial plan, and provisions for long-term management and maintenance.

The banking instrument is signed by the sponsor, as well as the Mitigation Bank Review Team (typically composed of regulatory agencies such as the Corps, EPA, Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and Natural Resources Conservation Service (NRCS)). The Corps is the lead agency in authorizing mitigation bank permits on a project specific basis. The NRCS is in charge of authorizing mitigation project established solely for the purpose of the "Swampbuster" provisions of the Food Security Act.

A mitigation bank provides "credits" to be used by those seeking to develop in areas where on-site preservation or restoration is impractical or when use of a bank is environmentally preferable. Developers use the land in the bank to compensate for "debits", or adverse impacts upon wetlands. One problem is how to value the credits and debits. This value, according to the new guidance, should be provided for in the banking instrument. The simplest way (and the method used by Mississippi's mitigation banks) to assess credits and debits is by acreage. This method,

however, is not always best because wetlands are rarely the same in their ecological significance. The proposed guidelines recommend the FWS's Habitat Evaluation Procedures or another hydrogeomorphic approach to value the wetlands whenever it is practical. These methods take into account the various wildlife and geological conditions when assigning a value. The guidance also prefers mitigation using the same type of wetlands to further the "no net loss" policy.

The amount of credits available for withdrawal is another question with which the new guidance deals. The recommendation is that once a bank has been established (i.e. the banking instrument has been signed, the bank site has been secured, and the financing has been procured) up to fifteen percent of the bank's mature credit value can be debited immediately. However, within the first full growing season following the initial debiting of a bank, the primary biological and physical improvements should be completed. Further debits may not be had until the bank develops the corresponding amount of credits. Credits based on the preservation of existing wetlands become available as soon as the appropriate legal and ecological steps are taken, such as obtaining easements, changing the use of the land, and procuring the finances.

"In-lieu-fee" arrangements are not allowed by the proposed guidance except in extraordinary circumstances. This situation arises when a developer offers to simply pay a natural resource entity money to be applied generally towards some future wetland development. Because the development usually sets no clear timetable and might begin some years down the road (if at all), the guidance strongly disapproves of this arrangement.

The guidelines also attempt to clear up questions concerning planning and operation of mitigation banks. The roles of the sponsor and the Mitigation Bank Review Team (MBRT) are spelled out in the guidance. The sponsor is responsible for the preparation of the banking instrument, overall operation and management of the bank, and accounting for all debits and credits with which the bank is involved. The sponsor must also obtain adequate financing for the bank. The amount may be more or less depending on the risk of failure and the projected cost of the bank until it becomes self-sustaining.

The MBRT is responsible for the development of a banking instrument that will meet the needs and requirements of all parties involved. The MBRT will strive to obtain a consensus among the various interests, although it is not bound to sign the instrument. If the MBRT does sign it, however, the Team will be bound to comply with the terms. After signing the banking instrument, the MBRT does not usually work on operation of the mitigation bank.

Its role is reduced to reviewing the monitoring and accounting reports of the sponsor.

Once a mitigation bank has been set up, the sponsor's work has just begun. He is then responsible for maintenance and protection of the bank until its operational life is over. This occurs when the bank has been fully debited and it becomes self-sustaining as specified in the banking instrument. The sponsor must also provide for the long-term management of the bank by appropriate legal and financial measures which protect against incompatible uses. Examples of legal protection are real estate arrangements, deed restrictions, and conservation easements.

The whole point of the mitigation program is to further the policy of "no net loss" of our nation's wetlands. Mitigation should not simply be a way to "buy" the right to damage the environment or an easy way out of having to meet applicable regulations. Mitigation banks should be used only as last resort.

The goal of wetlands mitigation is to closely approximate the environment we have, maintaining the existing plant and animal life. The fate of the mitigation program rests upon the appropriate use and development of these banks. They need to establish their longevity. The sponsor should provide both the financial and scientific resources to develop a bank that will harbor life and promote the safekeeping of the environment for generations to come.

Our country has a finite amount of land that can be used as wetlands. We should jealously guard the environmental resources that exist today, for they are our future. When they run out, where will our nation turn?□

*William "Chris" Harrison is a second year law student at the University of Mississippi School of Law and Associate Editor of the **WATER LOG**.*

The views expressed in this article are those of the author and do not necessarily represent the view of the editors or the Mississippi-Alabama Sea Grant Consortium.

What Will Become of the Environment Under the New Republican Congress?

by William "Chris" Harrison

THE FIRST 100 DAYS

The Congressional election of 1994 brought with it a new outlook on how the United States government should be run. When the Republicans took over both the House and Senate they did so with the promise that they would decrease the size of the federal government and ease the regulatory burden on American citizens. The centerpiece of their plan was the Contract with America, a document containing the main points of their agenda. According to the Contract, the Republicans sought accountability and responsibility of the government, as well as giving Americans the opportunity to succeed.

Many of the proposed changes appear to be good for our country. The new Congress seeks to decrease the amount of paperwork required in government processes, crack down on unfunded mandates, and reevaluate many federal regulations. Deregulation is a noble goal that our country needs. However, deregulation can go too far in the name of good economic policy. A hasty dismantling of current regulations could result in the loss of twenty-five years of positive environmental progress. Environmental groups have dubbed the regulatory relief agenda of unfunded mandates relief, protection of private property rights, and cost benefit analyses of regulations as the "unholy trinity."

The Job Creation and Wage Enhancement Act (H.R. 9), is one of the more comprehensive pieces of legislation passed by the House. It could also be a major threat to the environment. Within this act are several pieces of legislation that affect environmental regulation. The Private Property Protection Rights Act (formerly H.R. 925) seeks to formalize a system of property "takings". It would require the federal government to pay for any diminution of over twenty percent in the value of a landowner's property. If a regulation devalued the land more than fifty percent, the landowner would have the option of selling his land to the United States at its fair market value. Takings under this bill are limited to regulations under 1)section 404 of the Clean Water Act, 2)the Endangered Species Act, 3)Title XII "Swampbuster" provisions under the Food Security Act, 4)the Reclamation Act, 5)the Federal Land Policy Management Act, and 6)the Forest and Rangeland Renew-

able Resources Planning Act. The bill provides that no compensation is due when the regulation is made to prevent a hazard to public safety or damage to specific property other than the limited property. Although these are important exceptions, they seem inadequate.

One potential problem of the Private Property Protection Rights Act is the loss of local land taxes when the United States is forced to buy property. Another problem is the enormous cost to the federal government. Some predict this legislation could cost close to two hundred billion dollars over a five year period. Of even more concern is the requirement that the agency creating the particular "taking" is responsible for paying the landowner out of their budget. If an agency such as the EPA is forced to spend its entire budget buying up land, it may have to quit regulating or face termination.

Also included in H.R. 9 is the Risk Assessment and Cost-Benefit Act (formerly H.R. 1022). This act requires a cost-benefit analysis and an investigation of less burdensome alternatives of any rule costing more than twenty five million dollars per year. The goal is to concentrate resources on the greatest risks to human health and the environment. Factors to consider are the likelihood of harm, the severity of harm, the cost to the public, the number of individuals affected, the costs of the regulation, and the benefits to the public. The only exceptions to this cost-benefit analysis are emergency situations, regulations required for military readiness, and product labeling. This risk assessment could delay or even prevent legislation needed to protect the environment.

One positive piece of legislation included in H.R. 9 is the Paperwork Reduction Act (formerly H.R. 830). This act seeks to minimize the federal paperwork requirements on individuals, small businesses, and other organizations. The goal is to tighten up information channels and reduce the waste created by duplicate forms and useless information.

The House has also passed a rewrite of the Clean Water Act (H.R. 961). This rather lengthy bill contains a classification system for the ecological value of wetlands. Classification of an owner's land as most valuable would result in a "taking" of private property that requires compensation. This section of the bill could be very costly to the Clean Water Program, perhaps exceeding the entire clean water budget. The bill also requires a risk assessment and cost benefit analysis to virtually all regulations that impose cost of twenty-five million dollars or more annually. In addition, H.R. 961 would repeal requirements that coastal states develop pollution runoff control programs.

The Senate has come up with several pieces of legislation that could have an impact on the environment. One of these is the Regulatory Accountability Act of 1995 (S. 100).

This bill provides that in enacting any regulation, the agency shall consider a number of factors such as costs and benefits of a regulation, relative risks that the regulated activity poses, the alternatives to the regulation, and the effects of the regulation. This risk assessment approach is designed to apply more resources to the activities that pose greater risks. However, activities that might have a lesser impact could be disregarded, leaving the door open for harm to the environment.

Still in committee is the Regulatory Reform Act of 1995 (S. 291) contains several pieces of legislation. Title I provides for a cost benefit analysis of agency proposals; a risk assessment of regulations concerning health, safety, and the environment; and review of any new major regulations. Title III contains the Regulatory Accounting Act of 1995. This title requires the President to issue an estimate to Congress of the costs and benefits of Federal regulatory programs. Title IV, the Market Incentives Act of 1995, ensures that major rules operate through the application of market-based mechanisms.

One of the most comprehensive environmental Senate bills is the Omnibus Property Rights Act of 1995 (S. 605). Still in committee, this bill has been labeled as the "property owner's bill of rights." It calls for a strengthening of private property rights and limitations on Government. S. 605 establishes a federal judicial claim to adjudicate property takings claims. Although the bill claims it would be more efficient than equitable claims, this process would actually serve to further clog up an already backlogged court system. The bill also creates a new administrative procedure that assesses the potential impact of regulations on private property. If an agency regulation diminishes the value of private property by thirty-three percent or more, and the regulation is not "roughly proportional" to the need stated by the use, the landowner will receive just compensation. Title V of the bill creates a special administrative procedure for any landowner seeking compensation whose property is diminished by thirty-three percent or more by actions under the Endangered Species Act and the Clean Water Act.

In the Senate and the House there have been proposed cutbacks in the budgets of various agencies that are crucial in environmental regulation. The National Oceanic and Atmospheric Administration and the Environmental Protection Agency have been targeted for cuts.

Although the House passed a moratorium on all regulations passed since 1994 that would prevent them from being enforced (H.R. 450), the Senate rejected this measure. Instead, they came up with S. 219, requiring an examination period on all new regulations. This review would give Congress time to analyze the effect of this new legislation

and possibly reject or change the laws. However, costly delays and short-sited rejection could spell disaster for our nation's environmental protection.

President Clinton has promised to veto any "extreme" reform legislation that impedes the government's efforts to guard public health, safety, and the environment. He did, however, sign an unfunded mandates bill (S. 1) that requires the Federal Government to pay for mandates imposed on state and local governments costing at least fifty million dollars annually. S. 1 could affect the enforcement of the Safe Water Drinking Act, the Clean Air Act, and the Clean Water Act.

We must be wary of any short-sighted attempts to fix environmental problems that have no easy solution. The rules need to be improved, there is no question of that. But taking one extreme or the other accomplishes nothing. Instead of over regulating or under regulating, we need to try and find a middle ground that allows for both economic and ecological considerations for the good of our nation. □

*William "Chris" Harrison is a second year law student at the University of Mississippi School of Law and Associate Editor of the **WATER LOG**.*

The views expressed in this article are those of the author and do not necessarily represent the view of the editors or the Mississippi-Alabama Sea Grant Consortium.

Editor's note: Look for an update on environmental legislation in an upcoming issue of the **WATER LOG.**

Lagniappe

A Little Something Extra

Our apologies for not crediting the Mississippi-Alabama Sea Grant Consortium's *Force Five* newsletter in last month's issue. A special thank you for allowing us to reprint "A Commentary - Dockside Gaming: Coastal Mississippi's Newest Industry" by Dave Burrage and Benedict Posadas. Sorry for any inconveniences this oversight may have caused.

The MS Commission on Marine Resources (MCMR) voted to ban all commercial fishing north of the CSX railroad track in Hancock, Harrison, and Jackson counties. Taking effect on May 1st of this year, the measure is designed to protect marine life breeding grounds. The Commission is also considering a ban of all commercial fishing within a mile of the six Mississippi coastal islands. Public hearings will be held on the proposal.

In the Mississippi legislature, the House let a gill net restriction bill die by allowing the deadline for action to pass. Similar to the MCMR regulation passed in January, the legislation would have only been a duplicate measure. The bill's death does not affect the MCMR ban.

On April 17, 1995, the United States Supreme Court heard oral arguments on whether "harm" to endangered species under the Endangered Species Act includes the destruction or modification of an animal's habitat. The case, *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon* (62 LW 2587), will be a very important decision for environmentalists and landowners alike. We will have an update in a future issue of **WATER LOG**. □