LESSONS LEARNED PROTECTING AND RESTORING WILDLIFE IN THE SOUTHERN UNITED STATES UNDER THE ENDANGERED SPECIES ACT

OVERSIGHT FIELD HEARING

BEFORE THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

Saturday, April 30, 2005, in Jackson, Mississippi

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C O N T E N T S

OVERSIGHT FIELD HEARING IN JACKSON, MISSISSIPPI, ON "LESSONS LEARNED PROTECTING AND RESTORING WILDLIFE IN THE SOUTHERN UNITED STATES UNDER THE ENDANGERED SPECIES ACT"

Saturday, April 30, 2005
U.S. House of Representatives
Committee on Resources
Jackson, Mississippi

The Committee met, pursuant to call, at 9:00 a.m., at the Mississippi Museum of Natural Science, Rotwein Theater, 2148 Riverside Drive, Jackson, Mississippi, Hon. Richard W. Pombo presiding.

Present: Representatives Pombo and Pickering and Senator Crapo.

STATEMENT OF THE HON. RICHARD W. POMBO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

The CHAIRMAN. Good morning. The oversight hearing by the House Committee on Resources will come to order.

The Committee is meeting today for your testimony on the Endangered Species Act. I want to thank you for the opportunity to bring the Committee to Mississippi and the Southern United States. I look forward to listening, and gaining greater insight from the witnesses today on how the Endangered Species Act is being implemented in this region of the country.

First off, I would like to thank Governor Haley Barbour for his invitation and encouragement to hold this hearing in the great State of Mississippi. I've enjoyed spending the last couple of days here, well, day and a half, and meeting with folks and getting a better understanding of the prevailing wildlife issues.

I would also like to thank my friend and colleague, Congressman Chip Pickering, and thank you for having me here and working with me on such an important issue.

Born of the best intentions more than 30 years ago, the Endangered Species Act has failed to live up to its promise of recovery of threatened and endangered species to healthy populations. In fact, of the roughly 1,300 species listed under the Act in its entire history, only 10 have recovered and been removed from the list.

This translates into a less than one percent success rate for the species recovery. We can and must do better.

It is clear that the current system is broken and in need of updating and improving in order to protect, cooperatively conserve and recover America's species for future generations.

In regard to the announcement that we had a day and a half ago on the ivory-billed woodpecker, and the discovery of the species that was believed to be extinct, it's great news, and it also gives us the opportunity to step in and try to bring back a species which most people believed had become extinct, and I salute what the Fish and Wildlife Service is trying to do, they had their announcement, I believe it was Thursday morning, and are moving ahead, and the Secretary, Judge Manson, is very excited about moving forward on this.

Cooperative conservation is also the key to success. You can't have a successful Endangered Species Act without the cooperation of the landowners, and in a relationship between the Fish and Wildlife Service and property owners that encourages them and gives them the kind of incentive they need in order to recover those species.

Private property owners must be part of the solution. Too often we have tried to over regulate them, and regulate them out of a business, and as a result of that we have had the failures over the last 30 years. They must be, and have to be, part of an ultimate solution in moving forward.

I look forward to having the opportunity to hear our witnesses. I looked through the list and looked through the testimony that's been submitted ahead of time. I believe this will be very important in terms of our efforts to draft legislation and approve the Act, and I look forward to hearing your testimony here this morning.

I would like to recognize Congressman Pickering for any opening comments he would like to make at this time.

STATEMENT OF THE HON. CHIP PICKERING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. PICKERING. Chairman Pombo, we want to welcome you to Mississippi. We want to welcome Senator Crapo. This is a great opportunity for those of us in Mississippi, and those of us across the Southeast who care about our national resources and our wildlife, and conserving and protecting those in the most effective and efficient way possible.

If you look at the cooperative conservation model that Chairman Pombo discussed and programs like the Conservation Reserve Program (CRP) and Wetland Reserve Program (WRP), as well, all of those are incentive-based approaches where we build cooperative partnerships with private landowners, communities, and all those who have a stake in making sure that our natural resources are protected and promoted, and those are successful examples and successful models.

If you look at the Endangered Species Act, however, I think that that has created more of an adversarial model than a cooperative model, and a regulatory and commanding control versus the cooperative incentive-based model. But our hope is that as we go forward that we will build off the successful examples of cooperative

conservation versus the adversarial relationship that we have seen too much across the country as it relates to the Endangered Species Act.

I'd like to recognize James Cummins with Mississippi Fish and Wildlife Foundation, he's done tremendous work in this area; all of those who are on the panel, and we look forward to hearing each and every one of you.

David Bowen, David where are you? Former Congressman David Bowen— who was in the House of Representatives on the old Merchant Marine and Fisheries Committee back in the 70's and 80's— was there in the early days of the Endangered Species Act and brings efforts to modify and reform it. It's good to have you here, David.

This is a great opportunity. We truly appreciate, Mr. Chairman, that you came to Mississippi to do this and we hope that we give you a good story and good information as you take it back to Washington, and we want to do everything we can to help you in your reform efforts. Thank you.

The CHAIRMAN. Thank you. I'd now like to recognize Senator Mike Crapo for his opening comments. But before I let him start I'd just say that Senator Crapo originally was elected to the House at the same time I was, and after serving several terms in the House of Representatives was elected to the Senate, and since he has been a member of the Senate he has been a key figure in the Senate in dealing with the Endangered Species Act and wildlife issues, and has been extremely involved.

It looks like at this time that he will take the lead on a number of issues in the Senate, one of those being the Endangered Species Act, so we are very fortunate to have him here today. Senator Crapo.

STATEMENT OF THE HON. MIKE CRAPO, A UNITED STATES SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. Thank you very much, Chairman Pombo, and I really do appreciate being invited here for this House hearing. It's not extremely common for a Senator to be invited. I think it's our friendship that maybe got me the invite to be here, but I truly appreciate the opportunity to come here to Mississippi and to learn in the experiences that we have on the Endangered Species Act in the south.

And Chip, thank you for inviting me, as well. It's great to come to your great state. The hospitality here has just been tremendous. I truly do appreciate the hospitality that the folks here in Mississippi have shown to me during this visit.

I also want to thank Governor Haley Barbour, who was very instrumental in making sure that we were able to get down here and that this hearing was held in Mississippi.

The announcement this week of an ivory-billed woodpecker being seen in Arkansas is a fitting inspiration for today's hearing. The ivory-billed woodpecker, a long period extinct, has been seen after 60 years of being basically absent. And as we mobilize the recovery program for the ivory-bill, the bird itself is a lesson for our need for strong recovery provisions in the Endangered Species Act. The comments that have been made by Chairman Pombo and

Representative Pickering are very, very accurate and appropriate. We need to make sure that we deal with the reasons and the fact that it has not been as successful in the past.

It seems to me that we have succeeded before in some cases where we can learn how to proceed in the many cases where we haven't yet found success. For example, the whooping crane and the California condor were both at one time down to a hand full of remaining individuals, and today they're making progress toward recovery because of active and intensive efforts and the latest technology.

We should do the same for the ivory bill, and we should do the same for almost—well, for all of our deeply endangered species.

To guarantee that we can normalize recovery efforts for all of the most endangered species, we must make today's hearing the first step toward breaking many years of gridlock on the issues. We all understand that the ESA is a powerful law, one that touches both our wildlife and our property, both of which are precious. That power, however, does not always produce conservation that helps wildlife and protects property.

Frequently, both wildlife and property have endured conflicts brought by the power of the Act misdirected, and today we begin a new and different path forward. On the new path we've got to focus on points of agreement, and I'm determined to help improve the ESA with bipartisan support from both the House and the Senate, which again, is one of the reasons I think it's very significant that we have both the House and the Senate represented here today, and I again thank the Chairman for reaching out to help that happen.

The key to agreement is an improved recovery program that respects landowners. The steps to the agreement must be improving habitat and conservation and recovery and providing more and better incentives and enhancing the role of states. We must insist on improvements that strengthen the ESA for wildlife and for property owners alike. And if we take this path the Endangered Species Act will be less contentious and more effective, and very importantly we'll have the votes to be able to win in Congress.

The time is right for this new path for the Endangered Species Act, and this first hearing of the year is the right place to get started. I'm encouraged by the willingness of businesses and private groups around the country to focus on recovering species. And I see from the testimony today that we will be getting a lot more encouragement in this process. Again, thank you, Mr. Chairman, for inviting me to be here.

[The prepared statement of Senator Crapo follows:]

Statement of The Honorable Mike Crapo, a U.S. Senator from the State of Idaho

Good morning.

Thank you, Mr. Chairman, for including me in this important field hearing to examine the lessons learned here in the South. And thank you Chip. I appreciate the hospitality you and the folks here in Mississippi have shown me during my visit.

The announcement this week of an ivory-billed woodpecker in Arkansas is a fitting inspiration for today's hearing.

The ivory-billed woodpecker, long feared extinct, has been seen after 60 years since the last confirmed U.S. sighting.

As we mobilize a recovery program for the ivory-bill, the bird itself is a lesson of our need for strong recovery provisions in the Endangered Species Act.

We have succeeded before in helping critically endangered birds. For example, the whooping crane and the California condor both were at one time down to a handful of remaining individuals. Today they are both making progress toward recovery because of active and intensive efforts and the latest technology.

We should do the same for the ivory-bill, and we should do the same for all our most deeply endangered species.

To guarantee that we can mobilize recovery efforts for all the most endangered species, we must make today's hearing our first step toward breaking many years of gridlock on this issue.

We all understand that ESA is a powerful law: one that touches both our wildlife and our property, both of which are precious.

That power, however, does not always produce conservation that helps wildlife and protects property. Frequently, both wildlife and property have endured conflicts wrought by the power of the Act misdirected.

Today we begin a new and different path forward.

On the new path, we must focus on points of agreement. I am determined to improve the ESA with bipartisan support in both the House and the Senate.

The key to agreement is an improved recovery program that respects landowners.

The steps to agreement are:

- improving habitat conservation and recovery;
- providing more and better incentives; and
- enhancing the role of states where appropriate.

We must insist on improvements that strengthen ESA for wildlife and for property owners alike.

If we take this path, the ESA will be less contentious and more effective—and we will have the votes to win passage of a bill.

The time is right for this new path for ESA and this first hearing of the year is the right place to get started.

I am encouraged by the willingness of businesses and private groups around the country to focus on recovering species.

I see from the testimony that I will be further encouraged today.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. I would like to recognize our first panel of witnesses. Libby Hartfield, the Director of the Mississippi Museum of Natural Sciences; Randy Bowen, Pulp and Paperworkers' Resource Council; James Cummins, the Executive Director of the Mississippi Fish and Wildlife Foundation; and Dave Tazik, Army Corps of Engineers. Welcome to the Committee hearing this morning. Ms. Hartfield, we're going to begin with you. I just want to tell all the witnesses here today that we limit the oral testimony to five minutes. Your entire written testimony will be included as part of the record, so if you could summarize your submitted testimony and try to limit your oral comments to five minutes, we'd appreciate it. Ms. Hartfield.

STATEMENT OF LIBBY HARTFIELD, DIRECTOR, MISSISSIPPI MUSEUM OF NATURAL SCIENCES

Ms. HARTFIELD. First, I would just like to say a quick welcome to everybody to the Natural Science Museum, and I hope you take time to go downstairs and enjoy a little bit of what is here.

I've worked for the Mississippi Department of Wildlife, Fisheries and Parks for the past 27 years, and in the course of this work I've dealt with the Endangered Species Act during much of that time. The ESA has been good for Mississippi. The American Alligator has been fully recovered; the status of the bald eagle and the brown pelican has significantly improved and they soon will be delisted.

Species such as the Mississippi sandhill crane, ringed sawback, gopher tortoise, red-cockaded woodpecker, least tern, piping plover,

gulf sturgeon and the pallid sturgeon have seen their populations stabilize or have increased. These and other species would likely be extinct, or at least extirpated from Mississippi if not for the Act.

The people of Mississippi are close to the land and their environment, and the species listed under the ESA are highly valued as indicators of our way of life, our quality of life and our success at stewardship. Many are also important in ecotourism, a significant and growing industry in our State.

The Mississippi Department of Wildlife, Fisheries and Parks is proud of our role in these success stories, and equally proud of other successes that are less well known.

For example, our biologists have conducted and assisted in research efforts and negotiations with removing the need to list two endemic species, the Camp Shelby burrowing crayfish and the Jackson Prairie crayfish. Biologists employed by the department have also recently discovered two previously unknown breeding ponds for the highly endangered Mississippi gopher frog, and have facilitated the establishment of five captive populations in zoo populations, in zoo facilities.

Conflicts with the ESA have been few and far between in Mississippi, and they're usually resolved by Federal interagency consultations. With few exceptions most private actions requiring ESA approval or permits proceed with little conflict or attention.

The application of ESA in Mississippi, however, can be improved. There is a need for greater consistency and reliability in funding. It is imperative to have a standard allocation mechanism based on the number of species within a state. Over the past ten years, Mississippi's allocation has declined from a high of 160,000 in 1999, fluctuated as low as 73,000, and now we're back up to about 95,000. Recovery of endangered species usually requires much research over several years so inconsistent funding has been very problematic for us. Consistent funding was available for several years of research on Gulf sturgeon, yellow blotched and ringed sawback turtles and the information gleaned during those years has been crucial in recovery efforts for these animals.

Conducting basic research, implementing needed recovery actions, and assisting private cooperators are currently hampered by the low funding. We're concerned about the possibility of an unfunded Federal mandate to recover species without the proper resources if more responsibility is shifted from the government to the states.

Increasing ESA funding to the states through Section 6 cooperative agreements would only partially satisfy our funding problems because matching requirements already strain our resources. Our state revenues have declined, and meeting the required 25 percent match is often very difficult. We would like to see an overall reduction in matching percentages required or see the matched requirement indexed to the relative wealth of the state.

We believe a Federal funding source dedicated to the state ESA research and recovery would lead to more successes and fewer conflicts. Traditional wildlife and fisheries funding sources, such as the Pittman-Robertson and Wallop/Breaux, were instrumental in the restoration of the southeastern game and fishes during the past century. A similar commitment is required to recover threatened

and endangered species, and importantly to prevent other rare species from becoming eligible for protection under the act. Some of the newer programs such as the LIP program and many grants that we've talked about earlier, have much potential in helping us with species recovery if they're funded.

Much has been learned during the past 32 years of the ESA. One major lesson learned is that it is usually easier and cheaper to prevent the decline of a species and it's ecosystem than to attempt to restore them after drastic decline.

Another lesson is the need to open communication with all stakeholders and to be proactive about identifying and resolving potential conflicts. The MDWFP is dedicated to continuing to improve this approach.

Hopefully, during the coming decade, we can learn more from these lessons and move forward.

[The prepared statement of Ms. Hartfield follows:]

Statement of Libby Hartfield, Director, Mississippi Museum of Natural Science, Mississippi Department of Wildlife, Fisheries, and Parks

I have worked for the Mississippi Department of Wildlife, Fisheries, and Parks for the past 27 years. I served as an educator in the Museum of Natural Science for ten years, and as director of the Museum for the past seventeen years. In the course of this work I have dealt with the Endangered Species Act (ESA) during much of that time.

The ESA has been good for Mississippi.

- Two species, the American alligator and peregrine falcon, have been fully recovered.
- The status of the bald eagle and brown pelican have significantly improved to the point where they may soon be proposed for delisting.
- Species such as the Mississippi sandhill crane, ringed sawback, gopher tortoise, red-cockaded woodpecker, least tern, piping plover, gulf sturgeon, and pallid sturgeon have seen their populations stabilize or have increased.
- These and other species such as Mississippi gopher frog, gopher tortoise, orangenacre mucket, southern combshell and pondberry would likely be extinct or at the least, extirpated from Mississippi if not for the ESA.

The people of Mississippi are close to the land and their environment, and the species listed under the ESA are highly valued as indicators of our way of life, our quality of life and our success at stewardship. Many are also important in ecotourism, a significant and growing industry in our State.

The Mississippi Department of Wildlife, Fisheries and Parks is proud of our role in these success stories, and equally proud of other successes that are less well known. For example, our biologists have conducted or assisted in research efforts and negotiations which led to management actions that removed the need to list two endemic species, the Camp Shelby burrowing crayfish and Jackson Prairie crayfish, under the ESA. Biologists employed by the Department have also recently discovered two previously unknown breeding ponds for the highly endangered Mississippi gopher frog, and have facilitated the establishment of five captive populations in zoo facilities. We believe information equals alternatives, and our Museum biologists, collections and Natural Heritage database have proven this time and again.

Conflicts with the ESA have been few and far between in Mississippi, and they are usually resolved by Federal interagency consultations. With few exceptions, most private actions requiring ESA approval or permits are also able to proceed with little conflict or attention. Although we see the occasional headline that this or that listed species or critical habitat will change the world as we know it, such issues quietly fade away, usually with little actual impact.

The application of the ESA in Mississippi, however, can be improved.

There is a need for greater consistency and reliability in funding. It is imperative to have a standard allocation mechanism based on the number of listed species within a state.

Over the past ten years, Mississippi's allocation has declined from a high of $160,000 in 1999, fluctuated as low as $73,000 and is presently at $95,536. Recovery of endangered species usually requires much research over several years so inconsistent funding is problematic. Consistent funding was available for several years

of research efforts on the Gulf sturgeon, yellow blotched and ringed sawback turtles and the information gleaned from those years has been crucial to the recovery efforts of these animals.

Many of the species protected under the ESA in Mississippi are rare and very poorly known. Management and protection of these species will require knowledge of their life histories and habitats. We need more research and recovery efforts for poorly known endangered or threatened species in Mississippi and neighboring States, including those species that might need protection in the future.

Most ESA success stories in Mississippi result from cooperative efforts between Federal and State agencies, and private or corporate landowners. Guidance and assistance from the local and regional U.S. Fish and Wildlife Service personnel has been essential to our work on behalf of endangered species. USF&WS has the capacity to work regionally and has the expertise to advise states on recovery actions for both endemic and wider ranging species. Mississippi has relied on this expertise often in developing section 6 projects.

Conducting basic research, implementing needed recovery actions, and assisting private cooperators are currently hampered by low funding levels. Even the highest levels of funding ever received under ESA were never enough to address recovery of more than a handful of species. We are concerned about the possibility of an unfunded federal mandate to recover species without the proper resources if more responsibility is shifted from the federal government to the states.

Increasing ESA funding to the states through Section 6 cooperative agreements would only partially satisfy our funding problems because matching requirements already strain our resources. With state revenues declining, meeting the required 25% match is often very difficult. We would like to see an overall reduction in the matching percentage required or see the match requirement indexed to the relative wealth of the states. Finding alternative funding sources through existing grant avenues requires substantial financial and time commitments, and may also have matching requirements. These grants are often competitive and prone to go to more charismatic species or to states which have better means to attract the grants.

We believe a Federal funding source dedicated to State ESA research and recovery would lead to more successes and fewer conflicts. Traditional wildlife and fisheries funding sources, such as Pittman-Robertson and Wallop-Breaux, were instrumental in the restoration of southeastern game and fishes during the past century. A similar commitment is required to recovery threatened and endangered species, and to prevent other rare species from becoming eligible for protection under the ESA.

Some newer federal programs such as the Land Owner Incentive Program (LIP)have the potential to aid in species recovery if funded adequately. Mississippi received a tier 1 LIP grant of $180,000 to plan and initiate a program but now must compete for very limited funding before the program can be fully implemented.

Many of Mississippi's listed species are aquatic and draw attention to ecosystems in need to management. If we are to recover our aquatic species, we need to manage and protect their river and stream ecosystems. This may require improving water quality, preserving habitat through conservation easements, or re-introductions of species into formerly occupied habitats. These recovery actions will require cooperation between federal, state, and local governments and will require much greater commitment of funding from the federal government than has hitherto been available.

Much has been learned during the past 32 years of the ESA. One major lesson learned is that it is usually easier and cheaper to prevent the decline of a species and it's ecosystem than to attempt to restore them after drastic decline. Hopefully, during the decades to come, we can better apply what we have learned.

Another lesson learned is the need to ensure open communication with all stakeholders and to be proactive about identifying and resolving potential conflicts. The MDWFP is dedicated to continuing and improving this approach.

The CHAIRMAN. Thank you. Mr. Bowen.

STATEMENT OF JAMES RANDY BOWEN, PULP AND PAPERWORKERS' RESOURCE COUNCIL

Mr. BOWEN. I would like to take this opportunity to thank the House Resources Committee for having this very important hearing on the Endangered Species Act.

I'd like to give a brief history of the PPRC. We're a non-profit, grass roots organization concerning the fiber supply, forest practices and the Endangered Species Act for dedicated men and women with one common cause, and that cause is needing our jobs.

We began in the Pacific Northwest where the spotted owl was successful in shutting many mills down, thereby causing us to lose thousands of good living wage American jobs in the forest products, pulp and paper sectors. As time progressed, we realized this job loss would not just stay in the Pacific Northwest, nor would it just relate to the endangered species and our purpose statement is "To establish a grass root coalition concerned with fiber supply, the Endangered Species Act and our environment in a way that promotes knowledge and political activism so we may influence legislation and policies that affect our jobs".

The PPRC proposes the Endangered Species Act be updated to give equal consideration to social and economic, as well as biological, concerns. Currently, too many ESA listings lack a substantial basis in hard scientific data.

The House Resources Committee passed legislation (HR1662-The Endangered Species Data Quality Act of 2004) that focused on the importance of using field-tested data and community research. In addition to this language, provisions to the Act should insure that the ESA decisions are based on sound science, including peer review of listening and recovery decisions.

ESA should limit the definition of threatened and endangered species to those species which are biologically unique, excluding those that are only geographically isolated from other populations of the same species.

To stop the current tactic by environmental officials of targeting state officials who issue permits to private parties to merely conduct activities on their land, Congress and the Administration should consider actions to limit the liability of state officials various means, including legislation if necessary.

The current consultation process in ESA has mushroomed into an unnecessary lengthy and expensive process. Congress should support the Administration efforts to update these processes and provide legislative direction as necessary. Agency meetings to list or de-list should be held in geographic areas that are economically impacted. After a listing decision is made a full consideration should be given to all social and economic issues in all subsequent steps of the ESA.

Litigation by environmental groups has made the critical designation process a costly drain of financial and human resources with a very little gain in regard to species conservation. Congress should focus the critical habitat process on species restoration by removing it from the regulatory arena and making it part of the recovery process.

Wood products employees support ESA reform. Protecting truly endangered species is in the best interest of the public. The impact on people, property and jobs should be evaluated when making these regulations.

The ESA mandate system is not working. The ESA should be on equal footing with and not superior to, all Federal laws. The ESA needs to be absolutely based on objective and verifiable science.

The ESA should be a flexible and rational Act and apolitical in all decisions.

There should be a greater role for states and local governments in all ESA decisions. State constitutional authority over plants and animals should be restored. There should be compensation for private property owners when ESA diminishes property values.

The Act should be amended to ensure the species will not be listed until a recovery plan is developed and appropriations are approved. The word reform means the improvement or amendment of what is wrong or corrupt. The PPRC believes the time for reform is now and only real reform will help both plants and animals and preserve the American way of life.

The PPRC wants to conserve the Nation's endangered species but wants it done in partnership with the Federal government, not under the command and control authority of Federal agencies.

The PPRC supports access to information used by the government in the ESA decisionmaking processes. The PPRC feels that in order to simplify the process and make the Act work, ESA decisions should be based on sound science and include peer review of listing and recovery decisions.

The PPRC feels that true scientific facts and field data should be weighed more heavily than computer modeling. The PPRC supports limiting the definition of threatened and endangered species to those which are biologically unique, excluding those that are only geographically isolated from other populations of the same species. Create economic incentives to encourage species and habitat protection among private landowners. Recognize the importance and value of private property rights and that private property landowners should not have to bear all the expenses of species recovery. You should consider economic impacts to landowners and adjacent communities during all phases of ESA implementation. As you mentioned since ESA first became law, there were only 10 species have been recovered out of 1300 that's been listed, so that shows that it doesn't work.

The forest products industry is a vital part of the economy of the United States, especially here in the southern states. Most property in the Southern United States is privately owned. Besides all the other environmental hurdles we face, without fiber our industry would not survive, and ESA directly affects fiber supply. That is why reform is needed.

Imagine how excited people from the economic community would be if a company was looking to come and invest their millions of dollars and have millions of dollars of payroll. Taxes that are paid. The people that work at that plant are involved heavily in community affairs. They gave to the local United Way. Think of what the economic impact would be for the state. I work at such a plant and it's threatened right now, and without reform, that's why I'm here. I'm fighting for my job. Bottom line, I'm fighting for a pension. Our organization has a real close—I know you've seen it before, and it's a sad state of affairs. And the sad thing is that amount is continually growing with plants that are closing down and closing down, and it all started over the Endangered Species Act; which I know various country boys, Senator Crapo and Congressman Pombo are

from, know a lot about it. It started with the spotted owl and it's just mushroomed into something that's just out of control.

So again, I appreciate y'all holding this hearing for us and look forward to the reform in the future.

[The prepared statement of Mr. Bowen follows:]

Statement of James Randy Bowen, National Recording Secretary, Southern Pine Region Director, Pulp and Paperworkers' Resource Council (PPRC)

I would like to take this opportunity to thank the U.S. House of Representatives Committee on Resources for holding this very important hearing concerning the Endangered Species Act.

I would like to give a brief history about the Pulp and Paperworkers' Resource Council, more commonly known as the PPRC. We are a "grassroots, non-partisan" organization, formed in 1992, made up of hourly employees who work in the forest products industry. We work on fiber supply, forest practices, endangered species and environmental issues that impact our jobs. We are dedicated to the conservation of our environment while taking into account the economic stability of the workforce and our surrounding communities. We are dedicated men and women working together for one common cause. That cause being "OUR JOBS".

The PPRC began in the Pacific Northwest where the spotted owl was successful in shutting down many mills, thereby causing us to loose thousands of good living wage American jobs in the forest products, pulp and paper sectors. As time progressed, we realized this loss of jobs would not just stay in the Pacific Northwest, nor would it only relate to endangered species.

PPRC PURPOSE STATEMENT

"To establish a grassroots coalition concerned with fiber supply, the Endangered Species Act, and our environment in a way that promotes knowledge and political activism, so we may influence legislation and policies that affects our jobs."

The Pulp and Paperworkers' Resource Council (PPRC) proposes the Endangered Species Act (ESA) be updated to give equal consideration to social and economic, as well as biological, concerns.

- Currently, too many ESA listings lack a substantial basis in hard scientific data. The House Resources Committee passed legislation (H.R. 1662—The Endangered Species Data Quality Act of 2004) that focused on the importance of using field-tested data and continual research. In addition to including this language, revisions to the Act should insure that ESA decisions are based on sound science, including peer review of listing and recovery decisions.
- ESA should limit the definition of threatened and endangered "species" to those species which are biologically unique, excluding those that are only geographically isolated from other populations of the same species.
- To stop the current tactic by environmental officials of targeting of state officials, who issue permits to private parties to merely conduct activities on their land, Congress and the Administration should consider actions to limit liability of state officials various means, including legislation if necessary.
- The current consultation process in ESA has mushroomed into an unnecessarily lengthy and expensive process. Congress should support Administration efforts to update these processes and provide legislative direction as necessary.
- Agency meetings to list or de-list species should be held in the geographic area to be economically impacted.
- After a listing decision is made, full consideration should be given to all social and economic issues in all subsequent steps in the ESA process.
- Litigation by environmental groups has made the critical designation process a costly drain of financial and human resources with very little gain in regard to species conservation. Congress should focus the critical habitat process on species restoration by removing it from the regulatory arena and making it part of the recovery process.

Wood products employees support ESA reform. Protecting truly endangered species is in the best interests of the public The impact on people, property and jobs should be evaluated when making the regulations.

ESA needs to be modernized and updated after thirty years.

- The ESA mandate system is not working.
- The ESA should be on equal footing with, not superior to, all other laws.
- The ESA needs to be absolutely based in objective and verifiable science.
- The ESA should be a flexible and rational Act and apolitical in all decisions.

- There should be a greater role for states and local governments in all ESA decisions.
- State constitutional authority over plants and animals should be restored.
- There should be compensation for private property owners when ESA diminishes property values.
- The ACT should be amended to ensure that the species will not be listed until a recovery plan is developed and appropriations are approved.

REFORM (re-form") n. 1. the improvement or amendment of what is wrong, corrupt, etc.

The Pulp and Paperworkers' Resource Council believes the time for reform is now and only "Real Reform" will help both plants and animals and preserve the American way of life.

- The PPRC wants to conserve the nation's endangered species but wants it done in partnership with the federal government, not under the command-and control authority of federal agencies.
- The PPRC supports access to information used by the government in the ESA decision-making process.
- The PPRC feels that in order to simplify the process and make the Act work, ESA decisions should be based on sound science and include peer review of listing and recovery decisions.
- The PPRC feels that true scientific facts and field data should be weighed more heavily than computer modeling.
- The PPRC supports limiting the definition of threatened and endangered "species" to those which are biologically unique, excluding those that are only geographically isolated from other populations of the same species.

Some other consideration:

- Create economic incentives to encourage species and habitat protection among private landowners.
- Recognize the importance and value of private property rights and that private landowners should not have to bear all the expenses of species recovery.
- Consider economic impacts to landowners and adjacent communities during all phases of ESA implementation.

Since ESA was enacted in 1973,over 1300 species have been listed as either threatened or endangered, but only 10 domestic species have been recovered sufficiently to be removed from the list. That's less than a 1% success rate. The radical environmental community love ESA as it is now. They sue the landowners and governmental agencies to stop development and harvesting and management of timber resources. The results are violations of private property rights, interference with decisions based on sound science, prevention of projects, valuable resources access denied, mismanagement of government-owned land, and rural America suffers the economic hardship of such actions.

The forest products industry is a vital part of the economy of the United States, especially the southern states. Most property in the Southern United States is privately owned. Besides all the other environmental hurdles we face, without fiber our industry would not survive. ESA directly affects fiber supply.

ESA reform is needed now!

Imagine how excited economic developers would be if they got word of a business that provided 850 high paying jobs with an annual payroll of nearly $60 million.

This business would pay more than $11 million in state and local taxes every year. This would surely be the largest taxpayer in the parish. Purchases in a two-parish area alone would top $20 million. This business would also provide for nearly 500 associated jobs for area residents in transportation and harvesting.

Employees of this business would be active in almost every aspect of the community. Collectively, the group would give an average of $150,000 a year to the local United Way.

Conservative estimates of the total economic impact of that operation would be well over 3,000 jobs and $250 million annually. That doesn't even include statewide purchases of $110 million for wood fiber, raw materials and chemicals and $30 million annually for energy to sustain the operation.

That would have economic development experts, local and area elected officials and the general public jumping through hoops to see what they could do to land such a prize.

But what if that business is one that already exists? I know of one that already exists. The facts I stated are about International Paper's Louisiana Mill in Bastrop, Louisiana. June 13th, I'll have 31 years employment there.

Can you imagine what would happen to the employees and the community if we lost that? That is why we are working as hard as we can every day to see that we do everything we can to make sure that doesn't happen.

The economic environment for the forest products industry in the United States is not good. We see most of the growth overseas and in the Pacific Rim.

Again, fiber supply is vital and ESA affects us. ESA reform is needed! You can make a difference. I ask you to put a human face on ESA when you consider reform.

Thank you.

Response to questions submitted for the record by James Randy Bowen, National Recording Secretary, Southern Pine Region Director, Pulp and Paperworkers' Resource Council (PPRC), Bastrop, Louisiana

Question submitted by Senator Crapo:

1. *All of the panelists spoke of contributing time and money to species conservation—some more willing than others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground—would you be better off?*

Response:

Many private property landowners already contribute time and money to species conservation. For example: since 2001, International Paper Company has been an active partner with U.S. Fish and Wildlife Service, Tennessee Wildlife Resources Agency, Alabama Department of Conservation and Natural Resources, and Conservation Fisheries, Inc. in reintroduction of the boulder darter into Shoul Creek, located in Tennessee and Alabama. The boulder darter has been on the federal endangered species list for 17 years. This is just one example.

Many private property landowners already contribute but many may not be able to afford the expense. The ones who can't afford this should still be provided a seat at the table if it affects their private property land usage rights or may affect their property value.

My answer is YES if they are affected.

The CHAIRMAN. Thank you, Mr. Bowen. Mr. Cummins.

STATEMENT OF JAMES CUMMINS, EXECUTIVE DIRECTOR, MISSISSIPPI FISH AND WILDLIFE FOUNDATION

Mr. CUMMINS. Chairman Pombo, Congressman Pickering and Senator Crapo, thank you for the opportunity to speak on the Endangered Species Act. With the discovery of the ivory-billed woodpecker, this is a great time to begin a frank discussion about recovery.

I'm James Cummins, I'm Executive Director of the Mississippi Fish and Wildlife Foundation. I'm a certified fisheries and wildlife biologist as well as a private landowner. Two of our many accomplishments at the foundation include conceptualization of the wildlife habitat incentives program as well as the Healthy Forests Reserve Program.

Private lands provide habitat for 90 percent of our nation's listed species. Eight of the top ten states with the most listings are in the south. This region also provides 60 percent of our nation's timber. More timber is harvested annually from the National Forests in Mississippi than all of the entire National Forests in the Pacific Northwest combined.

Because of this you may wonder why you've not heard a lot more about ESA problems here in the south. Most of the biologists in the south have a fish, wildlife with management background, or in education, not just biology, so they're used to trying to resolve conflicts. We try to solve problems in the south, not create them. We have

very good leadership here as well. Sam Hamilton is our Regional Director in Atlanta and he's doing a great job.

The ESA has been very effective in preventing many species from becoming extinct, but it has not been successful at recovering them. Although recovery will take time for most species, it is certainly achievable.

The ESA should not be a permanent life support system. And like a quality health care system, restoring the health of our nation's listed species requires significant dollars, but spending money is certainly no guarantee of results. Emphasizing recovery can build confidence if funds are spent wisely.

I have quite a few suggestions to improve the ESA. Some I'll outline today, and others I'll fully describe in my written statement. Although the Act can be improved, don't forget that many of its problems are in the rules and regulations. Stewardship of listed species can certainly respect private property rights. Although a free market economy is the preferred means of improving environment, it does not always worked in this situation and incentive should be provided.

In some cases, like that of aquatic ecosystems, incentives do not always work, and a stronger commitment from some of the public works agencies is needed. Habitat is the basis for every plant, fish and wildlife population, and should be the basis of recovery. We're not taking full opportunity of the consensus over the importance of habitat management.

Our nation depends on private lands for economic uses. We also depend on them to provide many free services for society, such as oxygen, sequestering carbon dioxide and providing habitat. We expect all of this while rarely thinking about how landowners can afford to provide them free of charge. Landowners need the encouragement, the financial, as well as the technical support to undertake projects to recover the listed species found on their property.

Incentives provide the basic operating frame work to accomplish this objective. Congressman Pickering has certainly seen the evidence of that in the Wetland Reserve Program, as he's introduced the Wetland Reserve Restoration Act prior to this last Farm Bill.

We also need to recognize that there are other opportunities that exist, and many of you are familiar with that as you serve on your respective bodies, Agriculture Committee. Recovery can be incorporated into the Conservation and Reserve and Environmental Quality Incentives Program, and I certainly encourage you to work with your colleagues on the Ag Committee as we start looking at the 2007 Farm Bill.

The Administration and the Congress need to fully fund the Healthy Forest Reserve Program to develop the first agreements prior to year's end. I appreciate Congressman Walden and Senators Cochran, Lott, Chambliss, Lincoln and Crapo and others requesting funds for it, along with the support of 47 national conservation organizations.

The Healthy Forest Reserve Program is the perfect program for recovery efforts of the ivory-billed woodpecker. An enormous opportunity exists to allocate funding to it that really can provide the greatest benefit to the bird.

A significant recovery title should be incorporated into any new ESA legislation. A recovery and prevention program consisting of tax credits should be established.

These tax credits can be used by the landowner or even sold. This will allow the credit to help meet the needs of all landowners, including those with limited resources. The origin of this idea came with conversations and meetings I had with the late Senator John Chafee.

Eligible land should be in close proximity to existing populations where significant recovery can occur, rather than including its entire range. Priority should be on lands where the opportunity exists to resolve conflicts. The program could also consist—should consist of several components committed with a voluntary either long term or perpetual easement where the landowner would receive a tax credit equal to the appraised value of the property plus a half percent of the restoration cost.

The second component could consist of a 30 year easement where the landowner would receive 75 percent of the appraisal cost as a tax credit, as well as the restoration cost at that same amount.

The third component would consist of a voluntary 10 year agreement where the landowner would receive a tax credit equal to 75 percent of the restoration cost.

Those are some of the very similar type provisions that you're familiar with in the Wetland Reserve Program and what Congressman Pickering had introduced.

Finally, safe-harbor language should be included so that an owner should not be liable for take of a species from altering habitat once that agreement has expired. The Safe Harbor Program is a tool that began in the south in 1995 to encourage voluntary management by landowners to benefit listed species without imposing additional regulations on property.

We need legislation for a strong invasive species control program. In 2003 Senator Cochran introduced such a program as an independent title to the Healthy Forest Restoration Act; however, it was certainly not included in the final version of the bill.

While many people solely blame economic development, invasive species ranked as the second most important threat to listed species behind habitat destruction, having contributed to the decline of 42 percent of listed species.

These types of proactive approaches that I've described will help de-list threatened and endangered species by placing an emphasis on recovery and emphasizing economics. They will also aid a species before it reaches the list, a status of either threatened or endangered, as Libby mentioned earlier, thus making it unnecessary to list. Working with private property owners and enabling them to restore the habitat is the kind of proactive strategy that can head off a regulatory crisis, while improving the environment and providing opportunities that don't threaten jobs.

Mr. Chairman, Congressman Pickering and Senator Crapo, this concludes my remarks. Thank you.

[The prepared statement of Mr. Cummins follows:]

Statement of The Honorable James L. Cummins, Executive Director, Mississippi Fish and Wildlife Foundation

THE ENDANGERED SPECIES ACT:
A UNIQUE APPROACH TO RECOVERING THREATENED AND ENDANGERED SPECIES

"Timely disbursements to prepare for danger frequently prevent much greater disbursements to repel it."

GEORGE WASHINGTON

"Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."

ALDO LEOPOLD

"Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed. It is a many faceted treasure, of value to scholars, scientists and nature lovers alike, and it forms a vital part of the heritage we share as Americans."

RICHARD NIXON

Introduction

Chairman Pombo, Ranking Member Rahall, Members of the Committee, Congressman Pickering and Senator Crapo, thank you for the opportunity to appear before you today to speak on the Endangered Species Act (ESA), specifically how we can improve the recovery of species. With the announcement, this past Thursday of the discovery of the ivory-billed woodpecker, I know of no better time to begin a frank discussion about recovery. We have worked hard over the past 15 years to develop programs for recovery and work with private landowners and public agencies in the South on recovery efforts. Many of you have spent a lot of time on it as well and a lot of us in the conservation community appreciate it.

I am James L. Cummins, Executive Director of the Mississippi Fish and Wildlife Foundation. I am a certified fisheries biologist, a certified wildlife biologist and a private landowner. Some of the Foundation's more significant accomplishments include conceptualization of the Wildlife Habitat Incentives Program, helping pass the Grassland Reserve Program, developing many of the components of the Wetland Reserve Program and conceptualization of the Healthy Forests Reserve Program. Regarding public lands, we worked with our delegation to develop the Holt Collier and Theodore Roosevelt National Wildlife Refuges as well as the Sky Lake Wildlife Management Area, which contains the largest stand of ancient cypress in the world. We also work in the area of market-based incentives for conservation, such as tradable credits for carbon sequestration, threatened and endangered species, wetlands and streams. I proudly serve as a member of Environmental Defense's Center For Conservation Incentives. The Center's most recent program, Back From The Brink, is about recovering species. Senator Crapo, I appreciate you hosting Environmental Defense to announce the roll-out of Bank From The Brink.

Background

Many of you represent the West where the vast majority of public lands and threatened and endangered species conflicts occur.

Private lands provide habitat for 90 percent of our Nation's threatened and endangered species. The South has the largest percentage of listed and candidate species in the nation. And that is unfortunate. For the species sake, I wish that list was shorter. Eight of the top ten states/territories with the most listings are in the South; they include: Alabama (115), Florida (111), Georgia (66), North Carolina (63), Tennessee (96), Texas (91), Virginia (71) and Puerto Rico (75). Mississippi has 38.

According to the U.S. Department of Agriculture's (USDA) Forest Service (USFS), nationwide, public forest lands comprise 317 million acres (42.38%) and private forest lands comprise 431 million acres (57.62%). Private forests provide approximately 89 percent of the nation's timber harvest. According to the latest data from the USFS, specifically the Southern Forest Resource Assessment, nationwide, the South alone provides 60 percent of the nation's timber supply, making it the largest producer of timber compared to any country in the world. Furthermore, more board feet of timber are annually harvested from the National Forests in Mississippi than all of the National Forests in the Pacific Northwest combined. Although many factors affect these seemingly lopsided statistics, the primary reason that private forests produce so much timber without substantial conflicts is simple—it is called management.

A case can be made that the ESA has been very effective in preventing many species from becoming extinct; however, by all accounts, it has not been successful at restoring habitat and significantly increasing populations. The Act has listed a great many species and kept them from becoming extinct, however it has de-listed/recovered very few. If our health system operated in a similar fashion, it would need

to be improved. As an example, we would have put 1,274 people in the hospital, kept 989 in intensive care (endangered), 275 in the regular ward (threatened) and released 10 (de-listed). The ESA should not be viewed as permanent life support system for threatened and endangered species. There is significant room for improvement, but like a quality health care system, restoring the health of our Nation's candidate, threatened and endangered species requires dollars—and lots of them.

But spending money is no guarantee of results. We need to break the standoff over funding. Emphasizing recovery can build confidence that our money is spent wisely, and this confidence can, in turn, build support for more investment from both the private and public sectors.

I have quite a few suggestions to improve the ESA. Although the Act can be made better, I want to point out that many of the problems on the regulatory side are not always about the Act. They are about the rules and regulations governing it. And that, for the most part, is an Administrative issue.

Develop New Conservation Incentives and Better Use Existing Ones

The ESA can be much more effective if new, constructive ideas are incorporated into it. Stewardship of threatened and endangered species can be encouraged that respects property rights. Although a free-market economy is the preferred means of improving the environment, it does not always work in this situation and incentives should be provided. Incentives appear to be more expensive, but many times are less harmful to the economy than burdensome regulations. And in some cases, like that of aquatic ecosystems, incentives do not always work and a stronger commitment and more cooperation from the public works agencies is needed.

Habitat is the basis of every fish and wildlife population and should be the basis of every recovery effort. I am not persuaded that the current ideas on the table are taking full opportunity of the consensus over the importance of habitat protection, restoration and enhancement.

It is obvious that we cannot set aside unlimited acres for fish and wildlife habitat. The ESA calls for the federal government to prohibit certain activities that would cause the take of a listed species unless such activities are not otherwise authorized by an incidental take permit. Many times, if the land use causes a take, the result under the current system causes not only hostility on the part of the owner, but sometimes damage to the species needing assistance. Ability of government to control how property is used can make an enemy out of even the most harmless of birds, fish or other listed species.

Our nation depends very heavily on private lands to produce the thousands of products we need every day—from cotton to coal to cellulose and beyond. We are also depending on these same lands to provide many other services that benefit society, for most of which landowners never receive compensation. These free services to society include producing oxygen, sequestering carbon dioxide, filtering air and water, providing fish and wildlife habitat, including that for threatened and endangered species, improving the aesthetic beauty of the natural landscape and providing opportunities for recreation and solitude, just to name a few. In fact, both Governor Haley Barbour and Congressman Bennie Thompson view these services as extremely important to economic growth and improving Mississippi's quality of life.

We as a nation have come to expect all of this from private landowners while rarely giving thought to how they can afford to provide these services "free of charge," when these services cost landowners. It is a cost that can only be recovered through the selling of timber, minerals or by divesting of the land.

While this may be possible for some private landowners, many small and medium-sized landowners continue to find it difficult, if not impossible, to invest in active and sustainable land management over such a long time. Add to this the uncertainty of regulations that might limit land management options, as well as the ever-increasing, campaign against the use of wood products, and it is easy to see why more and more private landowners are choosing to divest of their lands. These lands are rapidly being developed and broken into smaller units that cannot sustain many of the benefits and services upon which society depends. Land having value—even for wood—is a great thing, especially when you are competing against concrete and asphalt.

Landowners need the encouragement, financial and technical support, and backing of federal and state governments, to undertake projects to recover the declining, threatened and endangered species that are found on their property. Incentive-based programs provide the basic operating framework to accomplish this objective.

We need to better utilize existing programs to recover species. First, the Bush Administration and the Congress need to fully fund the Healthy Forests Reserve Program (HFRP) and develop the first agreements under the program prior to this year's end. On the House side, Congressman Walden, and on the Senate side,

Senators Cochran, Lott, Smith, Chambliss, Lincoln, Pryor, Breaux, Landrieu, Miller and Crapo have requested funds with the support of 47 national conservation groups.

The HFRP is the perfect program for recovery efforts of the ivory-billed woodpecker. I am pleased to see that the USDA has allocated $5 million to aid in its recovery; however, an enormous opportunity exists to allocate funding to the HFRP, one of their own programs, that can provide the greatest benefit to the woodpecker. I hope additional discussion will occur before all opportunities of funding for this current fiscal year are exhausted.

The top ten states with the greatest risk of forest ecosystem loss almost mirror those states with the most listed species. These states are Florida, California, Hawaii, Georgia, North Carolina, Texas, South Carolina, Virginia, Alabama and Tennessee. Restoring forest ecosystems like the once great longleaf pine forest of the southern coastal plain, fire-maintained natural southern pine forests, southwestern riparian forest, Hawaiian dry forest, Southern Appalachian spruce-fir forest, mature Eastern deciduous forest, California riparian forest, old-growth forest of the pacific Northwest, mature red and white pine forests of the Great Lake states, fire-maintained ponderosa pine forests and southern forested wetlands are extremely important to the recovery of many species.

One way to increase the rate at which species are recovered is to change the way the U.S. Fish and Wildlife (USFWS) allocates funding. In allocating conservation dollars, the ESA requires the USFWS and the National Oceanic and Atmospheric Administration (NOAA) Fisheries to give priority to species that are "most likely to benefit" from recovery plans which are required for each listed species. In 1988, 2002 and 2005, the General Accounting Office reported that these agencies were instead allocating funds to regions based on other factors, such as office workload instead of "most likely to benefit."

In addition to providing funds for species in dire need, the USFWS should allocate funds to species that have significant potential for recovery. The USFWS should also take into account partnerships among diverse stakeholders.

Recovery can be further incorporated into the programs of the USDA, specifically the Conservation Reserve Program and the Environmental Quality Incentives Program. I urge you work with your colleagues on the House Agriculture Committee to utilize the conservation provisions of the Farm Bill to assist in recovery and incorporate specific language in the 2007 Farm Bill.

Furthermore, USDA employees, specifically those of the Natural Resources Conservation Service, work with thousands of landowners every day. If they were more knowledgeable about threatened and endangered species conservation tools and needs, and had more authority in species conservation efforts, they, along with State Technical Committees, could develop appropriate conservation practices which could reduce private landowner anxiety and better enlist them in conservation of the species in need.

A significant recovery title should be included in any new piece of legislation concerning ESA reauthorization. An Endangered Species Recovery and Prevention Program (ESRPP), consisting of tax credits (that can be sold) and direct payments for recovery should be established. This potential program should emphasize recovery through habitat restoration. Also, it should aid a species before it reaches either a status of threatened or endangered. The origin of this idea came from several conversations that began in Tulsa, Oklahoma, and meetings with the late Senator John Chafee, who also felt that incentives are critical to recover threatened and endangered species.

These tax credits can be used by the landowner. The landowner could also transfer or sell the tax credit to another private individual, corporation, group or association so it will help meet the needs of all landowners, included those with limited resources.

The ESRPP would focus on restoration of habitat, which would function similar to HFRP. This program should be limited to the area where there is a realistic possibility of recovering a species rather than allowing its entire historic range to be included. The ESRPP would allow non-federal property owners to enroll land where significant improvements in habitat would occur. Eligible lands should include those that are in close proximity to existing habitat and populations where significant population recovery can occur. Priority should be given to lands where the opportunity exists to resolve landowner conflicts with threatened and/or endangered species.

The ESRPP could consist of three components. The first component could consist of a voluntary, perpetual easement being placed on land that is in close proximity to existing habitat of a threatened or endangered species; the landowner would re-

ceive a tax credit equal to the appraised value of the property plus 100 percent of the restoration costs.

The second component could consist of a voluntary, 30-year easement being placed on land that is in close proximity to the existing habitat of a threatened or endangered species; the landowner could receive 75 percent of the appraised value of the property plus 75 percent of the restoration costs.

The third component could consist of a voluntary, 10-year agreement being placed on land to improve a species' habitat before it reaches a threatened or endangered status (i.e., candidate, state listed species, rare, peripheral, special concern); the landowner could receive a tax credit equal to 75 percent of the restoration costs.

Finally, safe-harbor language should be included so that a property owner shall not be liable for any incidental take of any listed species or resident species, pursuant to the Act or any other federal law, from altering the habitat or making a different use of the area under the agreement once it has expired. In providing safe harbor provisions, land enrolled in the ESRPP and land in the immediate area that would likely be impacted by the restoration plan as the species is recovering.

The Safe Harbor Program is a very important tool. It began in the South in 1995 as a novel approach to encourage voluntary management by private landowners to benefit listed species without imposing additional regulatory restrictions on property use. Today, landowners across the nation in 17 states have enrolled and are managing 3.6 million acres of private property with Safe Harbor Agreements. In the South, state agencies have developed and administer state-wide Safe Harbor Plans and permits for the red-cockaded woodpecker in Louisiana, Georgia, South Carolina and Texas from which private landowners have enrolled over 200,000 acres. In Mississippi, the USFWS has approved and is about to issue the first permit for a gopher tortoise and the red-cockaded woodpecker Safe Harbor Agreement. The USFWS and its partners, which include the Foundation, Environmental Defense and the American Forest Foundation, are currently working to develop a range-wide gopher tortoise Safe Harbor Plan, a black pine snake Candidate Conservation Agreement and permits. During the first year of this plan, we anticipate landowners enrolling approximately 5,000 acres. These landowners will restore, grow and produce longleaf pine for timber while enhancing habitat for these species. The Safe Harbor Program works great and we don't see any need to change this program.

This type of proactive approach that incentives can provide will help de-list threatened and endangered species by placing an emphasis on population recovery. It will also aid a species before it reaches either a status of threatened or endangered, thus making it unnecessary to list a species. Working with private property owners and enabling them to restore habitat is the kind of proactive strategy that can head off regulatory crises, while improving the environment and providing opportunities that don't threaten jobs.

Lastly, to recruit landowner partners, it is critical that the government show progress and highlight ESA success stories. The threatened and endangered species list should not be perceived as a permanent life support system for fading species. While fully restoring many plants and animals will take time, recovery for the vast majority of species is clearly achievable. Celebrating successes when they do occur will provide the ESA with a necessary, periodic dose of hope and optimism.

Better Utilize The National Fish Hatchery System

For more than a century, the National Fish Hatchery System has played a valuable role in providing fish to benefit our Nation. It is uniquely positioned to aid in the recovery of aquatic ecosystems through leadership in development and application of the best possible fish culture and fisheries management techniques. This includes the maintenance of healthy, wild fish and aquatic invertebrate populations through habitat conservation and improved harvest management, maintenance of genetic diversity and the proper use of hatchery stocks in achieving management objectives.

The System is doing some great things in the South regarding recovery. The recovery plans for shortnose sturgeon, pallid sturgeon and many freshwater mussels directly call for the development of cryopreservation techniques or for the genetic conservation of these species. The Warm Springs Fish Technology Center in Georgia is currently developing cryopreservation techniques for protocols for each of these species.

Here in Mississippi, the Private John Allen National Fish Hatchery is working extensively on the gulf strain of walleye. They are spawning them, stocking them into selective and suitable sites and evaluating them for survival, movement and growth. The Lower Mississippi River Coordination Office in Vicksburg has recently conducted six state-level planning meetings in the Lower Mississippi River Valley to identify and prioritize habitat restoration actions necessary to stabilize declining

aquatic resource populations protected under the Act. Due to the level of cooperation that has developed between the Lower Mississippi River Coordination Office and the U.S. Army Corps of Engineers at the Mississippi Valley Division and District levels, habitat restoration actions identified in the Pallid Sturgeon Endangered Species Recovery Plan and the Lower Mississippi River Aquatic Resource Management Plan are being implemented by the U.S. Army Corps of Engineers during their annual Mississippi River operations and maintenance activities.

The Natchitoches National Fish Hatchery in Louisiana continues to do extensive work in developing spawning techniques for the recovery of the pallid sturgeon. In 2004, the hatchery successfully spawned pallid crosses and maintained family lots which were stocked according to the Pallid Sturgeon Recovery Plan. In the next few years, pallid sturgeon will be cultured to address research needs.

Overall, the Southeast Regional Fisheries Program is addressing tasks and needs for 16 species for the recovery and restoration of threatened, endangered and imperiled aquatic species. The Southeast Aquatic Resource Partnership, which consists of the USFWS, state fish and wildlife agencies and fishery management councils, also play a major role in habitat restoration and population recovery. The partnership is a shining example of innovation and what can be done when fisheries management-oriented people try to solve problems.

At my former university, Virginia Tech, my major professor, Dr. Richard Neves, is propagating threatened and endangered mussels through the Fresh Water Mollusk Conservation Center, and stocking them in suitable habitat in Southwest Virginia. This is extremely important since 90 percent of the threatened and endangered mussels are found in the Southeast.

Unfortunately, even with this good work, the hatchery system has developed serious problems over its 128 year history. Presently, it faces both its worst crisis and its best chance for improvement. Since 1990, the USFWS's overall budget rose 35 percent, but funding for hatchery operations and maintenance has declined by 15 percent. The facilities are old and outmoded. A tremendous maintenance backlog exists and 25 percent of hatchery personnel positions are vacant. This is in part due to an erosion of congressional and public support as well as an erosion of support within the USFWS.

Combined with detailed hatchery work plans, clarified tribal agreements, re-defined fish-production responsibilities, updated training for hatchery personnel and proper habitat restoration and management, the system can not only help restore community lakes and streams, reverse declines in rare and declining species of fish, but help prevent species from becoming listed and recover threatened and endangered species of fish and other aquatic species with the help of appropriations from the threatened and endangered species program.

Incorporate Conservation Into Other Departments

The conservation of threatened and endangered species can be incorporated into other departments and programs of the government. In many instances multiple objectives can be reached on the same parcel of land.

One good example of this is the military. The Department of Defense is faced with a serious and growing threat to its ability to maintain the readiness of our Armed Forces. That threat, often termed encroachment, is caused largely by developmental pressures and loss of habitat in the vicinity of key installations and critical military air space and training routes. The list of bases, ranges and airspace already seriously impacted by these pressures is long and growing.

Unless action is taken now, those pressures will become even more severe and the adverse impacts on our military will worsen.

The most effective action we can take to protect these key bases, ranges and airspace is to protect the land and important habitat in their vicinity. In recognition of the remarkable success of this open and collaborative approach in countering encroachment at Fort Bragg, Congress authorized the military to enter into agreements with state and local governments and conservation organizations to work together to protect land in the vicinity of bases and associated airspace. It authorized the military to expend operational funds to help acquire, from willing sellers only, the minimum property interest necessary to ensure that an installation will be able to accomplish its mission now and in the future.

Those of us who have been privileged to work in close partnership with the military have the deepest respect and admiration for the dedicated professionals, uniformed and civilian, who do so much to ensure that as they protect our Nation, they also meet their obligations as stewards of the lands entrusted to their care.

Their efforts, and the unique nature of military activities, have resulted in our military bases having some of the best remaining habitat for threatened and

endangered species in the country and functioning as key reservoirs of the biodiversity so fundamental to an enduring and healthy environment.

There is a great opportunity to not only accomplish a key need of the military in reducing base encroachment, but recovering and hopefully de-listing species that may hamper the mission of the base or range.

Let me provide another example. On February 15, 2002, the Bush Administration announced the Climate Change Initiative, which includes carbon sequestration. Carbon sequestration is designed to meet the carbon-offset objectives of companies by reducing greenhouse gases. A carbon-offset program can positively impact clean air and can be used to restore ecosystems and enhance the recovery of threatened and endangered species, besides having other positive environmental impacts such as reducing water pollution.

There should be an emphasis on reforestation and forest management efforts so that it is done in a manner that both sequesters carbon and at the same time emphasizes the recovery of threatened and endangered species. By doing so, the United States can achieve benefits in other national and international commitments. To date, the U.S. Department of Interior has been a leader in working with energy companies to reforest lands of the USFWS in a biodiverse manner. The Southeast and the Pacific Northwest are the two most effective areas in North America for the sequestration of carbon.

Reduce The Spread Of Invasive Species

We need legislation for a strong invasive species control program. In 2003, Senator Thad Cochran included such a program as in independent title in the Healthy Forests Restoration Act; however, the title was not included in the final version of the bill.

Invasive species, sometimes referred to as nonnative, alien, exotic or non-indigenous, introduced species, are those that evolved elsewhere and have been purposely or accidentally relocated. It has been estimated that invasive species rank as the second most important threat to native species, behind habitat destruction, having contributed to the decline of 42 percent of our Nation's threatened and endangered species.

This invasion has gained momentum since the last century when many of these plants were first imported or accidentally introduced, many by the federal government. It is estimated that 100 million acres in the United States are already affected by invasive exotic plants. This acreage increases annually by an area twice the size of Delaware. Almost 20 percent of the species of plants in Mississippi's forests, parks, refuges and other open spaces are not native to our state. Some of these exotic plants meet few natural constraints and can soon dominate a landscape.

Invasive species can negatively impact native species in any number of ways including: eating them; competing with them; mating with them and decreasing genetic diversity; introducing pathogens and parasites that sicken or kill them; and disrupting available nutrients. An introduced species can change an entire ecosystem—changing species composition, decreasing rare species and even changing or degrading the normal functioning of the system. Ecosystems free of invasive species are a key to maintaining and recovering threatened and endangered species.

For example, the chestnut blight fungus from Asia all but wiped out the American chestnut, thus changing the makeup of eastern forests. Cogongrass, classified as the seventh worst weed in the world, is hardy and tolerant of shade, high salinity and drought. It forms dense mats that crowd out native vegetation and forage plants and displaces species such as the threatened gopher tortoise in the Gulf Coastal Plain. It can alter the natural fire regime by causing hotter and more frequent fires. Water hyacinth may be the world's worst aquatic weed. One of the fastest growing plants known, it displaces native plants, fish and wildlife, disrupts water transportation, including that of the Tennessee-Tombigbee Waterway, disturbs recreational fishing and blocks water intakes at hydroelectric power-generating dams. At one time in Florida, 125,000 acres of open water was covered with up to 200 tons of water hyacinth per acre.

Assistance for chemical, mechanical, biological and ecological control is needed where invasive species are impacting threatened and endangered species.

Other Considerations

One of the biggest obstacles to restoring threatened and endangered species is the inability of the USFWS to approve conservation initiatives quickly. The USFWS spends too much time on paperwork and not enough time recovering species. The long time it takes to develop voluntary conservation agreements, such as Safe Harbor agreements and conservation banks, damages landowner relations and hampers conservation efforts. Increasing the USFWS efficiency will require strong leadership, especially from the new Director.

We should seek research to develop cost-effective recovery techniques. The species protected by the Act are usually rare and not well known by the scientific community. Recovery requires determining basic life history and habitat needs for many species. This is a proper role for the U.S. Geological Survey, state agencies and universities.

Incentives are more difficult to apply on aquatic ecosystems. Greater cooperation among federal agencies that have jurisdiction in our waters and are involved in navigation and flood control (i.e., U.S. Army Corps of Engineers, Natural Resources Conservation Service) is critical. For example, the endangered least tern's status is improved due to a partnership among the U.S. Army Corps of Engineers, USFWS and the Mississippi Department of Wildlife, Fisheries and Parks to protect and improve habitat. The endangered pallid sturgeon's status may be improving due to the same agencies partnering to protect and improve fishery habitat in the Mississippi River.

Finally, the USDA's Wildlife Services can continue, and possibly at a greater level, providing animal damage control equipment and labor, specifically where threatened and endangered species have conflicts with commercial livestock, crop or aquaculture operations.

Summary

Landowners in the South, and particularly Mississippi, have done a very good job of conservation of habitat for all species, no matter whether they are listed under the Act or not. With a new way of thinking to make them more attractive, economically that is, they will be much better off.

The conservation community will support a large habitat and population recovery program. I think you will find that both industry and conservation groups in my part of the world will help implement conservation measures to avoid listings, recover species that are listed and do this in a manner that we work with private landowners versus against them.

The type of proactive approach that I have suggested will help remove the threatened and endangered species of our nation from their respective lists. It will also aid a species before it reaches a status of threatened or endangered, making it unnecessary to list a species. Working with private property owners and enabling them to conserve habitat on their property is the kind of proactive strategy that can head off regulatory crises, while improving the environment and providing opportunities for economic development.

Mr. Chairman, Ranking Member Rahall, Members of the Committee, Congressman Pickering and Senator Crapo, this concludes my remarks. I will be glad to respond to any questions that either of you or other members of the Committee may have.

Thank you.

Response to questions submitted for the record by Honorable James L. Cummins, Executive Director, Mississippi Fish and Wildlife Foundation

Question submitted by Senator Crapo

1. *All of the panelists spoke of contributing time and money to species conservation—some more willingly than others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground—would you be better off?*

RESPONSE:

In response to the question, yes we would be better off. I am not sure how the private sector could participate in hiring scientists, but that would help get the most qualified and practical person to respond to the need at hand.

Planning recovery would be most valuable. Many USFWS personnel are not aware of all of the recovery techniques and various programs of other agencies. We have requested to be on the recovery team of the ivory-billed woodpecker, have purchased two web sites (www.ivory-billed.org and www.ivory-billedwoodpecker.org) to educate the public and landowners about recovery techniques and safe harbor, for example. It appears that some of this may be happening for the woodpecker. Furthermore, by including others, such as the timber industry, the bird, or whatever the species in question, will be better off.

The same goes for action on the ground.

In all cases, not only will we be better off, but conflicts can possibly be avoided, there will be more support from all parties and the species of concern will be better off.

Please let me know if you need additional information.

Thanks,

The CHAIRMAN. Thank you. Mr. Tazik.

STATEMENT OF DAVID J. TAZIK, CHIEF, ECOSYSTEM EVALUATION AND ENGINEERING DIVISION, ENVIRONMENTAL LABORATORY, U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER

Mr. TAZIK. Good morning. Mr. Chairman and other Members of Congress, it is my pleasure to appear before you this morning to highlight research conducted by the U.S. Army Corps of Engineers on this important topic.

I'm a scientist who will limit my remarks to those areas of knowledge and the research we are conducting at the Engineer Research and Development Center.

In regard to policy and budgetary questions, I will be happy to take those for the record and assure that you will receive a full and prompt answer. I intend to demonstrate that the Corps' continued commitment to bringing good science and technology for the conservation of endangered species and the ecosystems——

The Corps recognizes its duty to address the prohibitive and affirmative duties of the Endangered Species Act in the pursuit of environmental sustainability goals under the Corps' environmental operating principals. One important lesson for us is that development and application of sound science is essential in endangered species conservation planning. As such, we actively engage in research to illustrate the effects of our mission related activities on high priority species.

The Corps has spent from $30 million to over $100 million per year since 1996 on over 250 federally listed species. Yet reported expenditures may be a substantial underestimate of the true cost of compliance. For example, we recently found reported costs for sea turtles were only about half the actual cost incurred by Corps districts.

In response, we are developing an approved cost accounting system. sea turtle issues arose for dredging projects as early as 1980. Prior to 1992, some dredging activities killed as many as 50 to 100 sea turtles per dredging project. At the time very little scientific data existed on sea turtle biology and behavior and water life subject to dredging. The Corps responded voluntarily with establishment of the sea turtle research program in 1991, that led to development of protectional protocols. Since their implementation less than one sea turtle incident has been documented for a dredging event.

The pallid sturgeon occurs in large rivers in the Mississippi River Basin. The cause of this and other river sturgeon is attributed to flood control and navigation projects, water pollution and commercial fishing for caviar. Studies of the pallid are underway through inner-agency collaboration along the Missouri River, the middle and lower regions of the Mississippi River. Most are fully or partially funded by the Corps. We have documented stable populations of the pallid in the lower Mississippi River and their presence in the middle Mississippi River during four months of the year. Rarity of the species requires a long term commitment to

fully evaluate the population trends relative to the ongoing mission activities.

We're also partnering with the American Bird Conservancy to establish a science-based data collection protocol for Interior Least Tern (ILT). Currently accepted population models do not account for disbursal between the coastal and interior populations of the tern, which may be a key factor in regulating size of the interior population, which is federally listed. Together we are assisting with coordination of a large scale genetic sampling that will help us understand the relationship between these two populations.

We are also partnering with the Conservancy to develop a range-wide monitoring plan designed to obtain an accurate estimate of the latest Least Tern population. The plan will be reviewed by a multi-agency working group, including numerous Federal, state and academic institutions.

The Corps has worked with the Services since enactment of the Act to develop science-based solutions to endangered species challenges and Corps projects, and we will continue to do so. Information resulting from each of the efforts described above is intended to provide a more reliable basis upon which to formulate habitat restoration and management.

We cannot always provide absolute certainty that our proposed activities will not affect a given species. As a result, the decisions about protective measures can be co-subjective and precautionary. Once subordinates and limitation efforts are instituted reversing them can be difficult. Our challenge is to provide the tools to quantify the risks and uncertainty based on the best available science and to help evaluate the efficacy of developing additional scientific information.

I hope that my testimony today illustrates the Corps' past and continuing commitment to pursue and use sound science and technology to conserve important wildlife resources in the Southern United States under the Endangered Species Act. On behalf of the Corps and the Engineer Research and Development Center, thank you for allowing me the opportunity to appear before you this morning.

[The prepared statement of Mr. Tazik follows:]

Statement of Dr. David J. Tazik, Chief, Ecosystem Evaluation and Engineering Division, Environmental Laboratory, U.S. Army Engineer Research and Development Center

Mr. Chairman and Members of the Committee

Introduction

I am David J. Tazik, Chief of the Ecosystem Evaluation and Engineering Division for the Environmental Laboratory at the U.S. Army Engineer Research and Development Center (ERDC) in Vicksburg, Mississippi, which is a component of the U.S. Army Corps of Engineers (the Corps). I am pleased to appear today on behalf of the ERDC and the Corps to provide information as requested in your letter of invitation dated 25 April 2005. The Congressional interest in the ERDC's and the Corps' contributions to protecting and restoring wildlife in the southern United States under the Endangered Species Act (ESA) is much appreciated.

The theme of my testimony today is the Value of Science in Implementation of the ESA. I intend to demonstrate the Corps' continuing commitment to bringing good science and technology to the conservation of endangered and threatened species and the ecosystems upon which they depend. While some of our research does support the Army and other military Services, I will confine my remarks to the Corps' civil works mission.

The Value of Sound Science in Implementation of the Endangered Species Act (ESA)

The Corps recognizes its duty to address all its responsibilities and duties under the ESA, meet regulatory requirements, and pursue environmental sustainability goals under the Corps' Environmental Operating Principles. And, we have learned a key lesson in the implementation of the ESA—that development and application of sound science is essential in planning for the protection of threatened and endangered species. As a result, we are actively engaged in programs to develop empirical data that define relationships between effects on high-priority species and mission-related activities.

Economic Costs of Endangered Species Protection

Based on recent expenditure reports, the Corps has spent from $32 to over $108 million per year since 1996 on over 250 federally listed threatened species and endangered species. Important taxa with significant populations in the southern United States include sturgeons, sea turtles, mussels, and shorebirds. Reported expenditures are suspected to be a substantial underestimate of the true cost of ESA compliance. A recent investigation for sea turtles, for example, revealed that reported costs were only about half the actual costs incurred by Districts. We are now developing an improved cost accounting system.

Sea Turtles

Sea turtle issues arose for dredging projects starting in 1980. Prior to 1992, some dredging activities killed as many as 50-100 sea turtles per dredging event; yet we knew that some dredging events had no impacts on sea turtles. At that time, very little scientific data existed on sea turtle biology and behavior in waterways subject to dredging. The Corps responded voluntarily with establishment of the Sea Turtle Research Program that led to development of sea turtle protection protocols. Since 1992, when the protocols were implemented, less than one sea turtle incident has been documented per dredging event.

Pallid Sturgeon

The pallid sturgeon occurs in large rivers in the Mississippi River Basin. It was federally listed as an endangered species in 1990 and a recovery plan was approved in 1993. Decline of this and other river sturgeon is attributed to flood control and navigation projects, water pollution, and commercial fishing for caviar. Studies of pallid sturgeon are underway through interagency collaboration and include three reaches of the Mississippi River Basin: Missouri River, Middle Mississippi River, and lower Mississippi River. Most research studies are fully or partially funded by the Corps from Northwest or Mississippi Valley Divisions.

Recent Corps studies have documented stable populations in the lower Mississippi River, and pallid sturgeon are regularly captured in the Middle Mississippi River (MMR) during cooler months. Rarity of endangered pallid sturgeon requires a long-term effort to fully evaluate population trends and habitat preference relative to ongoing civil works mission activities. And we continue in this endeavor.

Least Terns

The ERDC and the American Bird Conservancy (ABC) are currently partnering to assist the Corps in a variety of issues involving the Interior Least Tern (ILT). Our objective is to establish science-based data collection protocols for genetic studies and population monitoring. We will use results to improve subsequent population modeling that ultimately will inform long-term management for this species.

Coastal populations (other than California) of the least tern are not federally listed. And, the relationship between interior and coastal populations of this species remains a mystery. Currently accepted tern population models do not account for dispersal between the two, which may be a key factor in regulating population size, particularly for the interior population. Planned genetic studies will help solve the riddle, and should lead to a more reliable basis for future management recommendations. The Corps and ABC are contributing to a potentially definitive genetics analysis by assisting with coordination of a large-scale genetic sampling effort.

We are also partnering with the ABC to coordinate development of a range wide monitoring plan for the interior population of least terns. Our goal is to obtain an accurate assessment of regional and range-wide least tern population numbers and trends. The plan will be reviewed by the ILT Working Group, a multi-agency group including 4 U.S. Fish and Wildlife Service regions, 10 Corps districts and ERDC, several USGS science centers, 8 State wildlife agencies, several universities, and ABC. Data such as these should provide us all with a reliable basis upon which to monitor population status and inform habitat restoration and management decisions.

Many of these decisions are based on the best science available, but these are complex, interdependent systems with incredible geographic scope, and many aspects of the biology and ecology of these species are not well-understood. Taking action necessarily involves the agency relying on its considerable expertise and making a judgment call, and adjusting those decisions as more science becomes available or circumstances change.

The Corps has worked with the Services since enactment of the Act to develop science-based solutions to endangered species challenges at Corps projects, and will continue to do so. Information resulting from each of the efforts described above is intended to provide a more reliable basis upon which to formulate habitat restoration and management decisions. Once avoidance and minimization efforts are instituted, reversing them can be difficult, yet it is important for those making policy and management decisions to use the best available science in making those decisions and to be prepared to change course in response to new scientific developments.

In conclusion, my testimony illustrates the Corps' past and continuing commitment to the pursuit and use of sound science in an effort to meet prohibitive and affirmative duties under the ESA.

On behalf of the Corps and the ERDC, thank you for allowing me the opportunity to present this testimony today.

The CHAIRMAN. Thank you. I thank the entire panel for their testimony.

Dr. Tazik, just to begin with you, you talked about the true cost of compliance in your testimony, and I trust that the true cost was higher than what had been estimated in the past—that once you started looking into it, you believe the true cost was higher than what has been reported. Can you expand on that a little bit for me?

Mr. TAZIK. Well, there are a lot of costs that are inherent in some of the activities that aren't just the labor based or Corps personnel engaged in the compliance activities. There are contracts associated with dredging activities that often times, because of delays in the projects, there are costs incurred that don't get captured in the normal proceeding of expenditure accounting. So we're trying to work with the districts now to develop a, essentially, a spreadsheet that will identify specific types of expenditures that may have been missed in the past, that we're asking them to now account for and require a lot more detail.

The CHAIRMAN. So if a project gets delayed because of discussions and consultations being a result of that, that the true cost of those delays was not included. It was only the Army Corps personnel at the table that is included.

Mr. TAZIK. That's my understanding, sir.

The CHAIRMAN. And as you refine this, your efforts to come up with the true costs, are you just looking at Army Corps' costs, or are you looking at other state, Federal, local agencies and their costs of compliance?

Mr. TAZIK. No, we're looking at our agency cost.

The CHAIRMAN. Just yours.

Mr. TAZIK. Yes, just ours.

The CHAIRMAN. The other thing that or one of the other things you talked about was having science-based solutions, and I believe it was the Least Tern you talked about that you were working with others to come up with surveys that were based on science, and to try to figure out what the true picture was that you were dealing with. Why would you have to do that? Wouldn't Fish and Wildlife have all of the information? And if they're regulating you and

they're telling you this is what you have to do, wouldn't they have all that information already?

Mr. TAZIK. Not necessarily. You're calling upon the agency being regulated to try to provide the best science available. So we try to work in partnership with the Service and others, stakeholders, to come up with methodologies that everyone agrees to, that we agree that it's the best science that we can bring to the best monitoring that we can. And we certainly consult with the Service and coordinate with them and have their input provided mutually to come to a, you know, the idea of conservation, cooperative conservation, I think is a concern here, that we're cooperating to come up with the methodologies that we all agree to provide the right kind of data used to make management decisions.

The CHAIRMAN. So when you look at these surveys you are trying to find out what the habitat is, where the species actually live, how many there are, what the numbers are, what reproduction rates are, you know, all of the things that would give you a clearer picture of whether or not that species is endangered, and if it is, what its numbers really are, and what you could do in terms of mitigating any impact you may have.

Mr. TAZIK. Well, we certainly try to provide the data, the determination of whether they are endangered or not, certainly that belongs to the Service, but we try to help provide the information that will then be evaluated relative to recovery targets.

The CHAIRMAN. Thank you. Mr. Bowen, I found your testimony quite compelling, and you talked about the job loss that your industry has gone through in the last 20 years and what some of those impacts are. But you also come up with some real interesting suggestions on reforming the Act, and trying to make the Act work better. And one of those, there are a couple of them that I think the Committee has worked on in the last year, dealing with having better science and reforming the critical habitat process.

Do you believe that, from your experience, that if we had a higher level of science, or a more credible level of science, that the impacts on your industry, the job loss in your industry, would be any different than what it is now?

Mr. BOWEN. I think it would. I think the spotted owl is a prime example. I think the spotted owl was poor science. You've got, the biggest enemy, from what I understand, of the spotted owl is another owl. And as far as the science that was used, I mean—so yeah, I believe if we could get good sound science and peer reviewed science was used, you know, I think a lot of the species that are listed now wouldn't even be on the list. And I think a lot of land has been tied up because of it wouldn't be tied up right now. And that's the basis of our industry. If we can't get the fiber off the land, we're not going to exist.

The CHAIRMAN. Thank you. Time has expired. Mr. Pickering.

Mr. PICKERING. Mr. Chairman, again I want to thank y'all for starting your hearings here in Mississippi. I am from Clarksdale. It is great to be here in one of the treasures of Mississippi, the Museum of Natural Science.

Mr. Bowen, I found your testimony, as well, very compelling. And what I would like to ask all of the panelists, it seems to me that the critical habitat designation, and then the resulting litigations

or conflict, either from listings or non-listings, has resulted in most of the resources of the Fish and Wildlife Service being caught up in conflicts, controversy litigation. That does not go to protect or recover species, nor does it go to bring communities together in partnerships, nor does it give incentives for private parties to work together with all agencies to actually achieve the objectives in a way that balances the environment with our economic interest.

What would y'all recommend in improving the critical habitat designation? What reform? What can we do to solve that problem? I mean, I'll just start with you, Ms. Hartfield, and then I'll go through the panel.

Ms. HARTFIELD. That's a hard question, but it's something we've got to look at. You're right. There is too much resources being spent on litigation. I know our state, and I'm sure all of the other states, that's the only one that appears, seeing how many start a project as to how open one can be. How can we better negotiate creatively with all our partners if we're constricted by what we can do so I believe that it's something we've just got to open to further dialog.

Mr. PICKERING. Mr. Bowen.

Mr. BOWEN. I agree with what was just said, but it ought to include the private landowners in anything that's done, including the community that's involved. One way of helping stop some of these lawsuits I would like to see Congress do something about all of our tax dollars going to these environmental corporations. They're not groups, they're corporations that's got the funds to file these suits and keep everything tied up in court.

Mr. PICKERING. I hear it said sometimes that the current ecosystem, because of the litigation and no incentives to actually recover is a SSS policy, shoot, shovel and shut up. So instead of having a landowner actually come forward, the last thing a landowner would ever want to do is say I've got a red-cockaded woodpecker in my tree. This is my children's inheritance and I would like you to come and lock up my land and take away my value. That is the wrong way to go about solving the issues before us. Mr. Cummins and Mr. Tazik.

Mr. CUMMINS. In terms of terrestrial ecosystems, I don't feel that critical habitat is that important, but we have to find a substitute, and I think you're right on the mark when you mentioned the word incentives. We're working right now with a landowner on a longleaf pine restoration project. You may know him. His name is Judge Charles Pickering. And he's doing a great job in terms of—in all honesty, it's people like that that are really concerned about conservation, that we can work with him on incentive-based programs to help restore habitat.

When you get to the aquatic side, I think it's a little bit more difficult. Critical habitat has some certainly important features, but I think we've got to put some more time and thought into how do we develop a substitute for that. I think that there's a lot of opportunities, utilizing our natural fish hatchery system, utilizing the Corps of Engineers as they're going through and tweaking maintenance projects for example on the mainline Mississippi.

But to sum it up, I think we can find a substitute in the form of incentives on terrestrial systems. But in terms of aquatic, I think we've got to put some more thought into what that substitute is.

Mr. TAZIK. I think our communication and dialogue are important features of that. As far as a specific recommendation I can't give you one for that.

Mr. PICKERING. Mr. Chairman, thank you very much. And again, we greatly appreciate you starting the hearings here.

The CHAIRMAN. Senator Crapo.

Senator CRAPO. Thank you very much. And to address Senator Pickering and say, we had introduced legislation last year that would actually change the timing of definition of critical habitat to base it more on the biological than a suspicion of it, which I think would have actually reduced a tremendous amount of litigation, which they were mostly litigating over failed dead lines. And there are solutions to that issue.

Ms. Hartfield, again, as the rest of us, I appreciate the invitation to be here in this great facility today. It's a tremendous museum. I think we're going to probably have to rush off, the airplane cannot go through these meetings, but I wish we did have opportunity, and maybe we will be back to do that at some time.

Your testimony indicated that the 25 percent matching requirement for Section 6 cooperative agreement was straining state resources. Do you have a suggestion as to how far that matching requirement should be reduced? Do you have any idea what would work?

Ms. HARTFIELD. The 25 percent match has been difficult for us sometimes. I wish for a 15 because I could sure use it. One of our concerns now is that we keep hearing that the match may be increased, and already some of the programs require a 50 percent match, which just kind of puts us out of the competition. So anything below 25 would be greatly—any of those programs that require 50 percent match are going to be difficult for us.

Senator CRAPO. Do you think that if it had been at 15 you think you could——

Ms. HARTFIELD. It would be some funds that we probably could have made use of that we weren't able to.

Senator CRAPO. Thank you very much. Mr. Bowen, I want to tell you I can truly appreciate the work of the Pulp and Paperworkers' Resource Council. Your counterpart in Boise, Idaho, is Owen Squires.

Mr. BOWEN. Right.

Senator CRAPO. A good friend of mine, and I encourage you to say hello for me the next time you see him.

Mr. BOWEN. I will sure do that.

Senator CRAPO. At one of your national meetings, I think that the efforts that you folks have been involved in is tremendous, and I agree with the comments that you made about how we've got to start finding ways to create incentives for the landowners to be able to—to basically do the things that they want to do, but which they don't feel they have the tools to be able to do now with the benefits, the habitat and the recovery efforts for our species. And I just wanted to primarily indicate to you that I believe that your focus on the current consultation process and how lengthy and

difficult it is does need congressional attention. I don't want to expand on that at all, but please do if you'd like to.

Mr. BOWEN. That has been said already. The litigation has just got everything so tied up. I mean, it's nothing to file a lawsuit today, and the environmental corporations, like I said, have unlimited funds it seems like.

Most people think about the Sierra Club, or whomever, that it's just that local membership and all, but they're big buck business, and that's all it is. They're using capitalism to try to do away with capitalism in my opinion. They're trying to completely eliminate the manufacturing base in the United States, and if you get right down to it, I think it even comes down to a case of national security.

Senator CRAPO. I think the importance that you bring to the focus on jobs and the economy is a very important part of this debate, and the idea of finding working relationships is critical.

Mr. BOWEN. Well, what Congressman Pickering said awhile ago about trying to save your land and have it for your kids and whatever, I can tell you I'm not a big landowner. I've got a little bit of land, but I will guarantee you if I see something on there I'm not familiar with, I'm just going to see how it tastes because I'm sure not going to let anybody know about it.

Senator CRAPO. I think we better let that fly right there. I had a hearing—well, I won't get into that.

Mr. Cummins, I was interested in one of the quotes at the beginning of your testimony, your written testimony. You had a quotation from Aldo Leopold which said, "Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest". And I truly think that that was very thoughtful analysis. Do you know when that was said approximately?

Mr. CUMMINS. 1934. It was in his publication called Conservation Economics.

Senator CRAPO. So back in 1934 the idea by one of the most preemptive conservationists of our time, or of our country, has indicated that we've got to focus on this question of finding ways of incentivizing the private landowners to do the right thing.

Mr. CUMMINS. Absolutely. And it wasn't until 1985 when the Food Security Act was signed for the Farm Bill that we actually figured that out.

Senator CRAPO. Sometimes we don't figure things out as fast as we should, and hopefully these hearings will help us do that.

I was also interested in the letter that you—that showed up where a discussion you had with Senator, former Senator John Chafee.

Mr. CUMMINS. Yes, sir.

Senator CRAPO. Back in 1996, we focused on the importance of providing incentives to improve habitat, and I thought maybe I would invite a comment on that briefly. I think most people should know that now John Chafee's son, Wayne, is the Chairman of the Senate Subcommittee that handles this issue.

I think that's a very interesting historical perspective. As far back as 1996, we had the chairman of that committee focusing on incentives for habitat improvement.

Mr. CUMMINS. I've had the chance to briefly visit with Senator Chafee about that, but I certainly hope that as this process evolves I will have more opportunity to have a more detailed discussion about the importance of this issue.

Senator CRAPO. Thank you very much. Mr. Tazik, my time has expired so I guess I'm not going to get to grill you.

The CHAIRMAN. Thank you. I want to thank this panel for their testimony. There are other questions that we may have of you, and we would submit those to you in writing, and allow you to answer those in writing. I will hold the hearing record open to give you an opportunity to answer those, but I would like to have them included in the hearing record.

So I'm going to excuse this panel. Thank you again for your testimony. Ms. Hartfield, thank you again for allowing us here.

Mr. PICKERING. Mr. Chairman, if I could, while this panel is leaving, I do want to praise the works of the Mississippi Fish and Wildlife Foundation. They really have created example after example of incentive-based policy and a relationship with the State of Mississippi through conservation, maintenance and through the advocacy of the Conservation Reserve Program, the Wetland Reserve Program and the LIP Program. And in Mississippi we're seeing an abundance of wildlife come back and be restored and make use of the lands that were wetlands or that gave the habitat for all of our species. We're really seeing tremendous benefits from that come back to our state because of those incentive benefits.

The CHAIRMAN. I would like to welcome our second panel. Don Waldon, who is the Administrator of the Tennessee-Tombigbee Waterway Development Authority; Ray Vaughan, Executive Director of WildLaw; Paul Davidson, the Executive Director of the Black Bear Conservation Committee; and Don Robohm, President of SeaChick, Inc.

Welcome to the Committee, welcome to our hearing. We're going to begin with Mr. Waldon, and I will remind the witnesses again that your oral testimony is limited to five minutes, but your entire written testimony will be included in the record, so if could summarize it as much as possible I would appreciate it. Mr. Waldon.

STATEMENT OF DON WALDON, ADMINISTRATOR, TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY

Mr. WALDON. Thank you, Mr. Chairman, and good morning to you and the distinguished members of this Committee. I'm Don Waldon. I'm the Administrator of the Tennessee-Tombigbee Waterway Development Authority. The Authority is a four state interstate compact ratified by the U.S. Congress in 1958 to promote the development of the Tenn-Tom and its economic and trade potential.

The four Governors are members of the compact, and currently Governor Bob Riley serves as our Chairman.

I'm also Vice Chairman of the Alabama-Tombigbee Rivers Coalition. This organization is a non profit corporation made up of business interests and trade associations and has been actively involved in the listing of the so-called Alabama sturgeon since 1991.

We've been plaintiffs in three lawsuits against the U.S. Fish and Wildlife Service. We were successful in two of those, and the other case is pending in Federal District Court in Alabama.

The Waterway Authority and the Coalition, I think this is important to set the stage with, we have supported this being that we believe were distinct species and that were based on the best available science that justified their protection.

There is something like 115 listings that are occurring in the Tenn-Tom region. The business community has only challenged seven of those. Eventually six of those were withdrawn and the seventh one, the Alabama sturgeon is still pending in Federal Court.

Let me begin by talking a little bit about what we think are some of the more prevalent issues, particularly based on our experience with the Alabama sturgeon.

The first is a peer review and best available science. We believe the Service has too often relied on shoddy science to justify its actions. That was certainly the case for the Alabama sturgeon. While technology may have been the best scientific information available in the past, today genetics is playing an increasingly more important role to determine the status of various species. As you gentlemen know the Justice Department in coordination with the Interior Department routinely uses DNA tests to convict individuals of illegal importation of caviar from foreign species of sturgeon.

Two of the Service's most eminent scientists concluded that there was no genetic distinctions between the Alabama sturgeon and the far-reaching and abundant Mississippi shovelnose sturgeon. Simply stated, they were of the same species, genetically. Never the less the Service ignored this evidence and listed the fish. The Service also carefully strains others allowed to participate in the peer review process and as sure as we believe the results sometimes consistently with it's own predetermined conclusion. These biases by the Service were well documented in two lawsuits filed by the Coalition against the Service.

In both cases, the courts ruled against the Service and in favor of the Coalition and both of those ruling were affirmed by the Legislature.

Let me talk briefly about critical habitat. The concurrent designation of critical habitat positioning as required by the law is largely been ignored by the Service, even though the courts have directed the agency to do so. We strongly oppose any modifications of the annex that would change the timing of the critical habitat designation until sometime later in the listing and let me just briefly list three reasons.

The movement of concurrent designation requirements in the law will only provide more opportunity for the Service to inexcusably delay the designation of critical habitat and what we believe is most important—beginning a recovery program for the species. The concurrent requirement also helps insure what we believe is a better understanding of the real economic and other impacts of this listing and the designation of critical habitat at a crucial time in the decision process. As you know, only an economic impact analysis now requires that the designation of critical habitat but not the listing.

Third, the current designation will also help insure that landowners and others impacted by the listing are not needlessly or illegally deprived of public participation in this process. Especially those guaranteed by the provisions of NEPA. As you well know, the Service largely ignored NEPA requirements in its ESA actions. Therefore it is most important that Congress direct the Service to comply with the provisions of this law so that those impacted by the ESA are afforded better opportunities to be involved in the process.

And let me close by talking about what I think is the heart of this hearing and that's species conservation and recovery. We support those ESA provisions and programs that encourage the states and private entities to take a more active role in the conservation and recovery species. But only if the Service operates in good faith to support those efforts. And our experience with the agency has been to the contrary.

The Coalition, not the environmental community, but the Coalition was instrumental in developing a volunteer five-year conservation plan for the sturgeon. It was designed to recover the species by increasing its population through propagation. At our request and not the Service, the Congress appropriated $1.5 million to implement that plan. And we had the support of Congressman Pickering and the other congressional delegation.

The Service and the Coalition of the State of Alabama and other interested parties also approved a formal conservation agreement and strategy. All participants including the Service formally agreed that the plan was the best hope for recovery of the sturgeon.

They felt that the business community as well as the State expanded and greatly improved the fish's status and likely foresaw the need for any Federal listing because the species was already protected by state regulation. The State Service stated in its final ruling that the voluntary conservation agreement was the most viable approach to the conservation of the Alabama sturgeon. Nevertheless, in the year 2000, they listed the fish and because of the resource of the funding, the Federal source of the funding for that conservation program expired. As a result, no active recovery plan for the Alabama sturgeon currently exists.

We also were heavily involved in establishing, over a four-year period of voluntary work, a multi-species recovery plan in the Mobile Basin. That entailed plans for protection of 15 species—to our knowledge, the only one that's ever been done like that in the nation—but because, here again, the Service listed the fish, it really destroyed the effectiveness of that organization. The business community saw that there was no incentive for them to work cooperatively with the Service. So, we withdrew and all of that effort was wasted. And here again, the big loser was the fish.

Let me conclude, I see my time is gone, that we believe that a lot of the issues being talked today, and certainly those that I have mentioned do not need to be fixed by legislation. What we need to do is make sure that the Fish and Wildlife Service complies with the congressional intent of the endangered species laws, that's certainly true on critical habitat, complies with NEPA and these things that I've mentioned. We're not saying that we don't need reform but we can make a lot of progress toward recovery and really

carrying out the congressional intent of this law by really, more oversight by the Congress and hopefully a little bit more direction and better management of this program within the Department of the Interior. Thank you again.

[The prepared statement of Mr. Waldon follows:]

Statement of Donald G. Waldon, Administrator, Tennessee-Tombigbee Waterway Development Authority, and Vice Chairman, Alabama-Tombigbee Rivers Coalition

I. Background

Chairman Pombo and distinguished Committee members, my name is Donald G. Waldon. I am currently the Administrator of the Tennessee-Tombigbee Waterway Development Authority (the "Authority"), which is an interstate compact ratified by the United States Congress in 1958 to promote the development of the Waterway and its economic and trade potential. Funded solely by the member states, the compact currently consists of the States of Alabama, Kentucky, Mississippi and Tennessee. The Authority's membership is limited to the four governors and certain gubernatorial appointees from each state. Governor Bob Riley currently serves as the Authority's chairman. Current members include:

- Alabama—Governor Bob Riley; Director of the Alabama Department of Environmental Management Trey Glenn, III; Bruce Windham; Martha Stokes; W.H. "Buck" Borders; State Representative Allen Layson; and Robert Barnett.
- Kentucky—Governor Ernest Lee Fletcher; Lt. Governor Steve Spencer; Judge Mike Miller; Z.C. Enix; Judge William Shadoan; and Brian S. Roy.
- Mississippi—Governor Haley Barbour; Nick Ardillo; Bill Cleveland; Dale Pierce; T.L. "Bud" Phillips; and Martha Segars.
- Tennessee—Governor Phil Bredesen; Joe Barker; David Dickey; Judge Richard Holcomb; Kathy Holland; State Representative Randy Rinks; and Eddie Shaw, Jr.

Importantly, the Authority serves as the regional sponsor of the Tenn-Tom Waterway, promoting the development of the Waterway, exploring economic and trade opportunities, and addressing potential impediments to the Waterway's beneficial use. As a result, the Authority is deeply involved in federal and state policies affecting the Waterway, including the Endangered Species Act ("ESA").

In addition to serving as the administrator of the Authority, I am also the vice chairman of the Alabama-Tombigbee Rivers Coalition ("Coalition"), which is an Alabama non-profit corporation consisting of sixteen businesses, trade associations and state agencies that rely upon Alabama waterways as integral components of their businesses. The Coalition has been actively involved in the listing of the Alabama sturgeon since 1991, submitting numerous written comments to the United States Fish and Wildlife Service ("FWS" or "Service") during the listing process and filing suit challenging the listing as contrary to law—a case which is now pending before the United States District Court for the Northern District of Alabama. See Alabama-Tombigbee Rivers Coalition v. Norton, No. CV-01-P-0194-S (N.D. Ala.).

Given the breadth of issues the Resources Committee is addressing, we believe it is critical for private landowners to share their real-world experiences regarding the ESA. Perhaps the most compelling saga in our experience that justifies changes in the administration of the ESA centers around FWS' decade-long effort to list the so-called Alabama sturgeon as an endangered species.[1] Thus, the bulk of these comments are based on the Service's actions during the Alabama sturgeon listing process. Outside the listing process, the Tennessee-Tombigbee Waterway Authority actively participates in various conservation efforts with the Service and is often able to reach consensus with the Service on protecting species that merit protection under the statute. Nonetheless, as submitted below, we believe changes in both law and policy are crucial to achieving the ultimate goal of the ESA: to protect and recover the Nation's truly threatened and endangered species.

II. Peer Review & Best Available Science

We appreciate and share the Committee's desire to improve the quality of the science used in ESA-related decision-making. We believe that FWS has all too often

[1] Notably, organizations in Alabama have challenged relatively few proposed listing decisions by FWS. For example, of the 115 species listed as threatened or endangered in Alabama, businesses have participated in challenging only seven of those proposals. Six of the seven challenges resulted in withdrawal of the proposed listing decision due to faulty science. The seventh—the challenge to the listing of the Alabama sturgeon—is still under review by the federal courts.

relied on shoddy scientific work to justify its actions. For example, this Committee is likely aware of the concerns raised by states such as Wyoming, over the lack of objectivity in the peer review process regarding the Preble's meadow jumping mouse. Similarly, in the case of the Alabama sturgeon, the Service relied on flawed scientific data in taking the position that the fish is distinct from other shovelnose sturgeon found in abundance throughout the entire Mississippi River system. As described in more detail below, FWS has persisted in its reliance on this flawed data in the face of mounting evidence that the Alabama sturgeon is genetically identical to the Mississippi shovelnose sturgeon.

At the same time, we are unconvinced that legislation is needed to fix all the ESA's problems, nor do we believe that legislation is the most appropriate remedy in certain instances. Much can and should be accomplished through administrative management and policy changes by the Service utilizing the ESA's existing authorities. Moreover, some legislative proposals may have unintended consequences that could prove to be quite negative. Although we certainly do not agree with many of the policies of the FWS in this area, we see advantages in leaving various statutory provisions, such as the "best available science" standard, broad enough to allow some administrative flexibility to respond to the inevitable improvements in scientific technology. For example, H.R. 1662 from the 108th Congress would have required FWS to "give greater weight to interpretations of data derived from or verified by timely field work (commonly referred to as "empirical data") that have been subjected to peer-review." Our experience, however, leads us to conclude that so-called peer review is not a panacea to the problem of incorrect science.

Nonetheless, before turning to our experiences in Alabama in greater detail, we call the Committee's attention to a matter which we hope will not be overlooked. H.R. 1662 proposed to apply new peer review provisions to "covered actions," defined as listings and delistings, changes in listing status, recovery plan development, and Section 7 consultations. Importantly, this list of "covered actions" omitted critical habitat designations. We recommend that, whatever form the Committee's legislation may take in this Congress, it is drafted in such a manner as not to imply that a lesser standard of scientific care would apply to critical habitat designations compared to other actions under the ESA.

A. Administration Policy Should be Revised to Require the Service to Flexibly Determine What Is the "Best Available Science" in Each Specific Situation

Like the standard for "best available technology" employed under other environmental statutes, what constitutes the "best available science" evolves over time. While taxonomy may have been the best scientific information the Service had available at some point in the past, today genetics is playing an increasingly more important role in the process of determining the status of various species. For example, the United States Department of Justice, in coordination with the Service, has employed genetics to convict individuals of illegal importation of caviar from foreign species of sturgeon. The Service, however, often refuses to employ genetics as a matter of listing policy, even where the taxonomic data is subject to scientific dispute. Our experience indicates that the Service often simply picks and chooses when to use genetics based on the ends it wishes to achieve. This is not sound science. Importantly, we do not believe that statutory revisions to the ESA are necessary to correct this particular concern. The better approach is, instead, to require the Service to issue a new policy regarding the standard for best available science in the listing process: where taxonomic data is disputed, genetics should be used to determine the status of a species.

B. The Service Has Rigged Peer Review to Support Its Preordained Conclusions

Even where the Service has purported to submit its scientific findings and determinations on listing issues to a peer review panel, at least in the unfortunate case of the Alabama sturgeon, the Service carefully screened those allowed to participate in the process to ensure a result consistent with its predetermined conclusions. The Service's efforts in this regard are well documented, because they were the subject of a Coalition lawsuit challenging the peer review process pursuant to the Federal Advisory Committee Act ("FACA"). In that case, the Eleventh Circuit confirmed that the Service had violated the procedures of FACA in its conduct of peer review for the Alabama sturgeon, and the court barred the Service from using the report produced by that illegal process. Alabama-Tombigbee Rivers Coalition v. Dept. of the Interior, 26 F.3d 1103 (11th Cir. 1994). That case is the source for the anecdote provided below.

After the publication of the first proposed listing in 1993, Secretary Babbitt ordered the creation of a "scientific advisory panel" to "consider the best available scientific information and assess the current status of the species." However, a

bipartisan group of Alabama Congressmen and Senators objected on the grounds that the small panel was biased. In response, the Service created a new panel of nine members, but that panel included three of the four members that sparked the initial concern, and it included none of the six scientists suggested by the Alabama Congressional delegation.

Initially, the Service established a procedure that conveniently allowed it to avoid the public notice and participation required under FACA: it would have its members file individual reports. However, shortly before the reports were due, the Service changed its procedure and convened a private meeting, from which "different thinking" stakeholders and scientists were excluded. The Alabama-Tombigbee Rivers Coalition sued, alleging that this process brought the panel's activities within FACA, and that the secretive and exclusive meeting clearly violated the openness requirements of that Act. See 5 U.S.C. App. 1, § 10.

The Coalition won in the district court in Alabama, which was unanimously upheld on appeal to the Eleventh Circuit. The courts held that the Service clearly violated FACA. Further, this violation was so serious that the courts were compelled to order the Service not to rely on the report produced by this illegal procedure. As both the lower and appellate courts stated:

> A simple "excuse us" cannot be sufficient.... FACA was designed by Congress to prevent the use of any advisory committee as part of the process of making important federal agency decisions unless that committee is properly constituted and produces its report in compliance with the procedural requirements of FACA, particularly where, as in this case, the procedural shortcomings are significant and the report potentially influential to the outcome.

26 F.3d at 1106. The Eleventh Circuit elaborated further: "Because the matters are so serious and of such great concern to so many with differing interests, it is absolutely necessary that the procedures established by Congress be followed to the letter." 26 F.3d at 1107 n.9.

That unfortunate episode illustrates the need for a renewed commitment to scientific integrity by the Service, especially including openness to ideas originating from beyond the favored circle of the Service's own staff and the Service-approved and/or favored scientists. It also highlights the fact that legislation is not a cure for every misdeed at the agency. Adequate laws were in place at the time of these events which should have guaranteed an open and inclusive procedure, but the Service refused to follow the law. We commend this Committee's willingness to address flaws in the peer review process with legislation, but we also urge the Committee to continue to exercise oversight of the Service and urge the leadership at Interior and the Fish and Wildlife Service to require its staff to act reasonably and responsibly through administrative, management and policy changes which are well within existing legal authorities.

III. Critical Habitat Designations Must Occur Concurrently with Listing

The ESA requires the Service to designate critical habitat "concurrently" with a listing decision. This Committee has considered legislation that would change the timing of the designation of critical habitat, such as recent legislation sponsored by Congressman Cardoza. We greatly respect the efforts of the Chairman and other Committee members, but we are opposed to this concept.

Our reasons are described in greater detail below. They can be summarized as follows: (A) allowing more time only provides greater opportunity for the Service to delay and evade its responsibility to designate critical habitat; (B) delay would cause the loss of the very real benefit of obtaining an economic analysis at the same time as a listing decision (a benefit made more important by a recent change in Service policy); and (C) we believe the NEPA process should apply to critical habitat designations, and this NEPA process should occur early in the decision process. Moreover, this issue is under active litigation by the Coalition in federal court in Alabama. In the Alabama sturgeon case, the Coalition has alleged that FWS' failure to designate critical habitat is not only illegal, but that it also impermissibly tainted the entire listing process. To change the "concurrent" requirement would undercut the position of the Coalition in this case.

A. Removing the "Concurrent" Requirement Only Provides More Opportunity for Inexcusable Delays

For years, the Service has flouted the ESA and Congressional intent by refusing to designate critical habitat concurrently with listing, in spite of the mandate of ESA Section 4(a)(3). The Service has used—some might say abused—the excuses available to it, namely, that it is not "prudent" to designate critical habitat, or that while it is prudent to do so, the critical habitat is "not then determinable." See ESA § 4(b)(6)(C). The Service has argued it would not be prudent because of poorly

substantiated claims that persons might vandalize or otherwise harm species, or that its budget provided insufficient funding to cover the cost of the action. For example, the Service refused to designate critical habitat when listing the green pitcher plant in Alabama due to fears that the designation would result in "over-collection." See 45 Fed. Reg. 18930-31 (Mar. 24, 1980) (final rule listing green pitcher plant as endangered). A wide variety of environmental groups and regulated entities have opposed these generally specious arguments, with considerable success in the federal courts.

In the case of the Alabama sturgeon, the Service in 1993 declared critical habitat to be both prudent and determinable, but it withdrew its proposed rule the following year. In 1999, the Service changed course, proposing not to designate critical habitat on the grounds that to do so could result in illegal takes. The proposed rule, however, noted that "all Federal agencies [including the Service] are currently aware of the location and extent of habitat occupied by the Alabama sturgeon." When it issued the final listing rule in 2000, the Service acknowledged that the "not prudent" finding was invalid; however, the Service then asserted that critical habitat was not determinable, despite having previously asserted that areas occupied by the fish were indeed well known. The Service also acknowledged that this finding resulted in a one-year deadline to designate critical habitat, yet it candidly admitted in litigation that it has missed this deadline and has offered no plans of imminent action to rectify its noncompliance.

For whatever reason, the Service simply does not like to designate critical habitat. Unable to wish the ESA's requirements away, the Service instead postpones compliance for years or simply ignores the law altogether. The point is, the Service already misses deadlines to designate critical habitat. The appropriate response to this situation is not to give the Service more time. The Service surely will only miss the later deadlines as well, and the species, environmental advocates, and regulated entities alike will be that much farther from a final critical habitat designation. Rather, both Congress and the courts should seek to require the Service to simply follow the law—to designate critical habitat, and to do so on time as the ESA now requires.

We note briefly that we are aware of arguments that critical habitat designation should occur later in the process, such as in conjunction with a recovery planning process. Some have suggested that FWS does not always possess adequate information to designate critical habitat at the time of listing, and to require FWS to do so places too great a burden on the agency. We would respond by suggesting that if FWS does not have enough information to know what areas are critical to the conservation of a species, it does not know enough to declare that species to be endangered or threatened.

B. "Concurrent" Requirement Promotes Understanding of Economic and other Impacts at a Crucial Time in the Decision Process

In the past, the Service has determined that the designation of critical habitat almost never caused an adverse economic impact on the grounds that any negative economic impacts associated with critical habitat designation would have occurred regardless of the designation, due to other requirements of the ESA. However, recent litigation brought by a ranchers association resulted in a significant change in the Service's illogical approach. New Mexico Cattle Growers Ass'n v. U.S. Fish & Wildlife Service, 248 F.3d 1277 (10th Cir. 2001). In this case, the court noted that FWS could have chosen to consider all economic impacts associated with critical habitat designation, even if a given impact was "co-extensive with other causes." Given a choice between these two methods, the court found that the "co-extensive" approach was closer to Congressional intent, since FWS' preferred method effectively read out of the Act any meaning for Congress' directive to consider economic impacts. Other courts have since followed that Tenth Circuit approach. See Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Service, 268 F. Supp. 1197, 1230 (E.D. Cal. 2003); Home Builders Ass'n of N. Cal. v. Norton, 293 F. Supp. 2d 1, 3-4 (D.D.C. 2002); Bldg. Indus. Legal Defense Found. v. Norton, 231 F. Supp. 2d 100, 102 (D.D.C. 2002); Natural Res. Defense Council v. U.S. Dept. of Interior, 275 F. Supp. 1136, 1141-42 (C.D. Cal. 2002); Nat'l Ass'n of Home Builders v. Evans, 2002 WL 1205743 at *2 (D.D.C. 2002).

Although we are not aware of any formal agency guidance or policy issuance as of yet, it appears that the Service has embraced the reasoning of the Tenth Circuit on a national scale. For example, the final rule to designate critical habitat for the California tiger salamander noted that its economic analysis "complies with the direction from the U.S. 10th Circuit Court of Appeals, that, when deciding which areas to designate as critical habitat, the economic analysis informing that decision should include "co-extensive" effects." 69 Fed. Reg. 68,568, 68,579 (Nov. 24, 2004);

see also 69 Fed. Reg. 59,996, 60,012 (Oct. 6, 2004) (noting in the preamble to the bull trout critical habitat designation that the Service included consideration of economic impacts that are co-extensive with other causes). Several court cases also include statements that the Service represented to the court that it intended to employ the Tenth Circuit's rule in future critical habitat designations. Home Builders Ass'n of N. Cal., 268 F. Supp. at 1227-28; Home Builders Ass'n of N. Cal., 293 F. Supp. 2d at 2-4; Bldg. Indus. Legal Defense Found., 231 F. Supp. 2d at 102; NRDC, 275 F. Supp. 2d at 1140-41.

We applaud the Service for embracing the "co-extensive" approach to the consideration of economic impacts, and we call to the Committee's attention a significant implication of this policy. After decades of failing to follow the ESA, the Service is now required to offer a meaningful analysis of the economic impacts at the front end of the process—that is, at the time of listing. We firmly believe this is what Congress had in mind all along, by (1) requiring critical habitat designations to occur concurrently with listings, and (2) requiring an economic impact analysis for critical habitat designations. We stand at the cusp of a significant improvement to the administration of the ESA—now is not the time to make a change in the Act that would preclude this significant improvement.

Another discussion of the Alabama sturgeon listing should illustrate this point. The listing of the Alabama sturgeon carries significant economic and social costs, ranging from impacts on the Corps of Engineers' ability to do annual maintenance dredging on Alabama's navigable waterways, to imposing greater restrictions on sand and gravel mining operations. In addition, the listing could lead to increased water flows through hydroelectric dams, which would reduce energy generation during peak load periods. NPDES permit limits could also be reduced thereby requiring major upgrades to both private and publicly owned sewage treatment plants. Notably, a detailed economic analysis jointly prepared by Troy State University and the University of South Alabama predicted a potential $11.3 billion adverse economic impact and the loss of almost 20,000 jobs over a 10-year period in Alabama and Mississippi as a result of the Alabama sturgeon listing.

During the original listing process in the early 1990s, these potential adverse economic impacts precipitated significant public relations and political problems for the Service. As discussed above, while the listing decision is to be made solely on the basis of the best available science, designation of critical habitat requires the Secretary to consider the economic and social impacts of that designation. Therefore, the economic impacts became a big issue in the Service's 1993 listing proposal, which also proposed to designate critical habitat.

However, after the Service withdrew its 1993 listing proposal, FWS relisted the Alabama sturgeon in 2000 without designating its critical habitat. This was an obvious attempt to avoid the previous economic and social impacts debate. Nevertheless, the ESA requires FWS to propose critical habitat designation concurrently with the listing proposal. Consequently, FWS was virtually guaranteed to be sued again—thereby perpetuating the sturgeon controversy and costing the private sector and the taxpayers even more money. Of course, this is now a critical issue pending in the Coalition's Alabama sturgeon litigation before the federal courts in Alabama. As a matter of policy consistent with the mandate of the ESA, the Service should be required to designate critical habitat concurrently with the listing decision, thus requiring the "up front" consideration of economic impacts during the listing process.

C. The Service Should Also Follow NEPA When Designating Critical Habitat

We have already explained why the Service violates the law by not proposing to designate critical habitat concurrently with the proposed listing. In addition, when proposing a critical habitat designation, it is imperative that the Service also comply with the National Environmental Policy Act ("NEPA"). NEPA exists to improve federal agency decisions and to provide opportunities for participation by the public. Without fully applying NEPA when assessing critical habitat designations, the Service could act without realizing that better alternatives may exist to protect, restore and enhance listed species. Landowners and users of public resources, such as waterways, are needlessly and illegally deprived of NEPA's provisions for public participation. Perhaps most importantly, the Service's failure to comply with NEPA violates a clear Congressional directive. If, as we submit, the NEPA process is good for critical habitat designations, then any change in the "concurrent" requirement would also only serve to delay the provision of NEPA's opportunities for landowners and others to participate in an ESA decision of major importance to them.

Prior to 1983, the Service performed a NEPA analysis on actions under Section 4(a) of the ESA, including critical habitats. In that year, however, the Service published a policy indicating it no longer would prepare a NEPA document for listings, delistings, reclassifications, and critical habitat designations. 48 Fed. Reg. 49,244

(Oct. 25, 1983). The Service argued that none of its environmental assessments on such actions up to that time had resulted in a determination to prepare an environmental impact statement, and that the ESA required listings to be based solely on biological grounds. Clearly, the first justification is irrelevant. NEPA admits no exception for actions arguably similar to past actions for which an EIS was not prepared. The second reason is just plain wrong when applied to critical habitat designations, for which the ESA explicitly requires consideration of economic and other impacts.

Nevertheless, in 1995, the Ninth Circuit issued an opinion supporting the Service's position. In Douglas County v. Babbitt, 48 F.3d 1495 (9th Cir. 1995), the court found that ESA's procedures somehow "displaced" NEPA, despite the complete absence in the ESA itself of any statement of intent to do so. Second, the Ninth Circuit found that no NEPA process was required, because a critical habitat designation either had no effect on the environment at all, or if it had an impact, the impact was ameliorative. Third, the court found that the ESA furthered the goals articulated in NEPA, and that somehow excused compliance with NEPA's procedural requirements.

However, the Ninth Circuit case has been thoroughly refuted and discredited by subsequent cases in the Tenth Circuit Court of Appeals and the District Court for the District of Columbia. Catron County Bd. of Commissioners v. U.S. Fish & Wildlife Service, 75 F.3d 1429 (10th Cir. 1996); Cape Hatteras Access Preservation Alliance v. U.S. Dept. of Interior, 344 F. Supp. 2d 108 (D.D.C. 2004). These cases present persuasive arguments diametrically opposite the Ninth Circuit's decision. First, while both NEPA and the ESA operate in the area of natural resources and the environment, they establish different goals and different procedures. The ESA seeks to protect species and their habitat; NEPA seeks to improve the federal government's information-gathering and decision making for the purpose of improving the human environment (which includes reference to social and economic factors). Both statutes include public participation procedures, but they are different. NEPA, for example, includes a public scoping process in which interested persons, among others, may participate in decisions about what issues are appropriate for consideration. The ESA provides no such opportunity for the public.

Second, critical habitat designations do in fact have serious consequences. The Service has attempted to downplay the significance of critical habitat designations—both in their impact on the regulated community and in their benefits for species—but as discussed above, the courts are increasingly rejecting the Service's arguments in this area. Further, because NEPA requires consideration of a broad range of impacts, including social and economic impacts, the fact that an action may have certain environmental benefits does not excuse compliance with the NEPA process.

Third, the question is not whether the ESA furthers NEPA's goals, but rather whether NEPA furthers both its own goals and those of the ESA. By seeking to improve the quality of federal decision making, application of NEPA would improve the Service's critical habitat designations.

The Service's response to the split between the Ninth and Tenth Circuits (prior to the issuance of the recent D.C. case) was to apply the Ninth Circuit's holding nationwide, except with respect to designations within the Tenth Circuit. This is backward, for two reasons. First, the Ninth Circuit decided the case wrongly, and the recent 2004 D.C. case is further evidence of this. Second, if forced to choose between the Ninth and Tenth Circuit opinions, the Service should choose the Tenth Circuit position. By including the NEPA process, it will ensure better decision making and a better process for the people who are affected by the ESA. Unless the Service takes near term action on its own initiative to reverse its policy and begin complying with NEPA, the ESA should be amended to require it.

IV. The Coalition Supports Enhancing the Role of States in Species Conservation

We support ESA provisions and programs which seek to enhance the conservation of species by encouraging and incentivizing private entities and states to take a more active role in various ESA-related processes. We believe this approach can be beneficial both to industry and to the conservation and recovery of species, but only if the Service operates in good faith to support the program.

A. Voluntary Conservation Plans

One area where this is certainly true is the implementation of "voluntary conservation plans" by federal, state and private entities. Unfortunately, when it comes to listing species, the Service often refuses to give adequate consideration to voluntary conservation plans, which often would make listing a species wholly unnecessary. That was the case with the Alabama sturgeon listing. And, like other concerns raised by this testimony, the most effective solution to this problem is a policy

change within the Service—not necessarily a revision to the ESA unless the Service fails to act.

1. The Service Should, Where Appropriate, Use Conservation Agreements as a Basis for Deciding Not to List a Species.

Our experience indicates that, at least in some circumstances, regulated entities can join with state and federal governmental interests and citizen groups to develop effective conservation plans which may, in some situations, make listing a species unnecessary. For example, we were instrumental in forming the Mobile River Basin Coalition ("MRBC"), a consensus building organization actively supported by the Service, the Corps of Engineers, and other Federal, State, and local government agencies, businesses, industries, trade associations, and environmental groups. These efforts culminated in the "Recovery Plan for the Mobile River Basin Aquatic Ecosystem," which detailed objectives, criteria and tasks for the recovery of 15 freshwater species in the Mobile River Basin listed under the ESA. See 63 Fed. Reg. 35277 (June 29, 1998) (public notice requesting comments on draft recovery plan).

In addition, the Alabama-Tombigbee Rivers Coalition, the MRBC, and the Service developed a voluntary "Conservation Plan for Freshwater Sturgeon in the Alabama River" ("Conservation Plan") in 1996. The voluntary Conservation Plan stated that the "primary threat to the continued survival of the freshwater sturgeon is its limited numbers, and its inability to maintain its population." Accordingly, the Conservation Plan "outline[d] research priorities and estimated costs that are considered essential for conservation of freshwater sturgeon in the Alabama River." Specifically, the Conservation Plan "proposed to develop a sturgeon propagation facility...and to undertake an overall five-year research program to obtain ecological, biological and genetic data needed for the long term conservation of the sturgeon, to develop propagation techniques for the fish, to ascertain its habitat needs, and to augment existing stocks to a sufficient level to ensure the sturgeon's long-term survival." The U.S. Department of the Interior, the U.S. Army Corps of Engineers, the Alabama Department of Conservation and Natural Resources, and the Rivers Coalition fully supported this five-year, multi-million dollar Conservation Plan and committed their resources to work together toward its implementation. In fact, Congress appropriated over $1.5 million to implement the Conservation Plan.

Similarly, we were instrumental in the development of a formal Conservation Agreement and Strategy for the Alabama Sturgeon ("Conservation Agreement"), which the Service, the State of Alabama, the Rivers Coalition, and other involved parties signed in 2000. The Conservation Agreement was developed through a long and often difficult process of discussion and negotiation. All participants, including the Service, agreed the plan represented the best hope for conservation and recovery of the Alabama sturgeon. It was supported by substantial funding and in-kind assistance from business interests.

Throughout the process of negotiating the Conservation Agreement, business interests were frank in expressing their desire to implement a program which would forestall the need to list the Alabama sturgeon. Despite the clear position of the State, businesses and industries, the Service subsequently listed the sturgeon anyway. Predictably, this caused industry and the Rivers Coalition to immediately withdraw their support, financial and otherwise, for the Conservation Agreement. Not surprisingly, since the failure of that process and the loss of broad-based support, the Service has been unable to implement adequate conservation measures in terms of effectiveness and available resources for implementation. As a result, no active recovery plan for the Alabama sturgeon presently exists.

In the final rule listing the Alabama sturgeon as endangered, the Service explained that, in their view, the Conservation Agreement was the "most viable approach to conservation of the Alabama sturgeon." 65 Fed. Reg. at 26456. However, the Service decided to list the Alabama sturgeon anyway, resulting in the destruction of the Conservation Agreement because, in the Service's words, "the certainty of the effectiveness of these efforts in removing existing threats remain unproven and [are] dependent upon many factors beyond human control." We still do not understand that reasoning, and the sturgeon has been the big loser of the Service's bad decision.

The Mobile River Basin Coalition was another innocent victim of the Service's decision to ignore the Conservation Agreement and list the Alabama sturgeon. That action destroyed the four plus years of trust and credibility which had been carefully nurtured among the members of the Coalition and had produced the only multi-species Recovery Plan for listed species anywhere in the country. As a result of the Service's listing decision, the Rivers Coalition and other business and industries terminated their membership in the MRBC, and to date none of those parties have been willing to engage in any further similar discussions with the Service. The Service demonstrated it did not really value those relationships developed with the

private sector, and it will be very difficult, if not impossible, for the Service to ever recreate that dynamic in the Mobile River Basin. In the words of Forest Gump, "Stupid is as stupid does," which was applicable to the Service's actions.

As discussed above, the formal Conservation Agreement would have guaranteed the best possible approach to restoring the Alabama sturgeon. In fact, we believe the ESA currently mandates that the Service should forego listing a species where an extensive state conservation plan would provide the species with a greater chance of recovery. For example, Congress stated in the ESA that "encouraging the States and other interested parties...to develop and maintain conservation programs...is a key to...better safeguarding, for the benefit of all citizens, the Nation's heritage in fish, wildlife and plants." 16 U.S.C. § 1531 (a)(5). In addition, the ESA states that a "policy of Congress [is] that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species." 16 U.S.C. § 1531(c)(2). Section (6)(a) of the ESA also states: "In carrying out the program authorized by this chapter, the Secretary shall cooperate to the maximum extent practicable with the States." 16 U.S.C. § 1535(a). Finally, Section 6(c) of the ESA states: "In furtherance of the purposes of this chapter, the Secretary is authorized to enter into a cooperative agreement...with any State which establishes and maintains an adequate and active program for the conservation of endangered species and threatened species." 16 U.S.C. § 1535(c).

Quite possibly the strongest authority for using a Conservation Agreement as the basis for refusing to list a species is found in Section 4(a)(1) of the ESA, which states that the Service must determine whether a species is threatened or endangered because of any of the following five factors: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. 16 U.S.C. § 1533(a)(1)(A). Although this language focuses on impacts negatively affecting a species, Section 4(b)(1)(A) requires the Service to "tak[e] into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction...." 16 U.S.C. § 1533(b)(1)(A). Read together, Sections 4(a)(1) and 4(b)(1) of the ESA require the Service to consider any State conservation measures which either positively or negatively affect a species' status (i.e., efforts which create, exacerbate, reduce, or remove threats identified through the Section 4(a)(1) analysis). Each of these sections makes it crystal clear that Congress intended for the Service to specifically consider any conservation efforts being made by the State when making a listing decision. We believe that the Service should begin giving greater weight to state-sponsored conservation plans as a means of providing the species with the greatest chance of recovery without triggering the ESA's costly constraints.

Response to questions submitted for the record by Donald G. Waldon, Administrator, Tennessee-Tombigbee Waterway Development Authority, and Vice Chairman, Alabama-Tombigbee Rivers Coalition

Thank you for your letter dated May 11, 2005, which included two questions submitted by Senator Mike Crapo following the House Resources Committee's field hearing in Jackson, Mississippi, on April 19, 2005. On behalf of the Tennessee-Tombigbee Waterway Development Authority and the Alabama-Tombigbee Rivers Coalition, we appreciate the Committee's continuing efforts to oversee the implementation of the Endangered Species Act ("ESA") and to identify ways to make the ESA work better. We are grateful for this opportunity to share our thoughts and views, and my responses to the two questions are detailed below.

Question 1: All of the panelists spoke of contributing time and money to species conservation—some more willingly than others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground—would you be better off?

Yes, we believe we would be better off with such a guarantee—with an important caveat. Having a seat at the table does not mean that the U.S. Fish and Wildlife Service ("FWS") will listen. As I noted in my April 19, 2005, written testimony (see pages 9-10), the Alabama-Tombigbee Rivers Coalition actively participated in a conscientious negotiation which led to the development of a Conservation Agreement and Strategy for the Alabama Sturgeon ("Conservation Agreement"). We had a seat at the table from beginning to end, but FWS effectively vetoed the unanimously agreed upon plan by their subsequent action. In that case, FWS should have been

required to abide by the decisions reached by the participants who developed the Conservation Agreement, which included all those parties who intended to provide expertise, funding and resources to implement the agreement. Private industry as well as several federal and state government agencies committed, financially and otherwise, in writing to support the Conservation Agreement. Moreover, FWS expressed the view, mutually shared by the other participants, that "implementation of the Conservation Agreement is the most viable approach to conservation of the Alabama sturgeon, based on current technology and information." As FWS well knew, continuing support for the Conservation Agreement depended on deferring the listing of the Alabama sturgeon; however, FWS listed the fish anyway. Predictably, public support for the Conservation Agreement dissolved immediately. In the years since then, conservation of the Alabama sturgeon has languished without funding or support, and FWS has done nothing to recover it.

Amending the ESA to provide an active role for participants from the private sector who are willing to fund conservation measures would go a long way toward encouraging their participation in measures which might not otherwise be funded or implemented. Under current law, FWS has "legal leverage" to incentivize so-called "voluntary" action when FWS' approval is required—that is, in the context of approving a federal action under Section 7 or an incidental take permit under Section 10 of the ESA. Otherwise, the ESA does nothing to proactively promote positive voluntary conservation measures. In our case, we, along with the State of Alabama and other federal agencies, sought to develop the best conservation plan we could design and to implement those measures proactively for the benefit of the species in an effort to forestall its listing. However, FWS ultimately disregarded those good faith efforts, because FWS claimed they were not one hundred percent certain the plan would recover the species, even though FWS agreed the plan was the species' best chance for survival.

Our experience leads us to the view that FWS should be required to respect the decisions and conclusions unanimously developed in concert with a team of stakeholders which includes the private parties who agree to provide funding for the conservation measures. In our view, private parties would be more likely to join a process and commit resources if they had assurance that FWS would respect the decisions made by those participating.

Question 2: Current deadlines for critical habitat are routinely abused, which is why many are considering changing those deadlines. If, however, we kept a requirement for an economic analysis at the time of listing, would that meet your interests?

As my April 19, 2005, written testimony indicated (see pages 6-7), we support the present requirement in the ESA to provide an analysis of economic and other relevant social impacts, and we support the requirement that this analysis be provided concurrently with listing—meaning at the front end of the process. Therefore, the proposal articulated in this question appears to address, at least conceptually, one of our interests.

I am concerned, however, about another interest that is also served by maintaining the present critical habitat designation at the front end of the proposed listing process, which is public notice. One of the promising albeit routinely ignored functions of critical habitat designation is to provide meaningful notice of the listing proposal to affected land owners and other members of the public. Under the ESA, critical habitat includes areas that are currently occupied by the species, encompass "essential" physical or biological features, and may require special management considerations. We believe that those who own land within such an area ought to have that information at the time a species is proposed for listing. Such timely notice serves to let private landowners know whether they should be interested in the listing process and, ideally, brings them to the table to participate.

We also believe that continuing to require critical habitat designation at the front end of the listing process actually improves the science. As indicated in my April 19 testimony (see pages 5-6), we take issue with those who have suggested that it is too difficult to gather and process sufficient data to designate critical habitat at the time of listing. If there is insufficient data to know what habitat is critical for a species' survival, then we believe there is insufficient scientific data to determine that a species ought to be listed in the first place. Nevertheless, if my first two concerns are adequately addressed and included at the proposed listing stage that would likely meet our interests on this particular issue.

Thank you again for this opportunity to respond to the Committee's questions. Please feel free to contact me if I can provide additional information or assistance.

The CHAIRMAN. Thank you. We have Eddie Briggs, who represents the Head Companies, Mr. Briggs.

STATEMENT OF EDDIE BRIGGS, ATTORNEY

Mr. BRIGGS. Thank you, Mr. Chairman. My name's Eddie Briggs. I'm an attorney here in Jackson. I've participated in environmental litigation for Head Companies and the Yates Companies. David Head offers his apologies this morning. He's trapped by the storm that was sweeping across Alabama as we meet today. Senator, welcome to the great State of Mississippi, Mr. Chairman, and to my congressman, Chip Pickering, good to see you this morning, Chip. Chip knows full well this is the last weekend of turkey season and if we weren't dedicated to the issue, we'd be out in the Mississippi woodlands this morning as I'm sure Judge Pickering is.

At 9:00 a.m. this morning, I learned that I was going to have to summarize David Head's testimony so bear with me as I try to make a few of the points that he would make to you today. As a developer and investor and a private landowner and perhaps to share with you as a practical matter just exactly what the Endangered Species Act means for those who try to develop our natural resources out there on a day-to-day basis.

There are four things that we want to point out to you this morning for your consideration. First is the Endangered Species Act, though not so intended by the Congress is to often in practice a local land use tool. Certainly this it is no surprise to the members of this Committee. The Act itself is primarily used by those who would oppose development as its number one weapon in stopping certain types of land development.

Second, the Act has serious economic and other impacts upon private landowners whose property provides habitat for threatened and endangered species and you've already heard testimony in that regard this morning. Third, as currently drafted, the Act forces the U S Fish and Wildlife service to make the decisions and take positions based on poor data and information.

And fourth, the Act's provisions regarding critical habitat designation are neither necessary nor effective as a conservation measure, and I mean actually the designation of critical habitat doesn't insure the conservation of the species at all but the designation of critical habitat does impose significant costs to the agency and to the public as a result of relatively meaningless rulemaking procedures and consequent permitting obligations.

Like it or not, the Endangered Species Act is the most significant local land use tool used by those who oppose development. The Act is all too easily invoked as the most ultimate zoning tool. I'm going to give you today, a little bit of history of two projects that we're currently involved in on the Fort Morgan Peninsula in Southern Alabama. These projects are in an area that is designated as Alabama beach mouse habitat.

Some several years ago, we started a project called The Beach Club there and over the course of development of that project, it took us some three years to get through the permitting process. We were forced to expend at that time about $1.8 million in order to get our project approved. Those costs came from resulting

litigation, necessary consultants involved, and a settlement ultimately with the plaintiff's in that case.

The current project that we're working on there is called the Beach Club West. It's a companion project to another project called The Highlands, where some 1,000 additional units are planned to be built out on Fort Morgan Peninsula. Those facilities will involve an investment of between $300 million and $500 million by my client that will ultimately develop a real estate value out on that peninsula we believe in excess of $1 billion.

These projects are vehemently opposed by some who would oppose multi-family development lots at the same time allowing the development for single family residences in this same area with no restrictions, virtually no restrictions whatsoever. Currently we feel that we've been discriminated against by Fish and Wildlife Service because while our projects are held in abeyance by Federal Court lawsuit, there are single family permits that are being considered or already have been granted for some 108 single family units that are going to actually occupy more beach mouse habitat than the Beach Club and Highland Projects.

At the same time, the single family projects are not required to mitigate their use of the habitat whatsoever and in our project we have used about 35 or so acres in developing these two condominiums and, at the same time, we set aside an interment conservation easement, 110 acres of beach mouse habitat to be permanently conserved at a cost of around $90 million to the developers.

When you look at the total cost of these two projects and these two projects and two facilities over the course of the last few years, projects for development and litigation in this area and the cost of the delays being included, we've spent some $8.5 million on NEPA, the NEPA process, and currently the Beach Club West Club project has been held in abeyance for some five years while we deal with litigation and with continuing road blocks raised by Fish and Wildlife Service.

One of the things that I feel is most strongly needed in this revision of the ESA is to require some time limits, some time lines, be met that the agencies that administer this Act be required to act in a timely fashion so that they can't just delay it and delay it and delay it. At one point during the course of this situation we were needing some environmental information that could only be provided by an expert who lived in Australia according to the Fish and Wildlife Service. We were required to wait nine months for this information to come in and ultimately the gentleman never did send it, it never came but still the delay was there, the cost and expense to our group was there.

When you look at how a multi-family development is treated by the Fish and Wildlife Service versus the single family developments, you'll find that single family developers used 230 percent more habitat in developing the same facility to be occupied by individuals versus the development of condominiums.

So, our consideration here today is not only economic but it's also that we do the best that we can with the resources that we have that the government agencies that we fund as tax payers actually respond in a timely fashion to the needs of not only the environment but those that are forced to work within these rules. I'm quite

fond of telling our opponents when we have those face-to-face meetings that we do from time to time, that what we need is to agree upon a set of rules and then everybody proceed by those rules.

What has happened to us is that we entered into this process, we made an investment, we've acted in good faith, we've put in place mitigation measures, we've done everything that we know how to do and then at every juncture the rules are changed. They want us to do more, address a different set of issues and that simply does not foster economic development and we don't feel like we've been treated equitably under the Act as it is now called, as it is now written.

I thank you for the opportunity to appear before you here today and will be glad to answer any questions you may have for me.

[The prepared statement of Mr. Head follows:]

Statement of David Head, Sr., Chief Executive Officer, Head Companies

Introduction.

Mr. Chairman, Members of the Committee, good morning and thank you for coming to Jackson to visit with us today. My name is David Head, Sr., I am the CEO of Head Companies. Our development activity along the Northern Gulf Coast includes numerous condominium projects completed, under construction or being permitted. I am an attorney and have been a member of the Alabama Bar since 1962. I have over forty years experience in permitting and developing properties some nine years of which involve the Alabama beach mouse.

My company is the managing partner responsible for development of the Beach Club and Beach Club West Projects, located on the Fort Morgan Peninsula of Alabama. In that capacity I have, since 1996, been involved with the Alabama beach mouse, which is listed as an endangered species under the Endangered Species Act. I sit as a member of the Alabama Beach Mouse Recovery Team, to which I was appointed in 2004.

My remarks this morning will be brief. I would like to address the following topics: First, the Endangered Species Act, though not so intended by Congress, is too often in practice a local land use tool. Second, the Act has serious economic and other impacts upon private landowners whose property provides habitat for threatened and endangered species. Third, as currently drafted, the Act forces the U.S. Fish & Wildlife Service to make decisions and take positions on poor data and information. And fourth, the Act's provisions regarding critical habitat designation are neither necessary nor effective as a conservation measure, but impose significant costs to the agency and the public as a result of relatively meaningless rulemaking procedures and consequent permitting obligations.

1. Like it or not, the Endangered Species Act is a Local Land Use Tool

One of the central premises of our federal system is that local land use regulation is left to state and local government. True to this ideal, it is the Department of the Interior's policy that the Endangered Species Act is neither intended nor to be applied as a local land use planning tool. However, in matters where a conflict arises between local land use activities and endangered species conservation, the Act is all too easily invoked as the ultimate zoning tool. And that is what is happening on the Fort Morgan Peninsula.

Our projects are intended to provide recreational opportunities allowing our owners and their guests to visit and vacation by the seaside on Alabama's Gulf Coast. Both Beach Club and Beach Club West are designed utilizing multi-family condominium towers to minimize our project footprint, avoid rural sprawl, and minimize habitat and other disturbance to the Alabama beach mouse. That design is sound business, sound conservation, and allows us to dedicate most of the land we own to wildlife conservation, including a substantial habitat preserve area and other measures, including conservation funding, for the benefit of the Alabama beach mouse. It is, however, controversial with some living on our part of the Peninsula who would rather see more single-family residences than our higher-density, more compact developments. So much so that interests on and off the Peninsula have chosen to use the ESA (and the National Environmental Policy Act) as litigation tools to delay or prevent us from making lawful use of our property. I will describe those

events to you in a moment. But first let me say, that for whatever reason, the FWS in its ESA implementation has played into the hands of our local opponents.

Our Beach Club West Project and affirmation of the Section 10 incidental take permit has been indefinitely delayed due to litigation and subsequent review under the National Environmental Policy Act (NEPA) over endangered beach mouse concerns, the Service has inexplicably—and quite unfairly—moved forward to issue scores of incidental take permits for single family residences throughout the Peninsula, including in the very area adjacent to our projects. While our multi-family development is being held hostage in the name of considering the potential impacts to this small rodent, the agency is allowing virtually unfettered construction of single family residences that in aggregate will have at least as significant if not greater impacts to the species and without the concomitant conservation benefits offered by our Beach Club West project. And our opponents including the Sierra Club and others, who ostensibly seek to protect the mouse, are sitting by while some 108+ single-family residences are permitted or being permitted without objection, and mouse habitat is lost. This is not only a subversion of the ESA to use it as a land use tool favoring habitat destroying single-family residents over habitat conserving multi-family projects, it is fundamentally unfair and poor conservation planning to boot.

2. Chronology of Permitting Activities for Beach Club and Beach Club West

BEACH CLUB (3 years)

July 18, 1996	Started discussions with Fish & Wildlife
December 9, 1996	Beach Club ITP Issued
February 3, 1997	Sierra Club Filed notice of intent to sue F &W
August 4, 1998	Beach Club ITP Remanded
July 15, 1999	Beach Club ITP Reaffirmed

BEACH CLUB WEST (5 years to date)

Spring 2000	Optioned parcel for Beach Club West
June 19, 2000	Started discussions with Fish & Wildlife
Fall 2000	Acquired BCW Property
April 18, 2002	Sierra Club sued F & W over BCW permit
April 19, 2002	BCW ITP Issued
April 2002	Started construction BCW
June 19, 2002	Court granted injunction against BCW construction
October 8, 2002	Agreed to start EIS
June 17, 2003	Lawsuit filed over F & W failure to re-designate critical habitat

3. History and Costs of Alabama Beach Mouse Litigation

Both the Beach Club and Beach Club West required the issuance of Incidental Take Permits because of potential take of the Alabama beach mouse. Our experience in obtaining and defending those permits is illustrative of the costs the ESA imposes on land owners. We have obtained two take permits from the Fish & Wildlife Service, as described above. Both permits have been litigated. And litigation continues. Our Beach Club permit was challenged by the Sierra Club in 1997. That lawsuit was finally resolved in 1999 after 2 1/2 years at the cost of over $1.8 million. Our Beach Club West permit was likewise challenged by the Sierra Club and other plaintiffs and to date has cost us $6,649,309 or a total of $8,449,309 when the Beach Club cost delays are included. That litigation resulted in an injunction against project construction while more detailed environmental reviews were performed under NEPA. The NEPA process is still ongoing; nearly three years after the injunction issued, the FWS still has not issued a draft environmental impact statement. The horizon for that project, at this point, appears very far away.

In addition to litigating our permits, our opponents have sought to prevent our use of our property by first filing a petition with FWS to expand the historic designation of critical habitat for the Alabama beach mouse, and then by filing yet another lawsuit in federal district court when the agency failed to act as promptly as the plaintiffs wanted. Their proposal for re-designation would, not surprisingly, require much of our property to be designated and regulated as critical habitat. FWS for its part has been delayed in responding to the petition by limited funds and other resources. In the critical habitat litigation, the plaintiffs have sought an injunction prohibiting FWS from acting upon incidental take permits such as ours until re-designation occurs—a process that could take several years. They do not object to single-family development which is more destructive. The irony of this, if one

is a supporter of endangered species conservation, is that critical habitat designation and regulation is not an effective conservation measure. Designation of critical habitat carries with it no promise of conservation measures for the species. In fact, the Service itself repeatedly has recognized that the habitat conservation plans (HCPs) which are at the heart of Incidental Take Permits provide far greater conservation benefits to threatened and endangered species than does critical habitat designation. (See the attached 25 Mitigation Measures).

The habitat conservation plan for Beach Club West and an adjacent contiguous development known as Gulf Highlands are being permitted under a joint HCP which will result in approximately 110.7 acres being conserved from development and available to the beach mouse in perpetuity. The conserved lands include 909 feet of prime gulf frontage that is currently selling for over $100,000 a front foot for condominium development. In other words over $90 million of beach front land value (before valuing contiguous interior lands) has been set aside forever for the beach mouse.

Under Fish & Wildlife estimates, a single family residence creates approximately 1/10 of an acre of impervious lands with no mitigation while Beach Club West and Gulf Highlands development plans call for a clustered development in which the impervious lands are only a fraction of that for a single family home. In an attached exhibit it can be seen that our condominium cluster development is exceeded 230% by a single family home development on a per unit basis while our mitigation measures insure additional acreage that is three times our developed lands will never be developed. None of this would happen as a result of critical habitat re-designation. And it is a fact that critical habitat designation takes at the least years and many tens if not hundreds of thousands of agency dollars, while (by FWS' own recognition) yielding no greater conservation benefits to the species than already result from the fact the species was listed. Those are dollars, and years, that FWS does not have. And the fact is that the habitat and habitat values which are the subject of critical habitat designation actions is already protected for the benefit of the listed species through application of the ESA's admonition that federal agencies not jeopardize the species. Since beginning our permitting activities over nine years ago, we have calculated that we have incurred legal and consulting fees along with other expenses directly tied to ESA permitting and related litigation in the amount of $8,449,309.

4. The ESA Requires the FWS to Act in the Face of Too Little Information

I want to illustrate this last point through our own experience. When the Alabama beach mouse was listed in 1985, FWS believed there existed only 350 acres of habitat suitable for use by the mouse on the Fort Morgan Peninsula. Over the past five years, as people have studied the mouse, often as the result of Incidental Take Permit requirements, our knowledge of the mouse and its habitat has expanded exponentially. At this time, the Service has confirmed that the Peninsula has some 2,700 acres of habitat suitable to meet the needs of the Alabama beach mouse, a far different picture than was believed at the time of listing. Yet the Act requires that listing be performed based on "the best available information," regardless of how little information may exist, or whether it is credible, reliable information or not. That is a poor basis upon which to perform a regulatory action that can result, as demonstrated above, in the imposition of millions of dollars in regulatory compliance costs before a landowner can make use of his or her property.

Thank you. I would be glad to respond to any questions you may have for me.

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25 Mitigation Measures

- Clustering development in the southeastern portion of the property to maintain large tracts of ABM habitat in the western and northern portions of the property;
- Preserving approximately 105.5 acres as a conservation area for the ABM;
- Preserving 909 linear feet of open beach areas, primary and secondary dunes, and associated swales, and escarpment;
- Foregoing development of the 102-unit, 17-acre French Caribbean tract, for which an ITP was previously issued in 2000, and which will become part of the conservation area protected by restrictive covenants;
- Locating the two development towers 724 feet and 600 feet north of the Gulf, providing a significant buffer between the towers and ABM designated critical habitat;

- Selectively clearing the canopy and understory of 10.5 acres of the property that are not currently believed to be occupied by ABM to enhance potential beach mouse habitat;
- Constructing a sloped land surface, rather than a traditional concrete retaining wall, along the south side of the project to provide refugia for ABM during high water events;
- Posting signage in the construction area to clearly mark the boundary of the development footprint;
- Designating a prime contractor to be responsible for refuse disposal in tightly closed, rodent-proof waste disposal containers during construction;
- Limiting storage of building materials to the development footprint;
- Requiring disposal of residential waste capable of attracting rodents in rodent-proof containers;
- Stopping construction work and immediately notifying Service personnel upon encountering ABM;
- Removing any injured ABM to a secure spot and immediately notifying Service personnel;
- Building dune walkover for pedestrian traffic to the wet beach;
- Posting signs in the dune area to alert visitors of ABM presence;
- Prohibiting off-road vehicles on the dunes or wet beach area;
- Providing educational brochures about the ABM to construction workers and development residents;
- Prohibiting outdoor lights illuminating the dunes;
- Requiring perimeter fencing to contain large enough spaces for ABM movement;
- Prohibiting domestic house cats in the residential development;
- Implementing a seasonal trapping program and a monitoring, reporting and predator-control program for the ABM, house mice, and domestic cat populations;
- Prohibiting the use of rodenticide on the property, except in totally enclosed structures;
- Implementing a dune restoration and enhancement program to be designed and overseen by a qualified expert approved by the Service;
- Assessing a $100 fee per residential unit per year, adjusted for inflation, to be used for ABM conservation, including 1) acquisition of ABM habitat, 2) enhancement of offsite ABM habitat on non-public lands, and 3) management of ABM on non-public lands; and
- Restoring 35 acres of off-site ABM habitat in the project vicinity, including creation of a minimum 2000-foot corridor connecting existing ABM habitat to the restored habitat.

NOTE: Additional attachments to Mr. Head's statement have been retained in the Committee's official files.

Response to questions submitted for the record by David Head, Sr., Chief Executive Officer, Head Companies

All of the panelists spoke of contributing time and money to species conservation-some more willingly that others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground-would you be better off?

Yes.

The CHAIRMAN. Thank you. Mr. Vaughan.

STATEMENT OF RAY VAUGHAN,
EXECUTIVE DIRECTOR, WILDLAW

Mr. VAUGHAN. Congressman, Senator, thank you very much for having me here today. Especially considering that I and WildLaw, the organization that I founded and represented while and before the Endangered Species Act faulted in the southeast more than anyone else. But I thank God for reminding everyone that it's not only environmentalists who filed a lawsuit as well.

But let me just say the Endangered Species Act is not so much broken as it is incomplete. In 1973 Congress took its best shot at addressing the problem and I agree Congress needs to take another shot at this, but it doesn't need to be scattered, it needs to be very well thought through. And I appreciate you starting to hold these hearings. To be honest with you, a number of nationally prominent environmentalists have called and e-mailed me asking me not to be here today. But I want to be here today.

I just want to say as often as our system of government has let me down, I still believe in it and I'm always willing to give it another shot. And I believe there a lot of things that can be done, a lot of things have been talked about today are basically some of the legislation that's pending are limitations on what we already have. And that's not the solution. That's a band-aid approach that may, in fact, increase the problems that have been cited in litigation. Which is really not so much a problem as a symptom of the problems.

Underfunded agencies. If an agency doesn't have all the guidance that it should—but it quite frankly is doing a very good job with what little it has—it has problems. There have been mistakes in compliance, there have been difficulties in service situations. But it's amazing to me that, in my experience, tries very hard with what little they have and if they had the funding they needed, a lot of the litigation would go away on its own because a lot of the problems are because they're not being able to meet their deadlines.

Imagine a health care system where all we had in America were emergency rooms. Well, that's what we have for our wildlife basically. Is an over all system that gets you back as an emergency rooms. What we need is a comprehensive system and a lot of the other ideas that have been put forth here today and other things, I think are very good to explore. And I have a number of things that I put in my written testimony about cooperative efforts that have worked and other things that could work.

Things I'd like to highlight would be, first, looking at habitat overall. As the Senator mentioned, this is essential for a wildlife protection system. The National Forest in Alabama, I used to sue them three, four times a year. Why, because they were breaking the law. Then they decided to come up with ecosystem, habitat-wide management focused on longleaf pine restoration. The reason they focused on longleaf pine restoration was because that's what's supposed to be there and because the red-cockaded woodpecker was an endangered species. Also, they had to do it. Once they did it, it's been using great science. The scientists love it, everyone loves it, and they haven't been sued or appealed in five years.

That has spread to Louisiana Kisatchie National Forest. The former head of the Louisiana Forestry Association actually thinks our lawsuit that shut them down too early did great things because now they're doing great longleaf restoration all over Kisatchie and no one is appealing or challenging what they're doing. The key to that was getting all the interests together.

Lawsuits sometimes force that to happen. Hopefully that can happen through this process as well, in a better way, in that if all the interests come together and have a frank discussion on, all

right, let's find out what we can agree on. Because there are things we can all agree need to be done. Changes that may be needed to the current system, improvements, additions, things that can be focused on.

Quite frankly, in a lot of areas an incentive-based approach can actually be a good thing. It can encourage the polluters to think oh, they have to pollute and I get paid not to pollute. I don't think that's the situation with the Endangered Species Act private landowners. The landowners aren't doing bad things necessarily, they're still making valid choices with the rights they have. The incentive-based approach increasing cooperative conservation, I think makes sense in the Endangered Species long life situation. And that's something we ought to explore.

But even within the current Act, we spend more time in working with the business interests than we do working against them to find solutions and I've outlined a number of examples of that in my written testimony of where the Endangered Species problems they initially had became an opportunity to actually make things better for them and better for the species as well. We need to get a lot of folks together, address this process.

The Forest Service when they were looking at the new National Forest management rates pulled together a great meeting of over a hundred people, very balanced with the numbers and interests. And if they give us enough time to talk good recommendations that were agreed on, we would come up great recommendations. Instead, they didn't and they didn't listen to what we did say including folks from the industry.

I think you have the opportunity at these hearings to move on, come up with really competent solutions and I appreciate it. Thank you very much.

[The prepared statement of Mr. Vaughan follows:]

Statement of Ray Vaughan, Executive Director, WildLaw

As the nation's premier wildlife protection law, the Endangered Species Act (ESA) has received a great deal of attention. Designed to prevent the extinction and to assist in the recovery of the rarest creatures on Earth and particularly those in the United States, the ESA was the first major federal statute to attempt to save species for their own sakes, regardless of any measurable value to humanity. Although it is arguably the strongest of America's environmental laws, in reality, the ESA has done very little to prevent the mass extinction that is currently occurring throughout the world. Neither the economic apocalypse that some opponents claim, nor the wonder law that some environmentalists claim, the ESA needs to be viewed in a proper perspective that reveals its true strengths and weaknesses and its impacts.

There are indeed a limited number of full success stories under the ESA. The recoveries of the American Alligator, the brown pelican, the peregrine falcon, the bald eagle and a handful of other species can be credited to the protections provided by the ESA and the work of the Departments of Interior and Commerce under the Act. For each species that has recovered due to efforts under the ESA, however, there are hundreds of other listed species that have made very little or no progress at all; at best, the majority of species listed under the ESA are just barely surviving and have been given only a short reprieve from extinction. Further, for all those hundreds of species listed under the Act and protected somewhat by it, there are thousands more that await listing and protection. Indeed, a number of species have gone extinct while waiting to be listed and protected under the mechanisms of the ESA. Chronically under-funded, a situation encouraged by Democratic and Republican Administrations alike, the recovery efforts of the Fish and Wildlife Service under the Act often amount to nothing more than "too little too late" for most species listed

under the Act. Nonetheless, the ESA stands as the United States' best effort to date at preserving the biological diversity of the country.

On the other hand, critics of the Act claim that it has unnecessarily adverse impacts upon the nation's economy. However, these critics can cite no studies to substantiate this claim. From 1987 through early 1992, almost 74,000 development projects came into potential conflict with endangered species under the Act, yet only 18 of those projects had to be stopped. As Professor Oliver Houck pointed out, "The number of projects actually arrested by the ESA is nearly nonexistent.... Alternatives to avoid jeopardy included a mix of measures neither surprising nor in many cases very demanding.... Rather, they reflect the bare minimum of alternatives necessary to keep those species that are listed hanging on, unrecovered, for an indeterminate time." Oliver A. Houck, "The Endangered Species Act and Its Implementation by the U.S. Departments of Interior and Commerce," 64 U. Colo. L. Rev. 277, 317-23 (1993). During the later years of the Clinton Administration and throughout the Bush Administration, I am aware of absolutely no projects have been stopped due to the ESA.

Although the ESA will sometimes have an adverse impact on a particular project, the vast majority of economic projects experience no difficulty under the ESA; indeed, at least 99.9% of developments never have an ESA problem at all. In highly publicized instances such as the controversy over the Northern Spotted Owl in the Pacific Northwest, the real cause of any economic problems was gross mismanagement of natural resources, such as logging at unsustainable rates. Rather than causing job losses and economic impacts, the listing of the owl under the ESA was a consequence of resource abuse, just as the economic impacts were. Often, the ESA and the creatures it attempts to protect are used as a convenient scapegoat to hide the fact of years, even decades, of irresponsible wasting of natural resources. When the facts, rather than the rhetoric, are examined, there is no evidence that the ESA or environmental statutes and regulations in general have any detectible adverse impact on the nation's economy. Political scientist Stephen M. Meyer of the Massachusetts Institute of Technology found that environmental regulations have no perceptible adverse economic impact at the state and national levels. The states with the strongest environmental regulations had the strongest economies, and the states with the weakest regulations had the weakest economies. Meyer, Environmentalism and Economic Prosperity: Testing the Environmental Impact Hypothesis (M.I.T. 1992). This study also found that growth in gross state product during the 1980s was more than twice as high in states with strong environmental regulations than in states with weak ones. Construction jobs grew by 53 percent in strong states and fell 1.4 percent in weak states. The same correlation holds true for the 1970s. Further updates by Professor Meyer in more recent years find the same results. See his articles at http://web.mit.edu/polisci/faculty/S.Meyer.html.

This brief examination of the claims of both the supporters of the ESA and its opponents gives a better and more accurate perspective of the Act. The ESA is not some powerful, miracle law, and it is also not some kind of economic catastrophe, or even a hindrance. Instead, it is a singular statute that attempts to accomplish something humanity has not tried before through statutory means: the saving of other species for their own good, regardless of whether those creatures have any significance to humanity or not. As such a unique statute, the ESA attempts noble things; however, although the Act sometimes succeeds, it routinely fails in its mission to bring species back from the brink of extinction. In its mission as an emergency room, as a last ditch attempt to prevent extinction, though, the ESA is arguably somewhat successful, because although it has not recovered many species, it has temporarily prevented most of the listed species from continuing to slip into the abyss of extinction. For the person who has to deal with a situation involving an endangered species, it is important to keep the ESA in correct perspective and understand how it really works in order to avoid the exaggerations and self-interested propaganda that can beset an ESA case. Working examples of protecting wildlife under the ESA, and other federal laws, exist in the Southeast.

Basically, the ESA operates blind; there is little effort to see the interaction of various species and to plan for their needs together. As a last resort, the ESA has had, and can have, only limited success. The current state of the law in protecting rare species does too little too slowly, even if the Act and the agencies under it were fully funded. Yet the ESA is still the most important of the few laws we have that emphasize the value of something on this Earth in terms other than its benefit to humans. Further, the ESA is unpredictable and erratic in giving businesses an idea of how to operate. These reasons emphasize the need to make the ESA more efficient. The Act could use strong devices for protecting ecosystems and habitats instead of just protecting species one at a time. If our law provided, for example, that a certain number of Pacific Northwest old-growth forest ecosystems be preserved in

their entirety, there would be no need to go through the motions of individually listing and protecting species such as the Northern Spotted Owl and the Marbled Murrelet. Protecting the whole protects all of its parts, and such an approach would be more effective at preserving species and more efficient in handling land management problems and in alerting business as to where and how development projects could be undertaken.

The dismay that the survival of one species among all the countless millions of species in the world could stop a major project is fairly common, but it oversimplifies and minimizes the real idea behind the ESA. The point is not to save one species but to save all species, to protect the entire biodiversity of the Earth upon which all life, including humanity, depends. To developers it seems a small thing to sacrifice one species to their project and their economic interests, but the value of any species is beyond humanity's ability to measure, and what is in danger is not just one species, but the entire ecosystem of which that species is a part. Because of the emphasis placed on saving one species at a time, the operation of the ESA has fueled this erroneous viewpoint to some degree. Again, a change to an ecosystem/habitat approach would put the goals of the Act in a better perspective and allow for the protection of all components of an ecosystem at one time. Furthermore, economic survival depends upon the survival of healthy ecosystems. Since our entire economy is built upon the environment of the Earth, the loss of biodiversity cannot continue for long before a degrading environment leads to degradation of our economy and our own health as a species.

If this were about health care, it is true that the ESA emergency rooms do not work nearly as well as they should, but that is no reason to get rid of those emergency rooms or to make them even less effective. The current crisis points out the need to design, build, fund and operate effectively an ENTIRE health care system so that the need for emergency rooms is reduced and ill health is reduced.

Instead of continuing the interminable traffic jam of litigation over the ESA, people who work with the ESA need to focus on more proactive solutions to conflicts under the Act. We can remain entrenched in a warfare of wills between environmentalists who demand full implementation of the ESA, faults and shortcomings included, and business interests and an Administration committed to doing whatever it takes to maximize profits. Or we can try something else.

An excellent example of how the current ESA can work to assist development instead of hinder it comes from central Alabama. Developers want to build up the Exit 38 area on Interstate 85 in east-central Alabama, but they do not want to make it a typical exit development; they want a forward-thinking model of quality development that enhances (and is a gateway to) the unique historic heritage of the area (Tuskegee). In the very middle of the planned development is a stream that is designated critical habitat for three listed endangered species. In a normal situation, that could kill, or at least cripple, the plans for development. Instead, WildLaw showed them how this was a great and unique opportunity for a development that would HELP endangered species. The species, all mussels, are currently being hammered by illegal use of off-road vehicles (ORV) riding in the stream. Developing the area will close off access to the stream by ORV users. If the development is also well done in how it handles basic environmental issues (such as sediment, chemical runoff, etc.), as they already plan to do, enclosing the critical habitat in a greenway at the center of the development would IMPROVE the lot of these species, thus making the development a national model and a prime candidate for federal funding from politicians who want to see positive ESA solutions instead of the usual train wrecks, such as Alabama Senator Richard Shelby. Everyone involved in the development LOVED this message and now highlights the ESA issue as part of what they are doing instead of fighting it.

WildLaw could have chosen to litigate over the species and critical habitat at Exit 38. Instead, we chose to try to work with the developers involved. Because the developers were also open to working with us, a solution was found that not only makes things better for the species but also better for the developers' bottom line.

Now, development work throughout that area does not get past the initial planning without environmentalists being brought in and listened to. The paradigm of conflict and distrust is giving way to an era of trust and cooperation. Development and sprawl WILL happen; no willful and unrealistic wishing will stop it, and no stretching of existing law can stop it. The best we can do is guide sprawl and development away from the best remnants of habitat and toward better ways of impacting the environment. Any claims to the contrary are fantasy.

Swift and favorable resolution of potential ESA conflicts begins with early recognition of their possibility. Development projects and other economic activities often give early consideration to possible problems with zoning, geology, labor, architectural requirements, materials availability and costs, transportation availability, real

estate costs, water, sewer and electrical infrastructure, and many other possible factors and events that may impact a project. With increasing environmental problems and public awareness of those problems, many business activities now regularly screen for potential hazardous waste problems, toxic contamination difficulties, ground water impacts, surface water pollution concerns, public perception issues, and a host of other possible environmental impacts. With the increasing sprawl development of wildlife habitat and the rapidly increasing rate of species extinction, both in the United States and worldwide, consideration of potential ESA conflicts early in the stages of a planned project is not only prudent business policy but also good public relations material. Redesigning the ESA to encourage more such wise and early planning of development with the impacts to wildlife and biodiversity in mind would be helpful.

But it is absolutely amazing how many development interests NEVER give consideration to these matters. If business interests would be willing to see environmentalists not as natural enemies, they could learn from and profit from the expertise and knowledge of those who work to protect rare species. If environmentalists would be willing to see themselves as something more than just litigators and "warriors" for a dying cause, they might be useful.

Many ESA problems occur long after a project has begun and progressed some way towards completion. Architectural, building supplies, and construction labor contracts are worked on and considered long prior to work starting on the ground, but often, possible wildlife issues are never considered. One would never begin building a 20-story condominium if the architect had only completed a rough sketch for the first floor; one needs to know all the possible architectural issues and engineering challenges before one begins pouring concrete. With the ever increasing depletion of wildlife species and their habitats and the increasing demand for development space, wildlife and ESA conflicts will grow, and the smart business will prepare for them as they would any other reasonably foreseeable event.

Mainly, one's chances of having an ESA problem are still very slim. The overwhelmingly vast majority of projects simply never have a potential ESA problem, and the vast majority that have a potential problem are shown not to harm the species in question and are not hindered. The rarity of actual ESA conflicts with developments show that the Act does not cause any major problems to the economy; however, the prudent business person can take a few simple steps to virtually insure that a conflict will not arise and derail a specific project. As these conflicts increase in the future, such prudence will reward those who know the workings of the ESA and are prepared for such problems. Making the ESA more proactive would also help head off and solve more of these problems as they grow in the future.

One major weakness of the ESA that both proponents and critics agree on is that the Act's focus on individual species causes it to be less effective and to give business interests less warning of possible conflicts. Focusing on individual species is an emergency room approach that tries to save a species only after it is already on the brink of extinction. An emphasis on habitat and an ecosystem-wide approach to preserving biodiversity could lead to a more efficient ESA. America would be stupid to base our entire human health care system on emergency rooms alone, but we do that for our wildlife health care system. Identifying ecosystems that need preservation will enable preservation of all the species in those environments before they each reach the edge of extinction. Further, a habitat approach will give more consistent warning to business of where development projects can, and cannot occur. Knowing the habitats that are protected will give development interests more continuity, simplicity and predictability.

Still, the ESA in its current form can work much better that it often does; the problem is not in the law but in the attitudes and actions of people. Several general points on handling an ESA problem under the current law are: (1) full cooperation in the consultation process will normally speed up and facilitate a favorable result. (2) The hiring of "experts" to say what one wants them to say rather than speaking the truth and dealing with it does not help. Hire only the best and have them work with the Service rather than taking an adversarial approach. (3) Taking an adversarial stance with the Service increases negative media exposure of the project and increases the chances that environmental organizations will become involved. Environmental groups tend to look favorably upon the Fish and Wildlife Service, particularly the Service's field personnel who do the real work of wildlife conservation, and are naturally suspicious of any development that will have an impact on a rare species. The lack of full disclosure and cooperation makes the environmentalists believe that the project is harmful, even if it is not. If a project is not harmful to a species, cooperation, not confrontation, will prove that point and allow things to proceed. If the project turns out to be harmful in some unexpected way, then

cooperation again allows for a speedier and better result by showing the developer's sincerity and willingness to adapt to the needs of the listed species.

Consider the habitat conservation plan (HCP) submitted by International Paper (IP) on the Red Hills Salamander. The Red Hills Salamander lives only in a specific hillside habitat of the Red Hills of southern Alabama; it is such a unique species that it is the only member of its genus. Most of the salamander's habitat is owned by a number of large timber companies. The first company to request a ' 10 permit and to submit a HCP on the salamander was IP. Instead of hiring a biologist who would just say what the company wanted him to say, the company opted for hiring a member of the Alabama Natural Heritage Program who was widely respected both by Fish and Wildlife Service personnel and by environmental groups. Instead of hiring the best "biostitute" they could find, IP hired the undisputedly best field biologist in all of Alabama. Wanting to know the truth rather than wanting just to hear what seemed least expensive for the company, IP allowed this biologist full access to its property and its records on the salamander and its timber practices. The result was a report that no one questioned as to its accuracy and completeness. Basing its HCP on that report and adopting most of the biologist's suggestions, IP came up with a good plan. The Fish and Wildlife Service was pleased with the HCP, and the world's top expert on the salamander, while not as pleased, found it acceptable. Environmental groups who were watching the salamander and IP's actions found the plan acceptable, and IP got its permit without a contest. IP's open and cooperative attitude along with full opportunity for the environmental community to participate produced a swift and favorable result for the company and an improved situation for the salamander. Because no one was actively surveying and managing their timber lands for the salamander, IP's HCP would set a standard for the other companies when they requested their ' 10 permits. Thus, before IP's HCP, the salamander's condition and future were uncertain; after IP's HCP, the state of the species was better known, its habitat was better protected, and IP was shielded from potential ' 9 liability, all without any difficult media or court confrontation.

In an opinion piece in The Wall Street Journal, Mark Suwyn, the executive vice president of IP's forestry and specialty products division, stated that IP took great satisfaction in developing the Red Hills Salamander HCP. Suwyn, "We Saved the Salamander—But It Wasn't Easy," The Wall Street Journal (November 29, 1993). However, he noted that the success of IP's HCP was due to the company's great financial assets, and he surmised that small land owners might not be able financially to go through the HCP process, thus leaving themselves exposed to possible § 9 liability if they proceed or economic loss if they do not. The Service has found successful ways to "group" small landowners into one HCP process, such as the red-cockaded woodpecker HCPs for entire states such as Georgia, which then eliminates the vast bulk of expense and difficulty for smaller landowners. While such groupings will not work for every species, they do work for wide-ranging species that have well-known habitat needs. Information on the success of that approach for the RCW can be found at "Georgia's red-cockaded woodpecker Safe Harbor and Habitat Conservation Plan," http://www.ncedr.org/casestudies/hcp/georgia.htm.

In all honesty, it must be stated that for every successful HCP I have seen, I have seen at least twice as many that failed utterly to do anything to protect or enhance the welfare of wildlife. The HCP process CAN be used successfully, but it has also more often been abused.

Although there are a few small fringe groups that do take contrarian positions as a rule, no matter what, the vast majority of major national and state environmental groups are not opposed to development. Any claims to the contrary are issued by those without any knowledge of how environmental organizations work or by outright liars. Most active environmentalists do not oppose development that is well-planned and that provides economic growth. Further, most environmental groups take reasonable stands on development issues, and if they can be shown that a project will not have significant adverse environmental impacts, most will not oppose it. Knowing this, the developer who confronts a potential ESA conflict should engage in active cooperation with the environmental community rather than in reactive confrontation. Indeed, environmentalists have real and unique knowledge that can not only avoid a conflict but also might make the business more money in the long run.

Where does the ESA go from here

The Endangered Species Act has been due for a reauthorization since 1992, but the numerous controversies surrounding it have preventing any changes from being made to the Act. The ESA needs a strong reauthorization which focuses on recovery, not just the survival of listed species, and that will shift the focus more toward ecosystems and entire habitats instead of just a species-by-species piecemeal approach.

Currently political realities make real improvements to the ESA very difficult, at best.

Litigation under the ESA as it exists now seems destined to continue. WildLaw has filed a share of the cases under the ESA, especially in the southeast, but we have always tried to be careful and very strategic in deciding what cases to file and when. We have sought to protect either critically imperiled species or umbrella species such that protecting them would protect many other species and much habitat. A key example was our nine-year fight (consisting of three lawsuits) to get protection for the Alabama sturgeon. Protecting the Alabama sturgeon protects the entire Alabama River from unnecessary water withdrawals. What water withdrawals are we talking about? Atlanta's plan to withdraw up to 90% of the water in the two main tributaries of the Alabama, the Coosa and Tallapoosa Rivers; the usage of water from the rivers by Alabama and its industries does not harm the fish. The Coosa River has already experienced the largest mass extinction documented in American history, the loss of more than 60 aquatic snails and mussel species due to the construction of the string of dams on it by Alabama Power in the early 1900s. Far from being a burden on economic development in Alabama, the Alabama sturgeon is literally the state's last hope for legally limiting the endless sprawl of Atlanta that, if fully realized, would mean the destruction of Alabama's economy. Try running and growing a state's economy on 10% of the water that the state used to have.

Other litigation, however, does seem more of an exercise in ability than in reality. The ESA does have set timelines for making decisions, and a case over a failure to meet those guidelines is generally an easy case to win for an environmental group. Many lawsuits under the ESA do appear to be nothing more than grabs at "low hanging fruit," without much, if any, consideration of the strategic and even biological values to be won. Has too much litigation been filed under the ESA? Absolutely, BUT that litigation is NOT the problem; it is a symptom of the problem.

The problem is that we, as a society, have not decided yet whether we care enough about God's other creatures, and even about our own species' long-term environmental and economic health, to address fully what has to be done to protect biodiversity in the United States and the world.

But what can be done right now with the ESA? Due to too much litigation and the constant refusal of the Administration and Congress to give the Fish and Wildlife Service the funding it really needs to do its ESA adequately, the Fish and Wildlife Service is caught in a vice grip. This impasse can be broken one of several ways: (1) Congress can adequately fund the work under the ESA (that will most likely never happen, especially since the agency never asks for anything within two orders of magnitude of full funding), (2) environmentalists and business interests can find ways to try real solutions to species problems so as to avoid ESA showdowns (some of this does occur, as seen above, but not nearly enough), (3) Congress can fundamentally change the ESA so as to eliminate these legal problems (but that would increase the ecological problems for rare species), or (4) Congress can bring ALL the stakeholders together to find ways to truly improve the ESA to make it better at protecting biodiversity while not harming economic interests.

Option 3 seems popular on Capitol Hill right now, but "reforms" that are really just quickie political tricks to thwart legal problems will not make the real problems go away. Option 4 is the only one with a chance of actually doing something positive, both for imperiled species and for the long-term health of the human economy. Here are some of my random ideas for starting option 4:

In February 2003, the U.S. Forest Service brought together approximately 100 interested people to discuss options for protecting biological diversity on the National Forests under the new National Forest Management Act regulations. I was one of the participants in that workshop and the only environmentalist/conservationist who gave a presentation at it. While the agency ultimately ignored everything this group suggested, the people and the balance of types of people (agency, industry, scientists, enviros, etc.) at that workshop was excellent. No party of interest could claim not to be adequately represented there. Given a few more days and a real mandate to find common ground solutions to problems on the National Forests, I guarantee that that group would have found at least a handful of common sense solutions 98% of everyone would have agreed with. The agency could have then moved forward on those consensus items and left more contentious issues aside for the time being, thus accomplishing much needed work in the public forests and reducing litigation significantly. The Forest Service chose to go another route and now remains mired in litigation, most of which it loses.

Before Congress goes about changing the ESA in ways that people "think" will improve it, why not pull together the best minds and all the interested parties and task them with finding solutions, with finding changes that make sense for us to

agree to try? Changing the law just to change it in response to litigation will result in one thing, more litigation to find new ways to use the law in litigation. As long as the Endangered Species Act exists, a conservative judge somewhere (and I mean a real conservative) will require the agencies to do something. Once they have to do something, people will litigate over that something endlessly, so long as the underlying conflicts exist. You cannot give agencies unbridled discretion in an attempt to make them untouchable in court. Unbridled discretion is totally anathema to the conservative ideal of limited government. Thus, a true conservative judge, not a "liberal" one, will be the one who will resurrect the litigation wars over the ESA if all you do is amend the Act in an attempt to limit litigation. I have practiced in front of more than 100 judges, and the ones who do the most to enforce the ESA the strongest are ALL Reagan and Bush I appointees.

If and when such a brain trust on the ESA is convened, my humble suggestions for ideas to consider follow: It seems to me that the two driving forces need to be: (1) what will work better to improve the survival chances for rare species (the current system has hit a wall trying to be an emergency room and nothing else), and (2) how can (1) be accomplished in ways that give incentives to private landowners and interests to assist in species conservation and that do not penalize people for using their land in otherwise legal ways.

As a private forest landowner myself, I feel that, on the private lands side of the ESA, all punitive measures need to be removed, except for direct, willful killing of a listed species (such as shooting a bald eagle). Indirect takings of listed species need to be made noncriminal and non-illegal civilly, but tied to some tracking/study mechanism so we can learn just how much damage those things (like development, timber harvest, etc.) really do or do not adversely impact species. We could set up a system whereby if landowners, developers, etc., agree to report all the impacts from indirect take (such as the bald eagle leaves its nest due to the construction of condos next to the next tree), their activities are permitted and they have full immunity from all such takes and harm. The agencies' budgets and abilities for doing such monitoring would have to be enhanced. Underfunding these agencies is a key reason for the problems (especially the litigation) we face now.

Thus, permitting would not be the convoluted mess it is now trying to modify development plans to minimize impacts, but a swifter process that notifies the federal agencies and then sets up monitoring by those agencies for scientific purposes; once monitoring plans met requirements set in the Act or by regulations, the permit would be automatic. All this would be tied to an incentives program (such as tax credits, assistance programs, conservation easements and their tax breaks, etc.) that would reward private landowners and developers for doing more than the minimal monitoring program, such as setting aside areas for the species, changing plans to minimize impacts, etc. Direct takings, such as shooting or trafficking in listed species, would be much more aggressively funded, pursued and prosecuted.

To make up for lessening species protections on private lands, protections of species on public lands would need to be increased by beginning ecosystem monitoring and restoration/conservation programs that would look to harmonize management with doing minimal harm to species and preventing more species from needing listing. Basically, we need to move away from the emergency room only approach of the current law and build a health care system for critters (although the emergency room would still have to be there to some lesser extent). This would be tied to a larger and more targeted land acquisition/conservation easement program to gain key lands and ecosystems into public protection from willing sellers.

Efforts to restore degraded public lands would fit in well with increased ESA protections for species there. A national model of success on protecting wildlife on public lands can be found in the National Forests of Alabama. In 1992, the National Forests in Alabama were the WORST of the forests in the whole Forest Service system; they violated every federal law as often as they could in order to "get the cut out." Yes, it did take a series of lawsuits, appeals and other legal actions to finally shut down all illegal logging in the National Forests in Alabama in 1999. Since then, however, the leadership of the Forests and much of the staff changed. Instead of continuing the fights over bad management, they decided to meet with us and see if we could find agreement on solutions for good management.

Now, all the National Forests in Alabama are implementing scientifically-valid restoration programs, all of which were prepared under (and in full compliance with) the 1982 NFMA regulations and the ESA. These restoration programs are immensely successful. Being the first to do this new type of restoration work, the Conecuh National Forest prepared a full Environmental Impact Statement (EIS) on what restoration is needed for that forest's unique Longleaf Pine/Wiregrass ecosystem (the rarest forest type in North America) and on what work could be done in five years to correct past mismanagement and restore the natural and healthy

forest native there. That restoration plan was not challenged legally in any way and succeeded, and it has won national awards. National Forests in Louisiana, Florida and parts of Mississippi are also doing great work at Longleaf Pine restoration, all in compliance with NFMA and the ESA. Survey data on threatened, endangered and sensitive species is being collected and analyzed. Public participation is open and good. NEPA analysis for most of these projects is exemplary and does not slow down the agency at all. Indeed, these forests have found that doing NEPA analysis right, instead of trying to shortcut NEPA, makes their final decisions better and more successful. The same could work for the ESA.

I personally do not oppose revising the scientific standards portion of the ESA, SO LONG AS the scientific standards that are adopted are indeed SCIENTIFIC, and not political in design. Why not convene a blue-ribbon panel of scientists from many perspectives and with credentials that no one from any side could attack and have them develop standards for listing, delisting, critical habitat, recovery plan designs, etc.? As for critical habitat, I would make its protections stronger on public lands and, for private lands, make it advisory, so that it guides conservation efforts (like land acquisitions, conservation easements, local planning, incentive programs) but has no actual limiting impact on private landowners. Indeed, if the incentives package is designed well enough, having land designated critical habitat would actually be an economic boost to a landowner, if and only if, they decided to make advantage of it. If they wanted to pave the critical habitat over anyway despite the incentives to do something better, they could do so freely.

And further, because every species is a unique and special creation of the God who made us all, perhaps we should not be so cavalier about those that have passed into extinction at our hands. We should not forget so easily. We should do something to remind ourselves and recommit ourselves to doing a better job of stewardship with what the Lord has given us in trust for future generations. As we have memorials to every war, so the brave dead and the lessons of that war are not forgotten, just as we have the Civil Rights Memorial in my home town of Montgomery, so that those who gave their lives for equality are not forgotten, perhaps we should erect a fitting monument to the species that have gone extinct during our watch. As my friend Professor Dan Rohlf said:

> "Society remembers things for many reasons, not all of which are pleasant. Wars, calamities, and episodes of genocide are seared in society's collective memory in museums, memorials, books, and other cultural expressions, in part to remember victims, and in part to remind society of the tragedy and horror of these occurrences in an effort to prevent similar ones in the future. However, there are few, if any, reminders of extinct species. Therefore, as Cokinos points out, people quickly and unfortunately become accustomed to a biotic landscape that no longer has clouds of passenger pigeons (*Ectopistes migratorius*) numbered in the millions or billions, or huge ivory-billed woodpeckers, called by some the 'Lord God Bird,' drumming on huge trees deep in Southern swamps. Other monuments have demonstrated the power of a simple list of names of the fallen as a spare, yet potent, means of keeping memories and knowledge alive. A list of extinct species could perhaps do likewise. It may be an uncomfortable reminder of human and agency failures. Yet it would almost undoubtedly serve as a source for interest in species that no longer exist, and in the causes of their demise. And with this interest, increased resolve to protect and restore the biosphere's biological heritage, and thus hope for the future of all species on the threatened and endangered lists, may follow."

Daniel J. Rohlf, "Section 4 of the Endangered Species Act: Top Ten Issues for the Next Thirty Years," 34 Envtl. L. 483, 552-53 (2004).

The ultimate issue comes down to: what is it we want to accomplish here? Do we want to find solutions to improve the environment and the survival of God's special creatures, and thus improve the long-term chances of the survival and advancement of our own society and economy? Or are we just going to keep playing expedient, short-term political games with extinction, something all sides and people involved (including me) are guilty of?

I deeply appreciate this opportunity to address the Committee and present this testimony before it. I remain committed to working with the Committee's members and staff to find real solutions for making the ESA a better and more effective law. Representative Joe Barton has publicly invited environmental groups "to come out of the trenches" and meet y'all halfway. If that invitation is truly sincere, as I believe it is, I am here to do that.

Thank you,

Response to questions submitted for the record by Ray Vaughan, Executive Director, WildLaw, 8116 Old Federal Road, Suite C, Montgomery, AL 36117; 334–396–4729; 334–396–9076 (fax); www.wildlaw.org

QUESTION SUBMITTED BY CHAIRMAN POMBO

1. *You expressed a willingness to explore ways to improve the science used in ESA determinations. One of the issues with regard to the adequacy of scientific data is that the science, used whether it pertains to a not likely to adversely affect determination or a determination to list a species, although perhaps the "best" available science, may be extremely limited. Can you suggest terms that define some minimum threshold of data that could be required for making determinations that would reduce the incidences of future data revealing that determinations, as a result of incomplete data, were incorrect, diverting scarce conservation dollars and increasing conflict?*

RESPONSE:

It seems that you are considering only a part of the interaction of science, law, and policy as these disciplines come together in implementing the ESA. Accordingly, when one looks at only part of a problem, the sorts of solutions that one might design to deal with it may not work very well, and could even backfire. I am the last person to suggest that the ESA does a very good job of properly integrating law, policy, and science, but it does better than most other environmental laws. However—and this is an important however—I think that trying to set legal standards for science in a vacuum, i.e., without systematically considering the respective roles of science and policy in constructing a biodiversity protection regime, simply does not and cannot work. That's the main problem I have with last year's bills that sought to set scientific standards for listing and other determinations under the Act. Given the way the Act currently works, those bills are simply ways to make it harder to list species or protect them under section 7, with a "good science" label but without any real basis in science and without any real decision on what we want the public policy of the ESA to be.

Courts have interpreted the ESA's "best science" mandate to simply require that the agencies consider all available scientific information that is relevant to the determination at hand. Courts have generally not required the agencies to give certain types of info more weight than others as a matter of law, but instead have allowed the agencies to use their expertise in deciding how much credence to give all the various bits of info. Unless Congress wishes to pursue policies that are different from those currently expressed under the ESA—or unless Congress is willing to undertake a much more comprehensive effort to better integrate science, law, and policy under the current version of the law—I think the existing science standard is still the best one possible.

The question implies that it is somehow bad to make decisions in the face of incomplete data, when in fact, given our limited knowledge about other species, we are virtually ALWAYS going to be making decisions under the ESA with incomplete information. Indeed, we do that in every area of life; if one had to have complete, peer-reviewed data upon which to base stock market decisions, the economy would collapse instantly; no one would ever buy any stocks. Since scientific uncertainty is going to be a given, the question is what to do at that point. The ESA's current answer—i.e., use all available information to make the best decision given what we know—seems to me to be a sound approach. The alternatives lead to policy choices that are arguably less than optimal. If we say that we should act cautiously whenever there is uncertainty, one could make an argument that we'd have to protect most species most of the time, thus incurring social costs that many people will likely be unwilling to bear. On the other hand, when one starts imposing requirements for information greater than the current "best science available" standard, the burden of uncertainty works against species conservation.

For example, one could require that any restrictions on human actions be justified by peer-reviewed studies in order to cut down on instances of unduly restricting human actions. However, this sort of policy could justify allowing people to cut down all the trees near the area in which the ivory-billed woodpecker was spotted since there are NO modern peer-reviewed articles discussing the habitat requirements of these birds. In other words, I think that imposing a higher data standard on listing and similar decisions (at least standing alone) is essentially just a policy choice to make it more difficult to protect species.

There is an obvious solution to the "problem" that more data in the future means that we may realize that some decisions we made in the past were wrong: change the past decisions based on the new information. Perhaps delisting due to new information showing that the original listing was not needed could be put on a faster

track than delisting due to recovery. Yes, that might mean that in some instances we will protect species that did not need that degree of protection or did not need protection at all. But one must also realize that it works the other way as well; there are many instances (in fact, I think there are actually more instances) when we use the best info available to decide NOT to protect certain species, or give listed species certain limited protections, and we later learn that we should have provided more protections. Our recent case over the Florida Scrub Jay proved this; it was listed as threatened and only certain actions were taken to protect it, and then the population collapsed and fell by half. It should have initially been listed as endangered and given more work on its protection and recovery.

In other words, the ESA at present incorporates a sort of adaptive management approach—do the best we can with the info we now have, and change if we get better info that suggests a different course. That seems sensible to me.

Nonetheless, I think that things can be done to make the utilization of the "best science available" standard work better and lead to less conflict. Keep the standard just as it is, but add a layer of administrative appeals to ESA work (like we have with the Bureau of Land Management, Forest Service, EPA, etc., but designed better to fit the ESA context and needs) and provide for the administrative appeals process to include a peer-review panel (only if quality of science is an issue on the appeal) to review whether the agency did use the best available science. The job of the panel would not be to reinterpret the data but merely to see if the agency had it and considered it reasonably and not arbitrarily, deferring to the agency on interpretation.

The panel would determine only IF the agency had and looked at the best available science; it would not second-guess the conclusions from that agency review. The only power of the panel would be to say whether or not the agency missed anything, thus solving, at least for that moment in time, the issue of whether the data was incomplete. All the legal conflicts I have seen over listing have not been about "the agency used all the available data but the data turned out to be wrong" (that has been used later as an reason for delisting), but the actual conflicts over listing, AT THE TIME OF LISTING, are almost always over the agency ignoring or refusing to look at some data or research. It is usually either environmentalists or industry folks claiming the agency ignored something favorable to them. The panel review during appeal would say whether or not the info at issue was available science that was ignored or not. If yes, the decision would be reversed and the agency tries again. If not, then the agency's decision based on the info is deferred to. And having such a panel would make a judge's job later easier, as he would not have to determine if something proffered by one side was or was not science the agency should have reviewed, as he could defer to the panel saying that the best available data was reviewed.

Thus, the issue would be the same thing judges decide now but it would be in the quicker, cheaper, less confrontational administrative appeal/mediation process first. Also, instead of a judge deciding the "best available science" was used, when few, if any judges, have a science background, you would have actual scientists making that review decision. That decision would then be due even greater deference by any courts that later might review the issue than the deference the agency gets now.

I think a well-designed appeals process (not a full trial de novo like some agencies have but also not a nearly meaningless perfunctory review, like the Forest Service has) would go a long way toward resolving many of the issues over the ESA right now.

Also, another thing I think worth suggesting is, just like I think we should have a big committee of all interests to work on solutions and changes before a bill is drafted, perhaps we should also have a balanced committee of scientists to ponder this question and find some possible improvements.

QUESTIONS SUBMITTED BY SENATOR CRAPO

2. *You state that in February 2003, the U.S. Forest Service brought together approximately 100 interested people to discuss options for protecting biological diversity on the National Forests under the new National Forest Management Act regulations. Did you find in that experience (and in other experiences) that federal agencies are able to promote collaborative solutions through such large group exercises?*

RESPONSE:

The February 2003 viability conference COULD have been a major step forward in resolving issues over the management of the National Forests. Yes, the agency did a great job of bringing the group together, but then the agency hamstrung the

mission of the group by artificially limiting the work to two options no one (in industry or environmentalists) really supported. Then, when the group spontaneously broke out of the mold the agency had put it in and starting working on finding common ground solutions, the Forest Service cut off that process and ignored any work done.

I have been in other, smaller (but longer) collaborative processes run by agencies that worked very well, such as the multi-year development of valid restoration programs in all the National Forests in Alabama. That worked due to the commitment of the agency people involved to ensure full public participation and open discussion of ideas. No top agency people led on that, but the local staff were given free rein to lead and they did.

On a forest-specific scale, the Conecuh National Forest has run a collaborative monitoring process of its Longleaf Pine restoration work for about five years now, bringing together environmentalists like me with industry people and state wildlife personnel. That has worked well.

So, I think agencies ARE capable of promoting and managing collaborative processes that can lead to collaborative solutions through large group exercises. The issue is really whether they WILL do so. Thus, leadership must come from somewhere. I don't think many top agency people in any agency will exercise such leadership. If Congress explicitly provided that leadership, I think we can do something positive with the agencies. I think the agencies can manage and maintain a fire, but they will not provide the spark to start that fire; Congress needs to do that.

3. What roles for state wildlife agencies do you see as helpful in a comprehensive wildlife conservation policy?

RESPONSE:

State wildlife agencies are vital to any successful wildlife conservation policy, but so many of their staff are trained in game species with few experienced in dealing with the issues involving rare species. Still, even state wildlife people who know little about rare species understand the basic premise and need for protecting habitat and how protecting the whole usually protects the parts, and they should be able to integrate habitat and rare species protection information and work into their existing programs with little problem, provided they are given the resources to do that. Given additional resources to broaden their abilities to deal with rare species management, state agencies would be vital and key focal points for implementing incentive programs for protection of rare species and habitat on private lands.

Currently, the U.S. Fish and Wildlife Service does not have much "local" presence with private landowners while the state agencies do but that presence is mostly limited to game species management. Finding ways to better combine the expertise of federal staff with the contacts and local knowledge of state agency staff would be critical to making incentive programs work on private lands.

4. All of the panelists spoke of contributing time and money to species conservation—some more willingly than others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground—would you be better off?

RESPONSE:

It is always tricky when talking about "investment" giving one person or entity greater access and say on an issue of public concern paid for with public dollars. Still, many problems (and then litigation) have arisen from situations where one side or the other did not feel that the process the agency used was fair and open to all who were interested. When industry people have direct access to the Secretary of Interior (getting to meet with the Secretary several times) during a listing process and environmentalists like me do not get even the chance to talk to the Secretary even on the phone (as happened with the Alabama sturgeon listing process), obviously something is wrong. When the agency listens to certain scientists but ignores others, something else is wrong.

Certainly, everyone would be better off with a CLEAR and SET procedure for how the agencies handle listing decisions and how public participation works in that process. This would not really require a change in the Act, but clear agency regulations on how this works would help. If the agency won't do that, then the only change required in the ESA itself would be for Congress to mandate the adoption of such regulations and what they must include. The FWS does not have such detailed rules while some other agencies do. When the Forest Service proposes a timber sale, I know exactly what the process is they will go through and when and how I can become involved as a member of the public. And Congress had to direct the Forest Service to adopt such rules.

At the most basic level, only those people interested and affected by an ESA issue get involved in the processes under the Act; thus, they have already demonstrated

"investment" of time and often money. A better and clearly defined process for how listing petitions are handled and how decisions are made would make everyone better off. Again, a well-designed administrative appeals process for listing decisions would also provide a needed check on any abuses in this area, thus heading off much of the current litigation.

As for allowing those people or entities interested in species conservation to actually take part in more agency-specific actions, such as hiring scientists, planning recovery and taking other on-the-ground actions, diverse and cooperative participation in such work is usually helpful, in my experience. The agencies can make cooperative agreements now with states and other partners, but this has not been used much, in my experience. While able to do such things now, the agencies have no directive from Congress to mandate, or at least encourage, such partnerships. I have seen recovery plans developed with multi-party participation, including on developing science needed for the plan. A mandate from Congress that the agencies adopt and try such a cooperative and open public process in the development of recovery plans and actions might make sense. Then those who are interested would invest time, and if they could, money, and get to participate. If someone did not choose to participate, then they would waive their ability to participate or complain about the results. If one participated but still did not like the results, their options to appeal the plan or challenge actions under it would still be available to them, but such an open process should improve recovery plans such that litigation over actions under them would have less viability than it does now. If no one showed up, then the agency could go ahead and do the plan themselves.

Thank you for the opportunity to answer your questions further, and I remain ready and available to you and your staffs to work on the ESA. Feel free to call on me or write me any time.

Thank you,

The CHAIRMAN. Thank you. Mr. Davidson.

STATEMENT OF PAUL DAVIDSON, EXECUTIVE DIRECTOR, BLACK BEAR CONSERVATION COMMITTEE

Mr. DAVIDSON. Thank you for the opportunity to be here today, Congressman, Senator. I had planned on giving an eloquent presentation but couldn't get the technical aspects of it ironed out. I figured out about 15 years ago people would rather look at pretty pictures than me. But we're going to have to endure, deal with me today, I'm afraid.

I am Paul Davidson. I'm Executive Director of the Black Bear Conservation Committee which is a diverse coalition of interests. We've been working together for the last 15 years to recover the threatened Louisiana black bear. The membership of the Black Bear Conservation Committee represents as diverse constituents as I guess you possibly imagine from Sierra Club, Audubon Wildlife Federation to the Cotton Growers Association, The Farm Bureau, the Louisiana Forestry Association, all the major timber companies in the region. And it has worked very well and I really appreciate Mr. Vaughan's comments about cooperative efforts because I think that the Black Bear Conservation Committee is probably one of the, certainly one of the best examples of what can happen and progress can be made when people work together.

The proposal to list the Louisiana black bear was made in July of 1990 which many of you know was the height of the conflicting controversy with the spotted owl and there weren't any interest in our region that felt that, you know, try to bring that sort of train wreck as it's been called, into this region was in anybody's best interest.

And in that way of thinking the Louisiana Forestry Association Wildlife and Recreation Committee hosted a committee meeting to

address the potential implications of a listing and talked about bears. They brought down Dr. Michael Pelton from the University of Tennessee who made a statement, that in order to preserve bears in the southeast would require a very coordinated and cooperative approach from the interest to who controlled the land. The public and private entities that controlled the land. That concept was embraced and the Black Bear Conservation Committee was formed.

We had some basic rules that we chose to go by and again put the resource first, leave your organizational vibes at the door, no confrontations regarding people—attack ideas, not individuals—and try to have a good time during this process. We felt we could keep these on the table, we made it fun, so we always had socials. We always took food and several cases of beer. So that did help create friendship among interests that historically are at odds and on the opposite side of the table.

Since that time we have made tremendous progress. Our primary mission is to restore the Louisiana black bear in Louisiana, Mississippi, Southern Arkansas and a good portion of East Texas, using education, research and habitat management. The primary reason that the bear got in trouble was original bottomland hardwood forest in the Mississippi River Valley, which was 24 million acres, has been largely converted to agricultural lands and was less than five million acres in 1990.

We initiated an educational program, created brochures, newsletters, we wrote a management handbook for landowners which essentially was EMP'd from the Mississippi Forestry Commission that we published and distributed to landowners. The initial printing that was 10,000, the next one was 6,000 and we have 5,000 in print right now. It was a big demand for that, had a lot of education about bears but it talks about the fact that management for bears is very compatible with most of the land and certainly with the public sustainable management. On the research front, if we're going to be educated about bears, we've got to know what's going on about bears. And because we've had all the people at the table we're able to keep up with the research as it is done on a day-today basis. We all get weekly updates from our researches. Primary research going on today, population assessments using DNA. We're repatriating projects. The delisting criteria for the Louisiana black bear mandates that we have connective habitats between populations from Arkansas to the Gulf of Mexico, that we have this evidence of genetic flow between re-existing populations and then some protective status of those habitats.

So, working with the official Wildlife Service, Natural Resources Conservation Service, the University, State agencies, we've delineated a habitat priority area of black bear priority area from Arkansas, and now incorporate a ranking where landowners in that region get up to 150 extra points on their numerical ranking with WRP projects. Such as there is actually incentive now for landowners having bear around is an asset, wanting a bear around is an asset. We have property owners asking to put bears around now. So we're working that aspect from the habitat perspective.

We're also moving bears back in population between the different populations which is embraced by the landowners. Because of these

incentives associated with WRP, we've got, since 1990, I guess, 365,000 acres have been reforested with CRP and WRP. And throughout the region, if you look at CRP, WRP with Parks, Fish and Wildlife and the thousands, tens of thousands acres that have been reforested for carbon infestation by utility companies, we're looking at a million acres in the last few years these regions have been planted back with trees. All from marginal and non-productive farm lands and high productive farm lands.

So, I guess my major point is people when they work together can accomplish a lot and there's been much said about cooperation which I think is absolutely essential. Things said about incentives what with being habitat restorations in our region relative to these Federal programs. I think we need to look seriously at endangered species conservation incentive programs.

How that would work, I think should be a combination of tax breaks, everything, every tool we have in the box should be investigated. I was really glad to see Dr. Greg Schildwachter here from Senator Crapo's staff. If I were to recommend someone who is competent to write and partner on the Endangered Species Act to help people in this country, Dr. Schildwachter would be one of them. I can assure you he has worked on a number of things over the years and I'm pleased to see that you are wise to have him on your staff.

Again, incentives, incentives, incentives, I cannot overstate that. I would like to say how with this cooperative program and project that we have in the 14 or 15 years since the listing of the Louisiana black bear, there have been no permits denied, no jobs lost, no landowner has not been able to do anything having to do with the land, that's talking about oil wells, we're talking about seismic, surveys, crops, timber harvest. Probably the biggest thing that got us going was the flexibility that the United States Fish and Wildlife put in the Act at the listing or put in the listing which was the 4(d) Rule that excepted normal agricultural activities from the takings provisions of the Act and that was criticized by some but it actually opened the door and the good faith effort by the Service and the timber industry and faced that as such and the timber industry has been a very, very willing and enthusiastic partner since day one.

So, again, people working together can accomplish just about anything, people working against each other can undermine just about anything.

I appreciate the opportunity to be here today. Any other information in the future you'd like to get from me on black bear conservation, please feel free contact us, thank you.

[The prepared statement of Mr. Davidson follows:]

Statement of Paul L. Davidson, Executive Director, Black Bear Conservation Committee

I would like to thank Representative Pombo and the House Committee on Resources for the opportunity to speak to you this morning. My name is Paul Davidson. I am the Executive Director of the Black Bear Conservation Committee (BBCC), an independent and diverse coalition of landowners, state and federal agencies, private conservation groups, forest and utility industry, agricultural interests, the academic community and other interested citizens working cooperatively to address management and restoration of the Louisiana black bear. I am also a landowner, the owner of EquiTerra Farm, LLC, a working farm growing a variety of

fruits and vegetables, and raising Belgian draft horses, Katahdin sheep, meat goats, pastured broilers, and laying hens.

As is usually the case when a species is proposed for listing under the provisions of the Endangered Species Act (ESA), quite a controversy was created over the proposed listing of the Louisiana black bear (Ursus americanus luteolus). Some thought that the listing was the bear's salvation. Others feared that the listing was going to place a heavy burden on private landowners, and still others felt listing was detrimental to the animal's well-being in that it could deny private landowners and wildlife managers the latitude, flexibility, and incentive necessary to manage for the bear.

In October of 1990, the Wildlife and Recreation Committee of the Louisiana Forestry Association hosted a meeting to discuss black bear ecology, management, and the implications of the U.S. Fish and Wildlife Service (USFWS) listing proposal. At that meeting, Dr. Michael Pelton of the University of Tennessee planted the seeds for a cooperative approach to managing for bears in the Southeast Coastal Plain by stating that a viable future for bears in the region would require a concerted and coordinated effort by the private and public agencies that control the land in occupied and potential habitat. The group adopted this cooperative attitude and the Black Bear Conservation Committee (BBCC) was formed.

Virtually all major groups in the region with an interest in bear management, conservation, research, or with land use in current or potential bear habitat, are active participants in the BBCC. The broad objectives of the BBCC are to stabilize and manage existing bear populations and to restore black bear to suitable habitat within Louisiana, Mississippi, east Texas, and southern Arkansas. Participants recognize that the best way to avoid any regulatory burden, whether perceived or real, is to actually restore bear populations to a point where the species is no longer threatened.

Extensive habitat loss and human exploitation are blamed for the decline in Louisiana black bear populations throughout their historic range. Black bears once occupied forested habitat throughout the region, but probably reached greatest densities in the expansive bottomland hardwood (BLH) forests of the Lower Mississippi Alluvial Valley (LMAV). Federally subsidized agriculture programs encouraged large-scale conversion of flood plain forests to agriculture. Unfortunately, these vast tracts are often marginal or totally non-productive as cropland. Unlike other parts of the country where there are considerable public land holdings, in the historic range of the Louisiana bear, 90% of the forested habitat is privately owned. Therefore, any action perceived to restrict activities on private properties has the potential to create adversarial positions relative to bear restoration efforts.

Recognizing that restoration of bears would require restoration of habitat, almost entirely on private land, it was clear from the beginning that private landowners would have to be involved in the program from planning through implementation if the restoration goal was to be achieved. To restore a federally listed species on private lands would require creating a situation where the species was not considered a liability to the private landowner. The BBCC had to create a scenario where it was in the landowners best interest, both financial and otherwise, to manage for bears and bear habitat.

To help achieve this goal the BBCC began by establishing five subcommittees: 1) Information and Education, 2) Habitat and Management, 3) Research, 4) Conflict Management, and 5) Funding.

As with most wildlife populations, the objectives and attitudes of landowners, land managers, and the general public will determine if a healthy bear population is considered positive or negative. The Information and Education Subcommittee works to promote the philosophy that a healthy bear population is an asset to the community and that with protection and responsible management, the black bear can coexist with other land use objectives.

Numerous PowerPoint presentations have been developed and are shown at forums throughout the region. A newsletter is published, three editions of a management handbook for landowners have been printed and distributed, along with a comprehensive restoration plan, a poster to help educate hunters about the protected status and associated penalties, and brochures to help educate the public about bears. Two tabletop displays are available for use in libraries, nature centers, weekend sportsman's shows and other events that educate the community. When the audience is appropriate, an effort is made to promote conservation incentive programs like the Wetland Reserve Program, Conservation Reserve Program, and Partners for Fish and Wildlife Program. All BBCC publications are available in the BBCC website at: www.bbcc.org

The goal of this BBCC effort is to:

1) Prevent further habitat fragmentation or loss,

2) Establish forested corridors between existing forested habitat,
3) Coordinate management among tracts to effectively use resources, and
4) Focus efforts of a diverse user group toward common management objectives that benefit the bear as well as the local communities.

For the past two years, the BBCC has received funding from the USFWS Private Stewardship Grants Program to plant trees and enhance habitat on private lands in Louisiana. In 2003, a grant for $85,200 was received to plant trees on 860 acres. In 2004, $65,800 was received to plant trees and control exotic plant species on Louisiana salt domes and other lands in coastal Louisiana.

Management recommendations are based on science and the best way to obtain this information is through research. The Research Subcommittee identifies research objectives and works to coordinate them to avoid duplication of efforts and to keep scientists working together. The primary areas of interest have been: habitat assessment; ecological data; population data; systematics; and repatriation to suitable habitat.

Groups involved in research projects are the USFWS, Louisiana Department of Wildlife and Fisheries, Mississippi Department of Wildlife and Fisheries, Arkansas Game and Fish Commission, Texas Parks and Wildlife Department, Louisiana State University, Mississippi State University, the University of Tennessee, and Virginia Tech. Various private and corporate landowners have been essential cooperators in all research projects and very little of the work would be possible without their support.

In the radio-telemetry work done in Louisiana, over 300 different bears have been captured and tagged. The major research project currently being funding is the repatriation of bears to unoccupied habitat in east-central Louisiana. Adult female bears with newborn cubs are moved from their winter dens in the Tensas Basin to prepared dens in lower Concordia and eastern Avoyelles Parishes. The intent of this work is to establish a viable bear population between two existing populations to speed up the recovery process. From 2001 to 2005, 23 adult females with 55 cubs have been moved to the repatriation area. Other research efforts focus on DNA hair snare work in the coastal population to determine the bear population and an effort to document the effectiveness of hazing nuisance bears with aggressive dogs.

Coordination of the activities of various state and federal agencies relevant to the bear is also an area that has required attention. The Conflict Management Team has been a key element in this effort. The USFWS, with input from the BBCC membership, drafted a "Contingency Plan for Dealing with Human/Bear Conflicts in Louisiana." The plan clearly delineates those parties responsible for resolving problems that may arise when bears come into conflict with human activities. The BBCC, working with the Louisiana Department of Wildlife and Fisheries, established a "Protocol for Dealing with Nuisance Bears." Since the BBCC is housed within the Louisiana agency, communication is efficient and effective. A very active and dedicated Conflict Management Team is committed to prevention and resolution of problem situations. Participants are the LA Department of Wildlife and Fisheries, USDA Wildlife Services, Louisiana State University, the BBCC, and USFWS.

The USFWS has provided funding to USDA Wildlife Services for electric fencing materials to exclude bears from apiaries as well as travel and labor expenses associated with nuisance bear problems. The Conflict Management Team has been very successful at working with local communities where bears are present. Most people, once educated about bears, will readily accept their presence and help to protect them. Since most conflicts with bears are associated with something to eat, this usually involves something as simple as proper management of garbage or feeding pets in areas not accessible to bears.

To take the management of problem bears to a higher level, the BBCC Executive Director and his wife, the LDWF Bear Biologist, purchased and trained two Blackmouth cur puppies in the spring of 2001. These dogs were trained to haze nuisance bears from around homes and workplaces. Since the development of a protocol addressing nuisance bears that involves the aversive conditioning with these dogs, 90% of the nuisance animals are not found in a nuisance situation again. The program has been so effective that other states and agencies are looking at replicating it in their states. The New Jersey Division of Wildlife has purchased three dogs and three others have been donated to biologists working for USDA Wildlife Services. A Louisiana State University graduate student is currently documenting the effectiveness of the dogs for a Masters thesis.

Funding for the BBCC has come from member organizations in support of their representatives for travel and meeting expenses. The timber and utility industries have provided funding necessary for printing of newsletters, brochures, and handbooks, as well as research support. A grant from the USFWS partially funds the activities of the Executive Director. An additional grant from the National Fish and

Wildlife Foundation provided the initial funding to establish the BBCC Landowner Assistance Program. That program is supported by other grants from foundations as well as corporate support.

Since July 1, 1997, the Louisiana Department of Wildlife and Fisheries has provided an office for the BBCC as well as covering telephone and postage expenses. This in-kind contribution saves the BBCC a considerable sum in operating expenses. Various timber companies allow the use of their properties for BBCC Board meetings at no cost as well as hosting social gatherings associated with BBCC activities. The overall in-kind contributions to the BBCC add up to many thousands of dollars each year.

Since its founding, the BBCC has had the primary objective of reversal of those factors that brought about the steady decline of the Louisiana black bear. The membership of the BBCC believes that it is possible to secure a place for the continued existence of the bear within its historic range.

The BBCC continues to actively solicit input from all parties that may be affected by a larger bear population and work with them to resolve potential conflicts. Without the support of the general public, and the landowner in particular, the goals of the BBCC can never be achieved and the Louisiana black bear will likely remain listed under the ESA.

This continued pro-active, inclusive, and cooperative effort will increase the probability of successful restoration of the Louisiana black bear and help establish a foundation for many other conservation projects. Developing working relationships with other conservation programs like the Migratory Bird Initiative in the Lower Mississippi Valley serve to build additional support for the BBCC effort.

The BBCC serves as a model, a means of resolving a resource management issue by encouraging input from all interested stakeholders, from the entire community. Priorities have been to put the resource first, to find common ground, to build coalitions while avoiding conflicts, to replace emotion with credible science throughout the management process, and to have a strong commitment to the achievement of the restoration objective.

By working together, the BBCC has had a positive impact on everybody involved and will, in the end, help restore a truly unique and magnificent component of our wildlife heritage.

None of this could be done without the full support of the USFWS, state agencies, timber companies and their biologists, private landowners, and many concerned individuals who sincerely believe that we need to look at things a little differently in a constantly changing social and political climate.

The BBCC has operated using what we call the Southern Rules of Engagement. These rules are:

1) Come to the table.
2) Leave your organizational 2 X 4 at the door.
3) Polarized opinion generates more heat than light and has no place at the resource management table.
4) Pick solutions, not fights.
5) Search for the most expansive common ground that is not intrusive.
6) Attack ideas, not individuals.
7) Differences of opinion can lead to enlightened decision making.
8) No personal attacks. One strike and you are out.
9) Have fun!

Response to questions submitted for the record by Paul L. Davidson, Executive Director, Black Bear Conservation Committee

Follow-up questions submitted by Chairman Pombo

1. *How important was the 4(d) rule in your efforts to conserve the Louisiana black bear?*
   a) *How would your efforts have been hampered if there were no 4(d) rule?*
   b) *Would the threat of more restrictive regulation reduced participation of private landowners?*

RESPONSE:

Without question, the 4(d) rule was extremely important in putting forth a "good faith effort" on the part of the U.S. Fish and Wildlife Service. The timber industry was very concerned that a listing for the bear would mean that they would have to secure permits for all timber harvesting activities, which could be costly. The rule allowed for "normal silvicultural activities" to be exempt from the "takings" provisions of the Act. Flexibility is inherent in the ESA, but too often not utilized. The

listing of the Louisiana black bear was the first time that section 4(d) was used for an exemption since 1973 when the law was passed.

Without doubt, our efforts would have been hampered without the rule. Forest landowners have been essential partners in all work being done in Louisiana and are eager to see bears restored and delisted.

It was actually the threat of regulation that brought all the diverse stakeholders to the table. Initially, many of the participants believed that we could show that we could get the job of restoring bears done without the listing. But once everybody started working together, it was obvious that we could actually get the job done, and done quite painlessly, effectively and efficiently.

We have been successful largely because of the incentives offered by the Farm Bill programs that pay to plant trees on marginal and nonproductive farmed wetlands. The beauty of it all is that what we do in the name of bears has tremendous implications on other species, water quality, groundwater recharge, floodwater retention, and atmospheric carbon.

People working together can accomplish remarkable results. People working against one another can bring all progress to a halt.

Follow up questions submitted by Senator Mike Crapo

2. *All of the panelists spoke of contributing time and money to species conservation-some more willingly that others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground-would you be better off?*

RESPONSE:

I think that species in peril would benefit to a large degree if the stakeholders were active participants. Without that participation, decisions that potentially impact local communities are made by someone hundreds of miles away in some office cubicle. That person may have no first hand knowledge of the impacts of their decisions. I hate to get too philosophical, but when our forefathers designed this democracy, their vision was to have citizens involved in the decision making process. Unfortunately, too many Americans have gotten lazy and found comfort in sitting back and allowing others to make decisions for them. In my opinion, that is why things don't work. This is not rocket science, but it can be complicated, often more from the social perspective than the science. We would all be better off with more stakeholder participation in the process of addressing imperiled species.

3. *Please elaborate on the point-reference system used as an incentive for black bear conservation under the Farm Bill.*

RESPONSE:

When the Wetland Reserve Program was first implemented, it took a "shotgun" approach to wetland restoration, planting trees in hundred acre tracts tens of miles from other project enrollments. Biologists looked at what was happening and felt that forest fragmentation was being promoted. So representatives from the state and federal agencies, universities, and NGO's all sat down and agreed that we needed a plan to focus the restoration efforts where they would do the most good. We had no idea at the time that WRP would be so popular and funded so generously.

Initially we looked at existing forested tracts and agreed that when the opportunity presented itself, we would try to expand on those tracts. To enable bears to travel from tract to tract would require wooded corridors. So we identified riparian corridors and expanded on them, but also identified corridors to link fragments that were not associated with a river or bayou.

We then prioritized the corridors, giving a narrow corridor the maximum number of additional points in the ranking process and moved out with areas with fewer points. We then "fine tuned" the maps by making sure that boundaries were clearly defined along roads or waterways to make them readily identified in the field.

The incentives were actually designed for the restoration of converted wetlands, but because of all the partnerships developed by the BBCC, all the players were able to sit down and make it work for bears. Because bears require large areas of habitat, most participants recognized that a whole host of other creatures would benefit from the collaborative project. Nonpoint source pollution from agricultural fields would be significantly reduced, as well as the cost of maintaining the drainage infrastructure. So not only did this process bring additional millions of dollars into depressed local communities, but millions more were saved by not having to maintain the drainage systems.

The CHAIRMAN. Thank you. Mr. Robohm.

STATEMENT OF DON ROBOHM, PRESIDENT, SEACHICK, INC.

Mr. ROBOHM. Chairman Pombo, Senator Crapo, Congressman Pickering, thank you for the opportunity to appear before you today to speak about the Endangered Species Act. I'm the founder and investor of SeaChick (Miss.), Inc., a private Mississippi Corporation that holds Mississippi's Aquaculture Permit number 1.

I appreciate the opportunity to participate today in making what I hope would be a positive contribution to strengthening the Endangered Species Act. Although SeaChick started with Hybrid Stripped Bass as its principle species, in January 1988, we switched to growing Tilapia, which continues today as our focus. SeaChick uses water and a single pass flow through technology involving sequential poly culture and reuse of well water. SeaChick can pump up to eight million gallons of well water per day and discharges a like quantity. "U"-tube technology is used to effectively inject liquid oxygen to oxygenate the 48 above ground circular concrete tanks in our production.

SeaChick was the first commercial fish farm in the world to use computers to feed fish. SeaChick had experienced some bird predation from such species as egrets, herons, osprey and cormorants during the years in which we focused on hybrid striped bass. We placed shade clothes over the 48 production tanks in a tent like manner centered over the water, leaving access to the fish along the edges of the tank wall. We placed lightweight meshed bird netting over the small fingerling pond and stretched mono-filament fishing line in a grid pattern over the two larger settling ponds.

We referred to this as passive exclusions. When passive exclusion by itself wasn't getting the job done the Atlanta office of the U.S. Fish and Wildlife Service urged SeaChick to apply for a species specific take permit to shoot. I've never owned a gun or held a hunting license.

With genuine reluctance, I allowed SeaChick to acquire a U.S. Fish and Wildlife Service take permit for each of the species then giving us problems. We created a "no-fly" zone over our production tanks using the lightest load shotgun shells, shooting warning shots in the vicinity of the birds to scare them away. Then shooting closer behind the flight path of the returning leaders. When the leaders continued to return, we shot at them from a considerable distance to reach-out and touch them but did not harm them. Only as a very last resort, did we shoot to kill these few remaining troublesome birds.

This protocol has maximized the number of, excuse me, minimized the number of birds taken and maximized the desired behavior modification. For five consecutive years SeaChick has been permitted to take five osprey per year and we have actually taken none over the last five years despite osprey visiting SeaChick almost daily. The brown pelican was listed throughout this range under an Endangered Species Act in the early 1970's. In 1985 brown pelicans in Florida and Alabama were delisted and the Alabama, Mississippi border was selected as the boundary for this action. At the time U.S. Fish and Wildlife stated that this was "This was done to ensure continued protected for Pelicans from Louisiana if they feed on opened nearby Mississippi waters".

So while Mississippi's brown pelican had recovered by 1985, the Fish and Wildlife Service located in Albuquerque, New Mexico continued the listing of Mississippi brown pelican. SeaChick is located approximately ten miles west of the Alabama border where we could get a take permit for brown pelicans. Due to no brown pelican recovery problem in Mississippi, 20 years ago the entire State of Mississippi remained penalized without take permits possible for the brown pelican. The Endangered Species Act allows the regional office of Atlanta to issue our take permits but allows the Albuquerque office to impose brown pelican listing upon Mississippi, but does not allow the regional office in Atlanta to start the delisting process of the brown pelican for states within its region. I'm told by U.S. Fish and Wildlife personnel that continued control of the delisting of species resides with the originating regional office—in the case of the brown pelican in Albuquerque, New Mexico.

I have three recommendations for you to consider as new ideas for the Endangered Species Act. The first one—when sustained observations and data support that a species is recovered in a specific area, that species should be promptly delisted. To recruit partners in the recovery process, it is critical that the U.S. Fish and Wildlife Service carefully monitor that process and when there is a success story, promptly act on that success. And the acknowledgment of successes as they happen will provide the Act, private landowners and those involved with enforcing the Act with credibility and continued delisting support.

One of the greatest problems with working with listed species is the inability of the Fish and Wildlife Service to approve actions quickly. They spend too much time doing paper work and not enough time working on recovery or delisting issues. This lengthy amount of time damages relations with landowners and others and hampers the recovery of other listed species. Finally, we suggest that some type of financial assistance be considered for landowners and businesses that have significant financial losses due to threatened and endangered species. Some form of crop insurance which is available for almost any other kind of crop wall should be considered as one component of reauthorization of the Act. Furthermore, providing a tax credit for damage control equipment and labor should be included.

Mr. Chairman, this concludes my remarks. I'll gladly respond to any questions.

[The prepared statement of Mr. Robohm follows:]

Statement of Donald Robohm, President, SeaChick (Miss.), Inc.

I am the founder and an investor in SeaChick (Miss.), Inc., a private Mississippi corporation that holds Mississippi's Aquaculture Permit No. 1. Started in August of 1987, SeaChick was involved with drafting the Aquaculture Act of 1988, with permitting done by the Mississippi Department of Natural Resources. Four years later, SeaChick started the legislative initiative which shifted permitting under the Aquaculture Act from the Mississippi Department of Wildlife, Fisheries and Parks to the Mississippi Department of Agriculture and Commerce, where it remains today. I welcome the opportunity to participate today in making what I hope will be a positive contribution to modifying the Endangered Species Act.

Although SeaChick was started with hybrid stripped bass as its principle species, in January 1998, we switched to growing tilapia, which continues today as our focus. Our high-intensity warm-water facility can be seen in the accompanying aerial photo: Exhibit A. SeaChick uses geothermal 1/4-mile deep-well water and cooler

shallow-well water in a single-pass flow-through technology involving sequential poly-culture and reuse of the well water. SeaChick can pump up to 8 million gallons of well water per day and discharges a like quantity per day. "U"-tube technology is used to efficiently inject liquid oxygen to oxygenate the 48 aboveground circular concrete production tanks. SeaChick was the first commercial fish farm in the world to use computers to feed fish. A close-up of the tanks and the feeding system is shown in the photo labeled Exhibit B. Much of SeaChick's high-intensity fish culture technology is protected by trade secret and does not leave the facility. An example of SeaChick's technology which does leave our facility can be found in U.S. Patent 6,557,492—"A System For Transporting And Storing Life Fish".

Today SeaChick produces its tilapia following five principles: 1) there are no antibiotics used anywhere in the facility, rather SeaChick is a world-leader in competitive exclusion, that is, using good bacteria to out-compete bad bacteria; 2) no sex-reversing or growth hormones are used; 3) no genetically modified fish are used; 4) no fish meal is used in our all plant protein (APP) production feeds; and 5) clean, pollution-free well water as old as 20,000 since it last fell as rain on the earth's surface, is used. We spin the water in our tanks so that our fish are swimming in moving water at all times, build and toning their muscles. By feeding them around the clock, under lights at night, SeaChick produces a flesh marbled with fat, much like red meats, but rich in the heart-friendly omega-3 lipids.

SeaChick started with three species of tilapia in 1988, that is, aurea, nilotica, and the mossambica. Hand selecting and breeding has been ongoing since then with the result called the SeaChick Gray, a hearty, fast-growing, efficient feed converter, with the goal of maximizing the percentage of boneless, skinless fillet weight to total live weight. The broodstock are placed in earthen ponds which combine first and third world technology in a manner which can produce 80-85,000 fingerlings per month with an average size of 80 to 120 grams for stocking into production tanks. 90-120 days after stocking we can harvest 1 1/4 to 1 1/2 pound market-sized food fish. These ponds range from 1/4 acre to 1 acre in size.

SeaChick had experienced some bird predation from such species as egrets, herons, osprey, and cormorants during the years in which we were focusing on hybrid striped bass. We placed shade clothes over the 48 production tanks in a tent-like manner centered over the water and leaving access to the fish along the edges of the tank wall. We placed lightweight meshed bird netting over the smaller fingerling ponds and stretched mono-filament fishing line in a grid pattern over the two larger ponds. We referred to this as passive exclusion. When passive exclusion, by itself, wasn't getting the job done the Atlanta office of the USF&WS urged SeaChick to get a species specific limited take permit to shoot. I have never owned a gun or held a hunting license. I volunteered to serve in South Viet Nam as a member of the Agriculture Team of International Voluntary Services from 1967 to 1969, and never carried or possessed a gun for the two years I lived and worked in the war zone.

With genuine reluctance, I allowed SeaChick to acquire a USF&WS take permit for each of the species then giving us problems. We created a "no-fly" zone over our production tanks using the lightest load shotgun shells, shooting "warning shots" in the vicinity of the birds to scare them away. Then shooting closer behind the flight path of the returning "leaders". When the "leaders" continued to return, we shot at them from a considerable distance to "reach-out and touch them" but not harm them. Only as a very last resort, did we shoot to kill these few troublesome birds. This protocol has minimized the number of birds "taken", and maximized the desired behavior modification. For five consecutive years SeaChick has been permitted to "take" five osprey per year, and we have actual taken none over those five years, despite osprey visiting SeaChick almost daily.

The Mississippi brown pelican was listed under Endangered Species Act in 1985, while Florida and Alabama brown pelicans were not. The reason, cited by the listing USF&WS regional office in New Mexico, was that the State of Mississippi would be used as a "buffer" state for the State of Louisiana, which did have a pelican problem. SeaChick is located approximately 10 miles west of the border with Alabama, where we could get a USF&WS take permit for brown pelicans. Due to no brown pelican problem in Mississippi, but instead due to a Louisiana brown pelican problem, the entire State of Mississippi was and remains penalized, without take permits for brown pelicans.

The Endangered Species Act allowed the Albuquerque USF&WS (the USF&WS Atlanta Regional Office issues SeaChick's take permits) to impose the brown pelican listing upon Mississippi, but does NOT allow the USF&WS Atlanta Regional Office to start the delisting process of the brown pelican for states within its region. I am told that control of delisting a species covered by the Endangered Species Act resides with the originating regional office in Albuquerque. Meanwhile Mississippi

and SeaChick suffer crippling losses to brown pelicans. We estimate direct losses to brown pelicans at $300,000 to 400,000 during the 2003-2004 pelican season at SeaChick. This does not include the indirect losses to parasites, diseases, and lost sales opportunities. Electrical events between brown pelicans and power lines at SeaChick did thousands of dollars of damage to motors, transformers, wiring, electrical components, computers and various electronics throughout the facility.

During the 2000-2001 and the 2001-2002 brown pelican seasons, SeaChick managed to received a USF&WS brown pelican harassment permit which included a capture/tag/relocation provision. We were able to capture grossly engorged brown pelicans filled with our tilapia. With experimentation and research done at SeaChick's expense and documented with the USF&WS, we developed a relocation technique that was 80-90% successful in relocating none-returning brown pelicans. Imagine our dismay when the USF&WS refused to renew the harassment permit provision for relocating brown pelicans because the Migratory Bird Act required banding, and SeaChick personnel were NOT licensed to band migratory birds. Twice in the 2004-2005 pelican season, SeaChick returned brown pelican harassment permits. These well-intentioned harassment permits were so restrictive and detailed as to make lawful compliance all but impossible. We choose to have no harassment permits during those periods. Eventually a temporary authority was granted to SeaChick to resume relocating brown pelicans using the relocation technique we had developed and documented in previous years. This "conflict", over banding brown pelicans, between the Endangered Species Act and the Migratory Bird Act must be resolved.

SeaChick has filed a 90-day letter with the USF&WS Atlanta Regional Office of its intent to submit an invoice for the regulatory taking of our tilapia crop during the 2004-2005 brown pelican season. We have invested tens of thousands of dollars per year protecting our crop and protecting the brown pelican. Over the years, Federal and state agencies have placed their representatives at our facility for weeks at a time and witnessed and recorded the unnatural behavior of brown pelicans at our facility despite our best efforts. Given our highly successful take permit results with other species, SeaChick seeks relief by delisting the brown pelican in Mississippi.

The CHAIRMAN. Thank you. I thank the entire panel for your testimony. I'm going to begin by recognizing Senator Crapo for his questions.

Senator CRAPO. Thank you very much, Mr. Chairman, and I want to use my five minutes to basically talk about the issue of collaboration and I'm really going to focus on Mr. Vaughan and Mr. Davidson—but Mr. Vaughan, it interested me that you indicated in your testimony that there were those who had encouraged you not to come today. That doesn't surprise me because I don't know how many people feel like this but back a few months ago Chairman Pombo and I, along with Senator Chafee and Congressman Walden from Oregon held a press conference where we indicated that we wanted to try to bring people together and get past the fighting that has been going on and build a fast forward system where consensus based reforms were being made to the Species Act.

And although that press announcement was received very positively in most quarters, there was some from various perspectives of the issue who immediately attacked and I think primarily was the attacks were based on a lack of trust. It was believed that we didn't really want to bring people together and try to find good solid consensus based solutions. And that was a disappointment to be honest with you. It was not one that was unexpected. We had seen this kind of reaction and it's not just from just one side or the other. This was the kind of reaction that comes, I think, from decades of fighting over the Act. And there needs to be a trust level brought and so first of all, Mr. Vaughan, I appreciate you coming

today and sharing your concerns and your willingness to see if there can't be some consensus based solutions.

Mr. Davidson, I was very interested in your testimony as you talked about how it was done and you listed in your testimony some southern rules of engagement which I hope you'll allow me to take back to the west. The items listed in your written testimony, I'll go over them very quickly. It is, come to the table, leave your organizational 2 X 4 at the door, polarized opinions generates more heat than light and has no place at the resource management table, pick solutions, not fights, search for the most expansive common ground that is not intrusive, attack ideas, not individuals, differences of opinion can lead to enlightened decisionmaking, no personal attacks. One strike and you're out and have fun. I think there's some real wisdom in that approach and we need to get people across the country focused on the fact that we have an opportunity now where we're trying to build a bipartisan, bicameral solution to some of the serious problems that have faced the species recovery and we're focusing on recovering species. That's what we want to seek as our objective and I'd just like to invite Mr. Vaughan and Mr. Davidson to comment if you would on this general issue.

Mr. VAUGHAN. I appreciate your remarks very much. Let me just say, coming from an environmental community, having done work like this as an attorney for almost 20 years and before that, just on my own for 10 years and it's no different for development in industry business like this. We've seen Federal agencies do horrible things to the environment. We've seen agencies do horrible things to economic interests or things that made no sense.

And a lot of times the only way we can address this type of thing is through litigation. And years ago the National Forest of Alabama they were breaking every law they could. There were some bad apples brought into those forests. But they brought in new people after the litigation changed some attitudes in the agency and we've all seen cooperative efforts that didn't work but I've seen some that did successfully, wonderfully successfully, mostly on public lands but some on private lands.

Paul's work on Louisiana's black bear on private land is a pretty amazing example in the southeast. So we have success stories that maybe folks elsewhere haven't seen and there's a lot, like Senator Barton said, it's strange warfare. So somebody's got to come around the trenches and halfway across. I'm willing to do that. I think some other folks are too, there is a lot. We certainly hope there are people who are willing to do that and want to create a safe haven for people who are willing to come up out of the trenches and get engaged in this process. Mr. Davidson.

Mr. DAVIDSON. Please don't take this wrong but, you know, I have been in Washington, D.C., way more times than I'd like to admit, and it is probably the most polarized, partisan, turf-protected environment I've ever been in my life.

Senator CRAPO. You've got that right.

Mr. DAVIDSON. And I don't like it. I don't like being there and that was what we were trying to avoid, of course, with the heat of the spotted owl breathing down our neck, we really wanted to get everybody together and what's been alluded to several times today,

private landowners are key to anything you do in the Southeast. But probably all over the country but certainly in the Pacific Northwest where you have 80 percent of the habitat is public land. It's a different world than it is here when 90 percent is private so anything you're going to do that has any consequence across the landscape has to engage landowners and right now they are scared to death. You know that this government is going to come in and take their land largely because interests outside of this region are telling them it's going to happen. I mean, we've seen instances where, you know, we just had some big national organizations and this comes from my experience, you know. I, in the past, served four terms as the Chair of the Sierra Club in Louisiana and, you know, I butted heads with the National Sierra Club all the time. I was President of the Louisiana Wildlife Federation twice. I had a better relationship with the National Wildlife Federation and we still disagree on a lot of things.

That Washington turf protective spar, left or right, whichever side you're on, you want to call it, does not encourage genuine collaboration and communication. It's his last stand and I'm not budging. And what we have learned is that this concept that when you collaborate, when you work together, that somebody's got to give up something. That's not necessarily the case. If you go in with the objective, trying to get everything you can get, I'm talking about every interest in the room, shoot for the stars, you'll be surprised that most of the time you can walk out of there with everybody getting everything they need.

So, it can happen. I don't see how in the world you'd ever legislate it but it certainly needs to be encouraged and I think if you talked to the Lafayette, Louisiana, U.S. Fish and Wildlife Service office, they'll tell you that our efforts have certainly made their lives easier and certainly made recovery of the Louisiana black bear move forward much more quickly than it could ever be done just with that agency.

Senator CRAPO. Thank you. Mr. Chairman, I know I'm over but let me just take one 30 seconds here to say I agree with the points that have been made by these witnesses. I know the other witnesses have similar feelings and we've got to get the confidence and the trust built up to allow us to do a, to start here to get people to come to the table and find these consensus based solutions. I am convinced that we can find solutions that are better for the environment and better for the economy than what we are driven to now under the current system and it's that objective that we want to achieve. We want people to be willing to come forward and participate in this process knowing that we're not going to run rough shod over anybody, we're going to try to bring people together and find consensus based solutions that will benefit everybody and especially the endangered species.

Thank you.

The CHAIRMAN. Thank you. We now recognize Congressman Pickering.

Mr. PICKERING. Senator Crapo, I just want to join with your very thoughtful approach but also to say Mr. Vaughan that I appreciate and I'm encouraged that you're here. Paul Davidson, you give a model for the rest of the country on how to approach these issues

and what I'd like to do is to follow up and ask some questions so that we can avoid the litigation and the adversarial relationships and instead of having prolonged, extended, adversarial and backed in litigation and this may well not be, sometimes litigation leads to settlement. It is a catalyst for settlement.

But our problem is that sometimes it takes three, four, five years to get to that point. Would it not be better if we could look at front end settlements and cooperative agreements through our laws that we would give alternative dispute mechanisms that once an issue comes up that we would give very strict deadlines, time lines for either an agreement to be reached by all parties to the agencies and private and community interest. If those agreements are not reached within a certain time line, they'd have mediation or arbitration with the time lines and as Mr. Briggs talked about, part of the lack of credibility of the Act is because the goal post seems to have moved or that it could be extorted either by competing economic interest or environmental interests.

So there's a sense that there's a fairness built into the process but also a very quick conflict resolution process that can follow the model of the black bear either by cooperative efforts or by statutory requirements of conflict resolution. Would that be helping, Mr. Vaughan and Mr. Davidson.

Mr. VAUGHAN. I'm actually trained in mediation and I'm a big fan of that. I'm not a big fan of binding arbitration because as an attorney and citizen, we should have a viable avenue for the court that's created by the constitution. But I think that might be a possibility. Some of the things for instance in the Healthy Forest Restoration Act, while I don't agree with everything how it was put together, when the process of that sort of pre decision or talking with each other and having meetings, having dispute raised before the decision, is done with everyone being honest and open about it. I've seen it work. But, it's a little too loose I think.

But I think you could come up with a system whereby the public participation front end, is not so much formal but much more inclusive and where you could have had a mediation like objection process first.

The Forest Service appeals process, a lot of people criticized it and some environmentalists just say, well, that's just a hurdle, I have to jump it before I get to the court, but we've actually settled a lot of the appeals, a lot more than we filed lawsuits in because we did meet with them and we were meeting with agency staff that were very open and honest about it. We came to a resolution because we weren't just against the project. We were against the public problems to the project even though it was going to fix it. The project went forward and there was no litigation. So I think that could be worked on. The processes that exist now are incomplete. Wildlife Services are quite inadequate so that would be something that should be explored, I think.

Mr. DAVIDSON. Again, I don't know how you'd legislate cooperation. It's certainly a component I think that's missing in what's going on now and so much of all the horror stories that reoccurred over the years, you know, we never dealt with that. For whatever reason I couldn't explain to you exactly why things worked as they have but we have always had good working relationships among

the agency personnel and we just, you know, we never got into the—this week we had a big conference call with BCC, U.S. Fish and Wildlife Service, Louisiana Parks, Wildlife and Fisheries, the Nature Conservancy and USDA, Natural Resource Conservation Service prioritizing, you know, WRP roles. I mean, that's in the counties and the parishes where we have, where we're running out of land to enroll and everybody didn't have a problem with our account of what we did best and all that, you know.

The critical habitat stuff which was so controversial, you know, with—years ago, over a beer, we decided that the way to resolve it is just to change the name to Way Cool Habitat and everybody would want it. But it's not going to be that easy. There has to be some flexibility, like in the laws which mandate designation of critical habitat, you now have different openings for a lawsuits.

There is no question that some species that require certain niches need a designation of critical habitat. Animals like a bear are generous, there's no need for that. What has happened over time as I have witnessed it, with the U.S. Fish and Wildlife Service, rather than designate critical habitat they incorporate the same things into the Section 7 consultations such as, they are accomplishing the same thing that critical habitat would accomplish through Section 7 without all the formal designation critical habitat and the paper work and again the agency resources that go into that. So there's a way to do all this, gentlemen, and I won't pretend to have all the answers but I know there are people out there who can put it all together for us. Thank you.

Mr. PICKERING. Thank you, Mr. Davidson. That, perhaps we could shift, perhaps we could shift litigation resources to your endangered species incentive program and that the funding is there for that, maybe that would be one way to bring people to an agreement more quickly than if it would end this litigation. I want to thank Senate Crapo. We have one thing in common, one of the many things in common, but one thing we have in common, I think you have five children as well, so now that your family's back home, we appreciate you leaving the comforts of home and family and Mr. Pombo and I share another thing in common. Our children play baseball and he's missing baseball games too.

Senator CRAPO. Right.

Mr. PICKERING. We've all slapped hands, we had one injury, in which the wheels came off and there are baseball games this morning. But I noticed everyone is here because this is an extremely important issue for our development of our environment and health of our economy and talks about some issues and Mr. Chairman, I greatly appreciate you being here and I look forward to working with both of you as we go through this process.

The CHAIRMAN. Thank you. You know I'm going to take that last quote that you just said about there's a way to do this if we want to do it and I'm going to blow it up on a big board like that and hang it in view because that's what I've been saying for the last 12 years. If you really want to do it, we can do it. It frustrates me beyond belief because one of the reasons I hold these field hearings is to come out here and listen to people like you outside of Washington. Back in Washington, if we were having the same hearings, there's nobody that would say the things you have said. We know

Senator Crapo's right, you know. We got together and said we're going to work across the Capitol, we're going to try to bring everybody in on this, we're going to try to make this thing work. We hadn't even gotten done talking, and the press releases were already being distributed to the reporters that were in the room trashing us for gutting the Endangered Species Act. We hadn't even finished announcing that we were going to work together and we were already accused of gutting it. That's why I bring the Committee out.

That's why we do these things because you're not going to get this done working with that group back there.

You know, if Mr. Vaughan, you talk about funding being a major problem. I know the three of us agree with you. I've introduced bills so many times increasing the amount of money to go through Fish and Wildlife Service that, that I can't count them all. But, it's not just a matter of more money going into Fish and Wildlife Service, you got to change the dynamics that's there. You got to start focusing on what the goal is instead of a lot of the stuff that's going on right now and Mr. Davidson talked about they didn't see the same problems here that we saw when it started out.

Well, one the reasons is that, you know, Mr. Vaughan talked about this and we did a lot of things wrong with that. I mean, there were things that we did with development, there were things that we did with Forest Management, there were things we did in Agriculture that were wrong. And we caused a lot of problems that we've got right now. But when we got in to spotted owl management, it really had nothing to do with spotted owls. It had to do with we didn't want any more cutting of timber. One of the main litigants in that whole situation was quoted as saying something to the effect of, thank God for the spotted owl because if it hadn't been for that, if we hadn't had the spotted owl we would have had to create one in order to stop the timber harvesting going on.

And it's kind of that attitude that has gotten us to where we are right now. Mr. Briggs, I want to ask you a question. You know, we went through the testimony, Mr. Head's testimony, and I thank you for pinch hitting here. I know that we got a call earlier that he was grounded and wasn't going to be able to be here today. And I appreciate you coming in. But in the testimony it outlines how much land has been set aside for mitigation and what the company was willing to do. Are you at the point right now where you could proceed with development.

Mr. BRIGGS. No, sir, we cannot proceed with development and there is no foreseeable resolution to our current project which began its permitting process some five years ago and we're currently held up, we feel like, by Fish and Wildlife not necessarily by the litigation or the Act itself since it is Fish and Wildlife people bringing up additional issues or raising the bar changing the requirements. We will use about 35 acres of habitat in our project and we have already committed 110 acres to a conservationist. So three times what we've utilized.

At the same time, this issue is not really about the Alabama beach mouse, it's about people who don't want multi-family projects built on the Fort Morgan Peninsula because at the same time 108 single family units have been permitted or currently are being

permitted under the process in place now with no mitigation. They used 230 percent more of real estate per unit than we did. It's not an issue that deals with protecting the mouse or increasing the mouse's chance of survival.

The CHAIRMAN. Now, that's what I wanted to get at. That right there. If I could sit down with Mr. Davidson and you and put you in the room and say, OK, the goal here is to protect this mouse and recover it, how do we allow him to use his land in recovery of the mouse. Now, if that's the goal, if that's what put on the table, I believe you can come to a solution.

Mr. BRIGGS. Certainly.

The CHAIRMAN. And I don't know if 110 acres are right or $20 million into an account somewhere that goes toward conservation or propagation or what have you, but——

Mr. BRIGGS. We do that as well.

The CHAIRMAN. I'm sure you do.

Mr. BRIGGS. We set aside—and annually the homes and the multi-family owners set aside two, three hundred dollars that goes into a beach mouse fund. Here again, none of these things are required if you build a single family housing. It's not usual.

The CHAIRMAN. I'm of the mind that if the goal is to recover a species, we can get there. If the goal is to stop this development from going forward we can't get there. And, Mr. Vaughan, I'm not real familiar with the work that you've done and things that have happened down here but I believe that the goal is to preserve species. We can get there.

There can be mitigations done, there can be things that we do that the Fish and Wildlife that allow people to use their private property without taking away their right and at the same time recovery of the species. I believe that we can get there. But, you know, what we run into in Washington so often is that recovery of species has very little to do with this whole debate. It has to do with, a lot to do with partisan politics, has a lot to do with political power and as a result of that we have these conflicts with private property owners. Were not doing a good job of recovering the species. We're not getting anywhere and we just keep fighting every year.

Now, it was like 12 years ago, one of the things I said when I was first elected, I wanted to reform the Endangered Species Act. I had no clue 12 years later I'd still be trying. You know, it made perfect sense to me that we had problems that we needed to fix and I think most responsible people in the environmental community will look at and say, yeah, there are some problems. There's something we need to do differently than what we're currently doing. And as we move forward with this I know that Senator Crapo talked about this, as we move forward with this we just got to sit down and my door is open to you any time and to Mr. Davidson. You guys want to come in and talk about what needs to be changed and how we make this thing work, I'm willing to listen.

Mr. DAVIDSON. Congressman, let me just say, I've already had meetings with Doug Crandall, your Committee staff member, that would be great, be fair with Doug and I appreciate the invitation but Doug's been, same invitation been very open. He's the key to having me here today, I appreciate him doing that. To give you an

example, I was involved early on in litigation over Mr. Head's property, the very first one down there because I believed it was about the beach mouse and there was no doubt the ball has been dropped on the Alabama beach mouse by the agency over all.

But very quickly I got out of that litigation and ceased representing the parties involvement in the litigation that's going on and on and on since then, which I have no involvement with, because it isn't really about the beach mouse. There are a lot of instances where everybody on all sides are doing as they should. A lot of times it's unintentional, a lot of times it's a reaction to the past.

Yet somehow we've got to get past the past and I'll be happy to work with you, Mr. Crapo, and folks on your staff at any time to find a real solution to the real problems.

The CHAIRMAN. Thank you. I really appreciate this entire panel and the testimony that you've given here this morning. I think it's been very helpful but I think it helped. I know with Chip and I, in the House and Senator Crapo, it helps us to move forward in trying to come up with something that will actually work because I do believe we can get there and it's just a matter of getting people in the room who actually want to come to a solution on this and those who don't, stay out. Now, I think we can get there and I appreciate that. I appreciate Senator Crapo agreeing to be here at the hearing, you know, we normally don't invite Senators because they talk too much. Mike's been a friend for a long time so he always comes to my hearings and I believe something's in the water over there, I don't know what it is.

Senator CRAPO. It's the rules.

The CHAIRMAN. And of course, you know, when we started talking about where we would do the hearings across the country and Chip has talked to me several times about the Endangered Species Act, the impact that it's had down here, it has, but, I think more importantly, he talked about what some of the successes were and the total cooperation that they've had down here and I felt that that was important to include as part of building a record in the hearings that, you know, it's not all failures. There are some times when things actually work, and we need to make that part of whatever the ultimate solution is.

I appreciate Chip inviting us down here and allowing us to come into his district and take a little time to be part of this hearing here morning.

I want to again thank the Museum for inviting us and the Governor for his cooperation. I can tell you that he originally had hoped to be a part of the hearing. We ended up changing the date that we were going to come down here and it conflicted with his schedule. Unfortunately, he wasn't able to join us here today, but I appreciate his invitation and cooperation.

Thanks to all the staff, everybody that helped make this hearing possible. I'll tell this panel before I adjourn the hearing that I know there'll be further questions and those will be submitted to you in writing. Answers might be included as part of the hearing process and I would appreciate it if you would respond in a timely manner to that as well.

If there is no further business before the Committee, the meeting's adjourned.

[Whereupon, the Committee was adjourned.]

Additional materials submitted for the record follow:]

[A statement submitted for the record by The Honorable Haley Barbour, Governor, State of Mississippi, follows:]

Statement of The Honorable Haley Barbour,
Governor, State of Mississippi

Good morning. I am proud to welcome to Mississippi Congressman Richard Pombo, Chairman of the House Committee on Resources, Senator Mike Crapo of Idaho, and our own Third District Congressman, Chip Pickering.

Mississippi is proud to host this first congressional field hearing in an effort to update and modernize the Endangered Species Act. We have learned a lot of lessons since the Act became law, and many of those have been in the South.

The Endangered Species Act is over 30 years old, and no changes to it have occurred since its expiration 14 years ago. It has been effective preventing some species from becoming extinct; however, by all accounts, it has not been successful increasing listed populations. Recovering and achieving sustainable populations of listed species should be the ultimate goal of this important law.

To date almost 1,300 species have been listed under the Act, but only ten have recovered sufficiently to be removed from the lists. Clearly, it is time to update the Act to employ the best fish and wildlife management practices so can we do a better job recovering these species. I believe without a stronger focus on restoring habitat, the full recovery and de-listing of populations of many species will not happen.

It is fitting that efforts to improve the Act begin here in the South. After all, the region has one-quarter of the listed species in the Nation, with approximately 300 endangered or threatened species. For example, eight of the top ten states and territories with the most listings include: Alabama, 89, Florida, 100, Georgia, 54, North Carolina, 50, Tennessee, 82, Texas, 81, Virginia, 55 and Puerto Rico, 69. Mississippi has 29. Only California and Hawaii have more.

Landowners in the South, and particularly Mississippi, have done a very good job conserving and creating habitat for all species, whether listed under the Act or not. Any legislation should include a strong recovery component and include incentives for private landowners to voluntarily participate.

As you begin this process, I encourage you to spend some time in the state and allow our people to showcase some of Mississippi's efforts to protect, restore, and enhance habitat for species that are listed, and in some cases, species we are trying to prevent being listed. I think you will find the South, and particularly Mississippi, will help you formulate solutions to modernize the Act so conservation measures can be implemented to avoid listings, recover listed species, and do it in a manner that works with landowners and industry, not against them.

Thank you for your time in addressing such an important issue, and I hope you enjoy your time in our great State.

[A statement submitted for the record by Rhett Johnson, Director, Solon Dixon Forestry Education Center, School of Forestry and Wildlife Sciences, Auburn University, and Co-Director, The Longleaf Alliance, follows:]

Statement of Rhett Johnson, Director, Solon Dixon Forestry Education Center, School of Forestry and Wildlife Sciences, Auburn University, and Co-Director, The Longleaf Alliance

One of my particular personal and professional interests is the longleaf pine ecosystem, one of the ecosystems that occurs here in the Southeast. It is estimated that longleaf pine covered some 90 million acres of the uplands of the southeastern United States prior to European discovery and settlement. Some forest historians suggest that that may have constituted the largest forest area on the continent dominated by a single species. Today an estimated 3 million acres of longleaf remain, much of it in badly degraded condition. There are a number of species indigenous to longleaf ecosystems that are in similar decline, several of them listed and protected by the Endangered Species Act and familiar to Southeastern forest landowners. These include the gopher tortoise, the Eastern indigo snake, and, perhaps

the best recognized, the red-cockaded woodpecker. Others, like the gopher frog, the black pine snake, and Bachman's sparrow, face futures linked to the health and availability of the longleaf pine ecosystem.

The Longleaf Alliance is an organization formed to slow the decline of the longleaf ecosystem and, hopefully, reverse that trend. As we contemplated our strategy, two related facts shaped our approach. More than 90% of the forestland in the area previously occupied by longleaf is owned by private interests and about 75% of that by non-industrial owners. It seemed intuitive that any significant recovery of longleaf pine would by necessity involve the participation of these landowners. In addition, it was and is our contention that, although there is a strong stewardship ethic shared by these landowners, economic return is also a strong driving force in their management decisions. We made the decision to build strong economic as well as ecological arguments for longleaf, reasoning that museums protect things that once were but won't be again. Further, that the way to save things was to give them value and the way to give them value was to use them. This approach has been very successful and longleaf recovery is well on its way.

The point of this discussion is to suggest that there is considerable logic in proposing longleaf pine and longleaf ecosystems as threatened or even endangered. After all, a 97% decline in acreage over the last 300 years is pretty dramatic! Instead, we learned to avoid either of those words assiduously. The alarm those terms excite among the majority of landowners would make our task next to impossible. In fact, the association of longleaf with species like the red-cockaded woodpecker concerns many landowners contemplating planting or even retaining longleaf. The perception that the Endangered Species Act triggers onerous government intervention in private matters and imposes strict and costly restrictions on landowners' decisions is alive and well in the Southeast. The fact is, for most affected landowners, the Endangered Species Act is punitive in nature, imposing either direct or indirect costs on those unlucky enough to have a listed species present on their land. I don't see much evidence of illegal "preventative actions", although I know it did occur with some frequency in the past. I think it is much more likely now for landowners to passively manage so as to discourage the presence of a threatened or endangered species on their land, e.g., to halt a prescribed fire program and allow habitat to become unsuitable for red-cockadeds or gopher tortoises.

The U.S. Fish and Wildlife Service has made great strides with programs like Safe Harbor to lessen the blow for landowners who have protected species on their properties, but the fact remains that landowners who host listed species are not rewarded for doing so and, in fact, are forced to support endangered species, at the request of society at large as expressed by the Endangered Species Act, at their own expense. The number of affected landowners is small, but the impact on many of those who are affected can be profound. Some accommodate the constraints imposed on them easily—even gladly—while others face both direct and opportunity costs, decreased land values at time of sale, etc.

Currently, the prospect of relief because of species recovery and subsequent delisting remains remote. In fact, one of the species whose recovery probably merits delisting, the bald eagle, has begun to turn the tables on us. Eagles have largely occupied the very best remaining habitat and are now beginning to nest in otherwise marginal habitats. They are now encroaching on our habitats. There are active eagle nests in downtown Apalachicola, Florida as well on busy nearby St. Georges Island. These birds are afforded the same protections under law as their cousins in more remote locations. If the ESA were indeed successful in recovering many listed species, the prospect of similar conflicts would be truly significant.

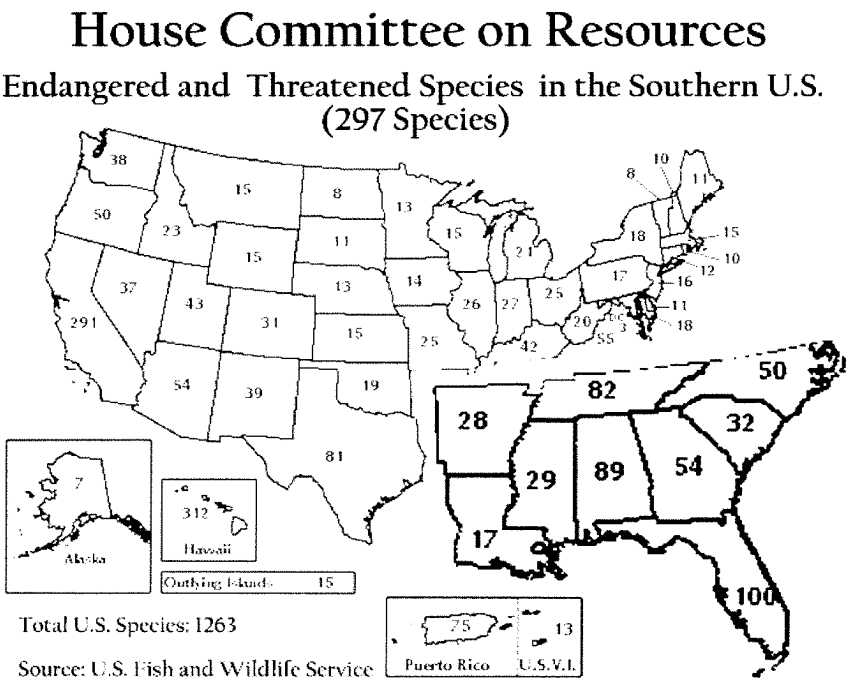
On the other hand, there are demographically isolated populations of listed species, particularly at the edges of their ranges, which offer virtually no potential to contribute to the recovery of the species, yet are accorded the same degree of protection as those who do. The contribution of these fragments of populations can only be to provide genetic diversity to populations with better prospects. Yet the individuals in question are seldom candidates for re-location, denying the affected landowners relief and the larger population better hope for recovery. It is a fact that relocation is often unsuccessful and that leaving these individuals in place at least preserves them for the short term. Nevertheless, the museum analogy is still appropriate. Locking valuables in the closet only buys time and, in the process, landowners pay the price.

I am a proponent on an Endangered Species Act for many reasons. Some species are keystone species whose loss would cause entire communities to be placed in jeopardy. There are others who offer answers to questions that plague us. If Eastern indigo snakes are immune to the venom of all North American venomous snakes, and they are, wouldn't it be wonderful to understand the mechanism that allows that immunity and add it to our own pharmacy? If we lost the indigo, we can never

make another one, only God can. Other listed species are listed because they have exacting habitat quality requirements. They can act as "canaries in the coal mine" for us. Flattened musk turtles require high water quality and silt-free streambeds for their continued success. Their presence assures us that the water quality protection strategies we have adopted are working, for us and for the turtles. Finally, we, as a society, have elected to protect some species because we just prefer not to live in a world without them. That generally applies to fairly dramatic species like grizzly bears, California condors, whooping cranes, bald eagles and Florida panthers and not to American burying beetles and Tulatoma snails, even though those species may actually be more important in strictly ecological terms. Still, those former species have intrinsic appeal that most Americans understand and embrace.

"Fixing" the Endangered Species Act should protect both species at risk and the private landowning public charged with providing their habitat. Better science to determine which species are truly at risk and which may have never been numerous is a start. Better science to identify and focus on those most likely to be recovered might also gain traction with the public. Delisting should be a real goal and not a distant and unobtainable Grail. If recovery is not likely, extraordinary efforts to preserve might be required and justified. These efforts must include rewards to landowners hosting these populations to relieve them of a burden imposed by the larger society. Restrictions on landowners should be carefully examined to determine efficacy and potential to contribute to the species recovery. If they are found to be unnecessary or without clear benefit, they should be re-examined and discarded if found to be lacking.

[A map showing Endangered and Threatened Species in the Southern U.S. follows:]



Response to questions submitted for the record by Dr. David J. Tazik, Chief, Ecosystem Evaluation and Engineering Division, Environmental Laboratory, U.S. Army Engineer Research and Development Center

Follow up questions submitted by Chairman Pombo:

1. **The Corps carries out and/or funds a significant amount of scientific research pertaining to endangered and threatened species. Some of this research is conducted in association with Corps projects. Has the Corps funded endangered or threatened species research in association with Corps projects that does not relate directly to the impacts or affects of the project on a species but would more accurately be described as scientific research regarding the species?**

Answer: Most scientific research funded or carried out by the Corps does relate directly to Corps project impacts (e.g., our extensive work on freshwater mussels and pallid sturgeon). Nonetheless, there are examples of scientific research funded by the Corps that does not relate directly to the impacts or effects of Corps projects on listed species, but may be required by the Services for projects to go forward. However, this research often yields information on species requirements that can in the end help determine project impacts.

- **If so, is any of this research ever conducted as a condition of a determination made by the FWS or NMFS?**

Answer: We are aware of at least one example where this research is a condition of a determination made by FWS or NMFS. Reasonable and Prudent Measures (RPM) subject to terms and conditions under the NMFS Biological Opinion regarding "Dredging of Gulf of Mexico Navigation Channels and Sand Mining ('Borrow') Areas Using Hopper Dredges by COE Galveston, New Orleans, Mobile, and Jacksonville Districts," require the Corps to collect tissue samples from all live and dead turtles captured by relocation trawling or dredging. The RPM further requires the Corps to provide tissue samples and funds needed for analysis to a specified NMFS lab.

- **Does any such research conducted by the Corps appear to be more consistent with the missions of FWS and NMFS than the mission of the Corps?**

Answer: This appears to be the case in research conducted by the Corps on the Interior Least Tern (ILT), which is intended to establish scientifically sound population monitoring guidelines and to assess the status of the species in specific drainages where status questions remain—notably the Cimarron and upper reaches of the Canadian and Red Rivers. The ILT is high priority species for the Corps due to its impact on the Corps mission, having been the subject of RPMs in several biological opinions issues by the U.S. Fish and Wildlife Service. The Corps has a strong incentive to take a leadership role in this activity. Since this species is directly tied in many cases to navigable waters, it is in our interest to address species conservation to maintain a balance between our navigation and environmental stewardship missions. We have extensive capability to address such issues, and prefer to cooperate proactively with the FWS. Our hypothesis, to be tested as part of this research, is that the ILT is healthy and warrants consideration for delisting. Our intent is to help provide the data needed to make this determination. Other activities funded by the Corps include genetic research on pallid sturgeon and federal fish hatcheries for pallid sturgeon propagation. The Corps funds this work to assist the Service with reintroduction and population augmentation in case population numbers become low. Basic genetics research is needed, although Corps research funding might be more effectively applied to habitat restoration research and monitoring. We advocate a habitat-based approach to endangered species conservation.

2. **In the Corps' opinion, are there any listed domestic sturgeons that may be questionable in terms of their uniqueness or distinctiveness from other listed or unlisted groups of sturgeons?**

Answer: There are numerous questions on hybridization between shovelnose and pallid sturgeons. There have been some genetic questions regarding the taxonomic classification of the Alabama sturgeon, which has not been seen for about 5 years, and only a few individuals had been captured prior to that. According to our research staff, a recently published journal article unequivocally establishes that the Alabama sturgeon is a true species.

3. **Are there any species that, in the Corps' opinion, may have population trends, numbers or distribution and/or that face overestimated threats indicating that the species may not merit its current endangered or threatened species status under the ESA?**

Answer: The FWS and the NMFS are the Federal agencies responsible for listing and delisting species, and for accomplishing, compiling, and evaluating information

upon which such decisions are based. That said, the Corps does have extensive expertise of its own in terms of habitat and species management and based upon this experience it appears that status reviews may be warranted for several species.

- **Based on the Corps' experience and knowledge are there any specific species that the Corps would suggest for status review?**

Answer: Species to consider include pallid sturgeon, two species of mussels, and Interior Least Tern. In the case of the pallid sturgeon, our data suggest that populations in the lower Mississippi River are stable, and probably in the middle Mississippi River as well. Two mussel species currently listed as endangered should be considered for downlisting or delisting—the fat pocketbook mussel (Potamilus capax) and the fat threeridge mussel (Amblema neislerii). Both have been found to be common to abundant and exhibit good evidence of recruitment. Depending upon the outcome of on-going surveys, the ILT might also be considered. In any event, recovery plans for each should be updated.

4. **Do you have any thoughts or comments you would like to offer with regard to taking a regional or system-wide view of the endangered species challenge or of increasing emphasis on conservation planning via the ESA's Section 7a(1).**

Answer: This is an important question affecting the Corps, notably as it relates to its ecosystem restoration authorities and projects being implemented across the country. A shift of emphasis from project-specific approach to endangered species issues (mostly the present practice) to a more regional or system-wide approach could alleviate inconsistency and inefficiency, while promoting an more holistic ecosystem approach to species and habitat conservation. Project level analyses of endangered species should always be conducted in the context of a larger scale program. Optimum use of limited resources to protect and manage species is not possible via a piecemeal approach that deals somewhat independently with each project. A good example is the pallid sturgeon that ranges over 3,000 miles in the Mississippi River basin. A more systemic approach would allow project planning, maintenance, and operations to more effectively support species protection and recovery. Another example is the $8 billion, 35 year effort to restore the Florida Everglades and over 18,000 square miles of marsh and associated habitats where there is a tension at times efforts to recover species such as the Florida Panther and Snail Kite, and holistic efforts to address the needs of all species and their habitats.

Section 7a (1) of the ESA provides each agency with the authority to develop what amounts to a conservation plan for listed species. Proactive implementation of this section of the law once a species is listed and before a crisis develops could go a long way towards preventing trouble down the road. Application of sound scientific principles and early coordination between regional offices of the Corps and the Services will help to ensure environmentally acceptable projects. Ideally, conservation plans should tier off of species recovery plans. Unfortunately, many recovery plans are outdated and need to be revised.

The Corps recognizes a need to develop guidance on implementation of this provision. The Corps and the Services need to work in partnership to develop a better approach especially for wide-ranging species. Two good working models exist for the Corps. The first is the region-wide biological assessment and guidelines for management of the Red-cockaded Woodpecker that were developed by the Army in collaboration with Region 4 of the FWS (circa 1996). The second is the Corps' Sea Turtle Research Program and region-wide biological assessment and biological opinions for the Gulf and South Atlantic U.S. Corps navigation Projects (circa 1990).

5. **You made several interesting comments with regard to the Corps' reported ESA expenditures. Is there any additional information or insights with regard to the expenditures the Corps makes to comply with the ESA that you think might be helpful?**

Answer: The Corps reported $33.5M in expenditures for threatened and endangered species during 2003 (most recent year published). While meeting the requirements for reporting, there are concerns that the reported amounts underestimate the total expenditures. For example, we found that Corps actual cost for sea turtles was $4.6M compared to the $2.3M reported by the Districts. Costs reported to FWS may be underestimated for several reasons, including: costs in contracts that go unreported; equipment costs not accounted for; and variations in District cost estimation procedures. We are developing a new reporting process to be used by Corps staff for the 2005 report. As the accounting of total costs improves, this cost information will be used in decisions to approve, modify, or in some cases abandon projects due to required commitment of ESA costs.

Follow up question submitted by Senator Crapo:

1. **All of the panelists spoke of contributing time and money to species conservation—some more willingly than others. If we could guarantee that your investment gave you a seat at the table to take part in hiring scientists, planning recovery, and taking action on the ground—would you be better off?**

Answer: As a federal agency, we enjoy the privileges suggested by Senator Crapo. Nonetheless, we endorse this approach. The Corps makes a considerable investment in hiring scientists and participating directly or indirectly in recovery planning, and taking action on the ground, often in partnership with others. We agree that stakeholders should have a seat at the table and participate in the scientific process and in recovery planning. Annually, the Corps participates in recovery efforts for about 70 listed species. Certainly it would be helpful if more funds were freed up for conservation and recovery planning—most agree that many plans are in need of updates.

Clearly, there will often be a wide range and diversity of interests in ecosystem management, including extreme positions on both sides of the house. Certainly we would all be better off, as would listed species, working through effectively managed partnerships emphasizing cooperative conservation. We firmly believe that if all were focused on the goal of species conservation we could find the ways and means of accommodating long-term species health while allowing reasonable human economic growth and development.

The Corps is willing to bring its considerable science and engineering expertise to the table to help find the "third way" in addressing the complex and often contentious issues surrounding conservation of endangered species and the ecosystems upon which they depend.