AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

H.R. 306, COROLLA WILD HORSES PROTECTION ACT; H.R. 588/S. 266, TO REDESIGNATE THE NOXUBEE NATIONAL WILDLIFE REFUGE AS THE SAM D. HAMILTON NOXUBEE NATIONAL WILDLIFE REFUGE; & H.R. 258, CHESAPEAKE BAY ACCOUNTABILITY AND RECOVERY ACT OF 2011

LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES, WILDLIFE, OCEANS AND INSULAR AFFAIRS

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

Thursday, April 7, 2011

Serial No. 112-22

Printed for the use of the Committee on Natural Resources

Available via the World Wide Web: http://www.fdsys.gov
or
Committee address: http://naturalresources.house.gov

U.S. GOVERNMENT PRINTING OFFICE

65-625 PDF WASHINGTON : 2011

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON NATURAL RESOURCES

DOC HASTINGS, WA, *Chairman*
EDWARD J. MARKEY, MA, *Ranking Democrat Member*

Don Young, AK
John J. Duncan, Jr., TN
Louie Gohmert, TX
Rob Bishop, UT
Doug Lamborn, CO
Robert J. Wittman, VA
Paul C. Broun, GA
John Fleming, LA
Mike Coffman, CO
Tom McClintock, CA
Glenn Thompson, PA
Jeff Denham, CA
Dan Benishek, MI
David Rivera, FL
Jeff Duncan, SC
Scott R. Tipton, CO
Paul A. Gosar, AZ
Raúl R. Labrador, ID
Kristi L. Noem, SD
Steve Southerland II, FL
Bill Flores, TX
Andy Harris, MD
Jeffrey M. Landry, LA
Charles J. "Chuck" Fleischmann, TN
Jon Runyan, NJ
Bill Johnson, OH

Dale E. Kildee, MI
Peter A. DeFazio, OR
Eni F.H. Faleomavaega, AS
Frank Pallone, Jr., NJ
Grace F. Napolitano, CA
Rush D. Holt, NJ
Raúl M. Grijalva, AZ
Madeleine Z. Bordallo, GU
Jim Costa, CA
Dan Boren, OK
Gregorio Kilili Camacho Sablan, CNMI
Martin Heinrich, NM
Ben Ray Luján, NM
John P. Sarbanes, MD
Betty Sutton, OH
Niki Tsongas, MA
Pedro R. Pierluisi, PR
John Garamendi, CA
Colleen W. Hanabusa, HI
Vacancy

Todd Young, *Chief of Staff*
Lisa Pittman, *Chief Counsel*
Jeffrey Duncan, *Democrat Staff Director*
David Watkins, *Democrat Chief Counsel*

SUBCOMMITTEE ON FISHERIES, WILDLIFE, OCEANS AND INSULAR AFFAIRS

JOHN FLEMING, LA, *Chairman*
GREGORIO KILILI CAMACHO SABLAN, CNMI, *Ranking Democrat Member*

Don Young, AK
Robert J. Wittman, VA
Jeff Duncan, SC
Steve Southerland, II, FL
Bill Flores, TX
Andy Harris, MD
Jeffrey M. Landry, LA
Jon Runyan, NJ
Doc Hastings, WA, *ex officio*

Eni F.H. Faleomavaega, AS
Frank Pallone, Jr., NJ
Madeleine Z. Bordallo, GU
Pedro R. Pierluisi, PR
Colleen W. Hanabusa, HI
Vacancy
Edward J. Markey, MA, *ex officio*

CONTENTS

	Page
Hearing held on Thursday, April 7, 2011	1
Statement of Members:	
Fleming, Hon. John, a Representative in Congress from the State of Louisiana	1
Prepared statement of	2
Sablan, Hon. Gregorio, a Delegate in Congress from the Commonwealth of the Northern Mariana Islands	3
Prepared statement of	4
Wittman, Hon. Robert J., a Representative in Congress from the State of Virginia	4
Prepared statement of	5
Statement of Witnesses:	
Harper, Hon. Gregg, a Representative in Congress from the State of Mississippi	8
Prepared statement on H.R. 588 and S. 266	10
Letter from the National Fish and Wildlife Foundation submitted for the record	11
Hutchins, Dr. Michael, Executive Director/CEO, The Wildlife Society	19
Prepared statement on H.R. 306	21
Jones, Hon. Walter B., Jr., a Representative in Congress from the State of North Carolina	6
Prepared statement on H.R. 306	7
Mann, Dr. Roger L., Professor of Marine Science, Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, Virginia	16
Prepared statement on H.R. 258	18
McCalpin, Karen H., Executive Director, Corolla Wild Horse Fund, Inc., Corolla, North Carolina	23
Prepared statement on H.R. 306	25
Siekaniec, Greg, Acting Deputy Director, U.S. Fish and Wildlife Service, U.S. Department of the Interior	12
Prepared statement on H.R. 588 and S. 266	13
Additional materials supplied:	
Marczyk, Bernie, Governmental Affairs Representative, Ducks Unlimited, Annapolis, Maryland, Letter submitted for the record on H.R. 258	38
Siglin, Doug, Director of Federal Affairs, Chesapeake Bay Foundation, Letter submitted for the record on H.R. 258	36
Skinner, Katherine D., State Director, North Carolina, The Nature Conservancy, Letter submitted for the record on H.R. 306	34

LEGISLATIVE HEARING ON H.R. 306, TO DIRECT THE SECRETARY OF THE INTERIOR TO ENTER INTO AN AGREEMENT WITH THE COROLLA WILD HORSE FUND, CURRITUCK COUNTY, AND THE STATE OF NORTH CAROLINA TO PROVIDE FOR THE MANAGEMENT OF FREE-ROAMING WILD HORSES IN AND AROUND THE CURRITUCK NATIONAL WILDLIFE REFUGE. "COROLLA WILD HORSES PROTECTION ACT"; H.R. 588, TO REDESIGNATE THE NOXUBEE NATIONAL WILDLIFE REFUGE AS THE SAM D. HAMILTON NOXUBEE NATIONAL WILDLIFE REFUGE; AND S. 266, A BILL TO REDESIGNATE THE NOXUBEE NATIONAL WILDLIFE REFUGE AS THE SAM D. HAMILTON NOXUBEE NATIONAL WILDLIFE REFUGE; H.R. 258, TO REQUIRE THE OFFICE OF MANAGEMENT AND BUDGET TO PREPARE A CROSSCUT BUDGET FOR RESTORATION ACTIVITIES IN THE CHESAPEAKE BAY WATERSHED, TO REQUIRE THE ENVIRONMENTAL PROTECTION AGENCY TO DEVELOP AND IMPLEMENT AN ADAPTIVE MANAGEMENT PLAN, AND FOR OTHER PURPOSES. "CHESAPEAKE BAY ACCOUNTABILITY AND RECOVERY ACT OF 2011"

Thursday, April 7, 2011
U.S. House of Representatives
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs
Committee on Natural Resources
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:01 a.m. in Room 1334, Longworth House Office Building, Hon. John Fleming [Chairman of the Subcommittee] presiding.

Present: Representatives Fleming, Wittman, Southerland, Harris, Bordallo and Sablan.

STATEMENT OF HON. JOHN FLEMING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Dr. FLEMING. The Subcommittee will come to order. The Chairman notes the presence of a quorum. Under Committee Rule 4[f], opening statements are limited to the Chairman and Ranking Member of the Subcommittee so that we can hear from our witnesses more quickly. However, I ask unanimous consent to include any other Member's opening statement in the hearing record if submitted to the Clerk by close of business today. Hearing no objection, so ordered.

Good morning. Today the Subcommittee will hear testimony on four legislative proposals. The first bill has been introduced by our distinguished Committee colleague, the gentleman from the 1st Congressional District in Virginia, Congressman Rob Wittman, whose timing was perfect this morning. H.R. 258 would require an interagency crosscut budget that will provide clarity and Federal

funding for restoration efforts in the Chesapeake Bay. In addition, this legislation will require that an adaptive management plan be adopted for Chesapeake Bay restoration activities. This plan would institute measurable objectives to ensure that both Federal and state dollars spent on restoration are producing positive results. The Chesapeake Bay supports more than 3,600 species of fish, plants and wildlife, and more than $1 billion in economic activity is generated from one of the largest estuaries in the world.

While millions of tax dollars have been spent to improve the quality of the Bay, these funds are distributed among many agencies and departments. The many Federal and state Chesapeake Bay restoration programs lack a single, comprehensive reporting system for the funding of these activities. The fundamental goal of H.R. 258 is to eliminate this serious shortcoming.

The second bill, H.R. 306, has been introduced by our colleague from North Carolina, Congressman Walter B. Jones. Now, the goal of his legislation is to try to save the herd of wild Corolla horses by requiring the Fish and Wildlife Service to enter into a new management agreement. I find it curious that the Fish and Wildlife Service feels these beautiful horses, whose ancestors arrived on the shores of North Carolina nearly 500 years ago, to be not native to this ecosystem and pest animals, yet this same agency has spent millions of dollars trying to protect, restore and save the population of such listed species as the Delhi Sands fly, delta smelt, kangaroo rat, New Mexico ridge-nosed rattlesnake, and Texas blind salamander.

I suspect that more than a few Americans would find these species to be pests. While this is not a hearing on the Endangered Species Act, what we do know is that the Corolla Wild Horse Fund, who have asked for changes to the management plan, passionately believes that Corolla wild horses are being managed for extinction. Finally, our colleague, Congressman Gregg Harper, has introduced H.R. 588, a bill to rename the Noxubee National Wildlife Refuge in Mississippi after former Fish and Wildlife Service Director Sam D. Hamilton who unexpectedly died on February 20, 2010. Director Hamilton had a distinguished 30-year career with the Service, and it is my understanding that his first outdoor jobs were banding wood ducks and building waterfowl pens at the Noxubee National Wildlife Refuge. Similar legislation, S. 266, has already passed the Senate and I hope our witnesses will discuss any differences or concerns with that legislation, as well as the House version. I look forward to hearing the testimony on these proposals. I am now pleased to recognize our Ranking Democratic Member from the Commonwealth of the Northern Mariana Islands, Congressman Sablan, for any statement he would like to make.

[The prepared statement of Dr. Fleming follows:]

Statement by The Honorable John Fleming, Chairman, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs, on H.R. 258, H.R. 306, H.R. 588 and S. 266

Good morning. Today the Subcommittee will hear testimony on four legislative proposals. The first bill has been introduced by our distinguished Committee colleague, the gentleman from the 1st Congressional District in Virginia, Congressman Rob Wittman.

H.R. 258 would require an interagency cross-cut budget that will provide clarity in federal funding for restoration efforts in the Chesapeake Bay. In addition, this

legislation will require that an adaptive management plan be adopted for Chesapeake Bay restoration activities. This plan would institute measurable objectives to ensure that both federal and state dollars spent on restoration are producing positive results.

The Chesapeake Bay supports more than 3,600 species of fish, plants and wildlife, and more than $1 billion in economic activity is generated from one of the largest estuaries in the world. While millions of tax dollars have been spent to improve the quality of the Bay, these funds are distributed among many agencies and departments. The many federal and state Chesapeake Bay restoration programs lack a single comprehensive reporting system for the funding of these activities. The fundamental goal of H.R. 258 is to eliminate this serious shortcoming.

The second bill, H.R. 306, has been introduced by our colleague from North Carolina, Congressman Walter B. Jones. The goal of his legislation is to try to save the herd of wild Corolla horses by requiring the Fish and Wildlife Service to enter into a new management agreement.

I find it curious that the Fish and Wildlife Service feels these beautiful horses whose ancestors arrived on the shores of North Carolina nearly 500 years ago to be "not native to this ecosystem" and "pest animals". Yet, this same agency has spent millions of tax dollars trying to protect, restore and save the population of such listed species as the Delhi Sands fly, delta smelt, Kangaroo rats, New Mexico ridge-nosed rattlesnakes and Texas blind salamanders. I suspect that more than a few Americans would find these species to be "pests". While this is not a hearing on the Endangered Species Act, what we do know is that the Corolla Wild Horse Fund, who have asked for changes to the management plan, passionately believes that Corolla wild horses are being managed for "extinction".

Finally, our colleague Congressman Gregg Harper has introduced H.R. 588, a bill to rename the Noxubee National Wildlife Refuge in Mississippi after former Fish and Wildlife Service Director Sam D. Hamilton who unexpectedly died on February 20, 2010. Director Hamilton had a distinguished 30 year career with the Service and it is my understanding that his first outdoors jobs was banding wood ducks and building waterfowl pens at the Noxubee National Wildlife Refuge. Similar legislation, S. 266, has already passed the Senate and I hope our witnesses will discuss any differences or concerns with that legislation as well as the House version.

I look forward to hearing the testimony on these proposals. I am now pleased to recognize our Ranking Democratic Member from the Commonwealth of Northern Marianas, Congressman Sablan, for any statement he would like to make.

STATEMENT OF HON. GREGORIO SABLAN, A DELEGATE IN CONGRESS FROM THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

Mr. SABLAN. Well, thank you very much, Mr. Chairman, and good morning, everyone. Congressman Jones, thank you for being here with us today. I look forward to hearing about your bill, H.R. 306, the Corolla Wild Horses Protection Act, which I understand will statutorily direct the U.S. Fish and Wildlife Service to formally enter into an agreement with other governmental and nongovernmental partners to ensure a long-term, sustainable wild horse herd on the Currituck Outer Banks in North Carolina. I hope I got that right. The management of non-native wildlife is always a challenge, including in the Commonwealth of the Northern Mariana Islands, so I will be interested to hear the different perspectives of our witnesses.

We appreciate you being here as well, Congressman Harper, to testify on your bill, H.R. 588, which would redesignate the Noxubee National Wildlife Refuge as the Sam D. Hamilton Noxubee National Wildlife Refuge. Although I have never had the chance to meet Director Hamilton, it is abundantly clear that everyone who worked with him during his three-plus decades of public service had the utmost respect and admiration for him. His lifelong commitment to conservation and restoration of some of the nation's most important species and ecosystems started at Noxubee

National Wildlife Refuge and it is fitting, I think, that this place is memorialized in his honor. Finally, I look forward to hearing about a bill introduced by our Subcommittee colleague, Congressman Wittman, H.R. 258. The Chesapeake Bay Accountability and Recovery Act of 2011 would increase coordination and accountability by requiring a crosscut project and adaptive management for all restoration activities in the Bay. I appreciate my colleague's efforts to improve accounting and oversight over these restoration activities which will enhance and recover the resources of the Bay. With that, I look forward to hearing from our witnesses today and learning more about these issues. Thank you very much, Mr. Chairman, and I yield back.

[The prepared statement of Mr. Sablan follows:]

Statement of The Honorable Gregorio Sablan, Ranking Member, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs, on H.R. 306, H.R. 588/S. 266, and H.R. 258

Thank you, Mr. Chairman.

Congressman Jones, thank you for being here with us today. I look forward to hearing about your bill, H.R. 306, the Corolla Wild Horses Protection Act, which I understand would statutorily direct the U.S. Fish and Wildlife Service to formally enter into an agreement with other governmental and non-governmental partners to ensure a long-term sustainable wild horse herd on the Currituck Outer Banks in North Carolina. The management of non-native wildlife is always a challenge, including in the Commonwealth of the Northern Mariana Islands, so I will be interested to hear the different perspectives of our witnesses.

We appreciate you being here as well, Congressman Harper, to testify on your bill, H.R. 588, which would redesignate the Noxubee National Wildlife Refuge as the Sam D. Hamilton Noxubee National Wildlife Refuge. Although I never had the chance to meet Director Hamilton, it is abundantly clear that everyone who worked with him during his three plus decades of public service had the utmost respect and admiration for him. His lifelong commitment to conservation and restoration of some of the Nation's most important species and ecosystems started at Noxubee National Wildlife Refuge and it is fitting that this place is memorialized in his honor.

Finally, I look forward to hearing about a bill introduced by our Subcommittee colleague, Congressman Wittman. H.R. 258, the Chesapeake Bay Accountability and Recovery Act of 2011 would increase coordination and accountability by requiring a crosscut budget and adaptive management for all restoration activities in the Bay. I appreciate my colleague's efforts to improve accounting and oversight over these restoration activities, which will enhance and recover the resources of the Bay.

With that, I look forward to hearing from our witnesses today and learning more about these issues.

Dr. FLEMING. I thank the gentleman. Based on the traditions of this Subcommittee, I would like to now recognize my good friend and colleague, Rob Wittman, for any opening statement he would like to make on this bill, H.R. 258.

STATEMENT OF HON. ROBERT WITTMAN, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. WITTMAN. Well, thank you, Mr. Chairman. I appreciate the opportunity to bring this bill before the Committee. As you know, the bill was also submitted in the 111th Congress where it passed the House 418 to 1. It is a very elemental part of what I believe needs to happen to increase the efforts to restore the Bay. It revolves around two fairly simple concepts. One, crosscut budgeting, and that simply means that where every penny is spent on the Bay, we will have a single place in the Federal budget where you can see exactly how much is being spent, and then from there you

can drill down and see exactly what agency is spending what. That creates a transparency there that leads to the ability to make sure that agencies are accountable, and the accountability part is the second element of what is called adaptive management.

Just like you would do if you owned a business, you make changes along the way depending on what is the most effective expenditure dollar. So if you are seeing that a particular practice is effective in reducing nitrogen, you would want to make sure you continue that practice. If there was one practice you were funding that is not particularly effective, you would want to make sure that you either made changes to it or that you redirected resources to something that was working. The same goes for other restoration practices on the Bay. Whether it is oyster restoration or sturgeon restoration, the concept is applicable across those Bay programs. So this bill merely puts in place those particular elements to make sure that there is transparency and that there is accountability in the efforts that go on with the Bay.

Some of the frustration that many of us have with what happens in Bay efforts is that you see multiple agencies doing many things, many times without coordination and many times without sharing data, many times without looking at the outcomes and how those outcomes are getting the total Bay effort toward restoration, whether it is through resources or whether it is for water quality. I think you will hear a little bit later on from Dr. Mann who works at the Virginia Institute of Marine Science about their experience and how they deal with the many different agencies. They are the lead agency in Virginia to provide direction and scientific information to the Virginia agencies and other agencies up and down the Bay watershed as to what is happening with the Bay.

How are particular efforts either being effective or not being effective? I know in my days in working with Bay water quality I saw many of those instances where if there was just a little more coordination, a little more transparency there, we could do so much more and make sure, too, that we are accelerating those efforts. As you know, right now the Chesapeake Bay Act is up for reauthorization. Many of the elements there in restoring the Chesapeake Bay haven't gotten to where we need to be as far as restoration. So I truly believe that this will be one of those elements to help elevate that, create that transparency and streamline things to make sure that we are focused on outcomes and coordination. So, Mr. Chairman, I thank you for your leadership on the Subcommittee. Thank you for the opportunity to bring this bill before the Subcommittee today, and I look forward to the testimony of our witnesses.

[The prepared statement of Mr. Wittman follows:]

Statement of The Honorable Robert J. Wittman, a Representative in Congress from the Commonwealth of Virginia, on H.R. 258

Chairman John Fleming, thank you very much for holding this hearing to consider legislation related to the Chesapeake Bay.

Today we will hear testimony on H.R. 258, The Chesapeake Bay Accountability and Recovery Act of 2011.

I am honored to represent Virginia's First Congressional District. Improving the health of the Chesapeake Bay is a priority to me and many of my constituents.

I believe there is a sense of frustration in the Chesapeake Bay watershed about the progress made to restore the Bay. Yes, there have been successes. However, with all of the federal, state, local and private partner investment we would all like

to see more accomplishments. Better accounting and more flexible management are essential to restoring the Chesapeake Bay.

My legislation, H.R. 258, the Chesapeake Bay Accountability and Recovery Act, would implement and strengthen management techniques like crosscut budgeting and adaptive management –to ensure we get more bang for our buck and continue to make progress in Bay restoration efforts. Both techniques will ensure that we're coordinating how restoration dollars are spent and making sure that everyone understands how individual projects fit into the bigger picture. That way, we're not duplicating efforts, spending money we don't need to or, worse, working at cross purposes.

H.R. 258 would require OMB in coordination with state and federal agencies involved in the Bay to report to Congress on the status of Chesapeake Bay restoration activities.

This legislation would also require EPA to develop and implement an adaptive management plan for Chesapeake Bay restoration activates.

Adaptive management relies on rigorous scientific monitoring, testing and evaluating; and the flexibility to modify management policies and strategies based on changing conditions.

The bill also requires EPA to appoint an Independent Evaluator (IE) to review and report on restoration activities, implementation of adaptive management, and other topics suggested by the Chesapeake Executive Council. The IE will report findings and recommendations to Congress every three years.

Crosscut budgeting, adaptive management and an Independent Evaluator should be key components for the complex restoration activity in the Chesapeake Bay.

The Chesapeake Bay Accountability and Recovery Act is common sense legislation, broadly supported throughout the watershed. During the 111th Congress, the House of Representatives passed H.R. 1053, identical legislation by a vote of 418–1. Currently, the bill is supported by a bipartisan group of Members of Congress across the Bay watershed. Outside organizations, including Ducks Unlimited, the Virginia Seafood Council and the Chesapeake Bay Foundation also support the legislation. Additionally, the National Taxpayer Union identified H.R. 258 as the "Least Expensive Bill of the Week" for March 2, 2011.

Thanks again for holding this hearing and I look forward to continuing working with you and the Committee to restore the Chesapeake Bay.

Dr. FLEMING. I thank the gentleman from Virginia and certainly appreciate his passion for this issue. It is very obvious that you are well read, sir, and well studied this, and that is a credit to your state, to your district. I think we will now hear from our first panel which is comprised of two of our distinguished colleagues, The Honorable Walter B. Jones of North Carolina and The Honorable Gregg Harper of Mississippi. Gentlemen, welcome to the Walter B. Jones Hearing Room. Like all witnesses, your written testimony will appear in the full hearing record so I ask that you keep your oral statement to five minutes as outlined in our invitation letter to you and under Committee Rule 4[a]. Our microphones are not automatic so please press the button when you are ready to begin. Let us see. OK. With that, I recognize Congressman Jones for five minutes, sir.

STATEMENT OF HON. WALTER B. JONES, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. JONES. Mr. Chairman, I want to thank you and the Ranking Member and the Members of the Committee for this opportunity to discuss H.R. 306, the Corolla Wild Horse Protection Act. This bill would provide for a new management plan for the free-roaming Corolla wild horses of North Carolina's Outer Banks. These Corolla horses can be traced back to the arrival of Spanish explorers on the Outer Banks in the 16th Century. These horses survived in the wild for over four centuries and currently roam across 7,500 acres of public and private land in coastal Currituck County, North

Carolina. Unfortunately, under the existing management agreement between the Interior Department, the State of North Carolina, Currituck County and the nonprofit Corolla Wild Horse Fund, the maximum number of horses allowed in the herd is 60. Leading equine genetic scientists believe that the number 60 threatens the herd's existence due to high levels of inbreeding and low levels of genetic diversity. To address this issue, H.R. 306 would require the parties to the agreement to craft a new management plan to allow a herd of no less than 110 horses with a target of 120 to 130 horses. That is the minimum number that renowned equine genetic scientist Dr. Gus Cothran of Texas A&M University has found to be necessary to maintain the herd's genetic viability. It is important to note that these numbers are well within the care and capacity of the land these horses call home and to increase the herd's genetic diversity the bill would, under limited circumstances, allow for the introduction of a small number of free-roaming wild horses from the related herd at Cape Lookout National Seashore. H.R. 306 is similar to a bill I authored to save the wild horses of Shackleford Banks in Cape Lookout National Seashore. That legislation, H.R. 765, which was signed into law by President Bill Clinton in 1998, has provided a successful framework for a public/private partnership to manage the Shackleford horses. I am grateful to President Clinton's Chief of Staff, Erskine Bowles, for his help in moving that legislation. Mr. Bowles, who just left his position as President of the University of North Carolina's system and was co-chair of President Obama's Debt Commission, is also a strong supporter of this bill, H.R. 306. Mr. Chairman, I would like to read a passage from a letter to the Committee in support of this bill from North Carolina State Senator Stan White. He states, "In 2010, the North Carolina General Assembly designated the Colonial Spanish Mustangs as the North Carolina state horse. It was done to show how important these horses are to our culture, their value to our economy and our commitment to their welfare. However, this designation cannot do its job without a solid management plan that clarifies what is necessary for these horses to thrive. H.R. 306 would allow for the best management of the herd according to what has been scientifically determined to be necessary for their health and long-term survival." Joining Senator White in his support for H.R. 306 are the Humane Society, North Carolina's Governor Bev Perdue, Currituck County, the Animal Welfare Institute, the Foundation for Shackleford Horses, Saving America's Mustangs, American Wild Horse Preservation Campaign and Equus Survival Trust. I would like to ask unanimous consent for letters of support be included for the record.

Dr. FLEMING. The gentleman asks for unanimous consent. If there are no objections, so ordered.

[The prepared statement of Mr. Jones follows:]

Statement of The Honorable Walter B. Jones, a Representative in Congress from the State of North Carolina, on H.R. 306, Corolla Wild Horses Protection Act

Chairman Fleming and Ranking Member Sablan, thank you for this hearing on H.R. 306, the Corolla Wild Horses Protection Act. The bill would provide for a new management plan for the free-roaming Corolla wild horses in and around the Currituck National Wildlife Refuge on the Outer Banks of North Carolina. The lin-

eage of the Corolla horses can be traced back to the arrival of Spanish explorers on the Outer Banks in the 16th century. These beautiful creatures have survived in the wild for over four centuries. They currently roam across over 7,500 acres of public and private land in coastal Currituck County, North Carolina.

Unfortunately, under the existing management agreement between the U.S. Department of the Interior, the State of North Carolina, the County of Currituck and the non-profit Corolla Wild Horse Fund, the maximum number of horses allowed in the herd is 60. Leading equine geneticists believe that the number 60 poses an immediate threat to the herd's existence due to high levels of inbreeding and low levels of genetic diversity in the herd. To address this issue, the bill would require the parties to the agreement to craft a new herd management plan that would allow for a herd of no less than 110 horses, with a target population of between 120 and 130 horses. That is the minimum number of horses that renowned equine geneticist Dr. Gus Cothran of Texas A&M University has found to be necessary to maintain the herd's genetic viability. It's important to note that these numbers are well within the carrying capacity of the land these horses call home. And to increase the herd's genetic diversity, the bill would also under limited circumstances allow for introduction of a small number of free-roaming wild horses from the related herd at Cape Lookout National Seashore.

This bill is similar to one I authored to protect the wild horses of Shackleford Banks in the Cape Lookout National Seashore. That legislation—H.R. 765—which was signed into law by President Bill Clinton in 1998, has provided a successful statutory framework for a public-private partnership to manage the Shackleford horses. I am grateful to President Clinton's Chief of Staff at that time—Erskine Bowles—for his assistance in moving that legislation. Mr. Bowles, who just stepped down as President of the University of North Carolina System and co-Chaired President Obama's Debt Commission, is also a strong supporter of this bill, H.R. 306.

Mr. Chairman, I would like to read from a letter to the Committee supporting H.R. 306 from North Carolina State Senator Stan White, who represents Currituck County in the State Senate. He states: "In 2010, the North Carolina General Assembly designated the Colonial Spanish Mustang as the North Carolina State Horse. It was done to show how important these horses are to our culture, their value to our economy, and our commitment to their welfare. However, this designation cannot do its job without a solid management plan that clarifies what is necessary for these horses to thrive. H.R. 306 would allow for the best management of the herd according to what has been scientifically determined to be necessary for their health and long-term survival."

Joining Senator White in supporting H.R. 306 are the Humane Society, North Carolina Governor Bev Perdue, Currituck County, the Animal Welfare Institute, The Foundation for Shackleford Horses, Saving America's Mustangs, American Wild Horse Preservation Campaign, and Equus Survival Trust. I would like to ask unanimous consent for letters of support from these individuals and organizations to be included for the record.

Mr. Chairman, again thank you for holding this hearing on H.R. 306. It is a legislative fix based on sound science, and I urge the Subcommittee to support it.

Mr. JONES. Mr. Chairman, before I close I would like to point to my right and my left these beautiful horses on the shore in Currituck County. they are majestic, they again are traced back to the Spanish Mustangs. Mr. Chairman and Ranking Member, I want to thank you for this opportunity to testify on H.R. 306. Thank you, sir.

Dr. FLEMING. I thank the distinguished gentleman from North Carolina for your testimony. Now we will turn to the distinguished gentleman from Mississippi. Sir, you have five minutes.

STATEMENT OF HON. GREGG HARPER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. HARPER. Thank you, Chairman Fleming, Ranking Member Sablan and distinguished Subcommittee Members. Thank you for this opportunity to come and testify regarding H.R. 588, legislation that I introduced to redesignate the Noxubee National Wildlife Refuge as the Sam D. Hamilton Noxubee National Wildlife Refuge.

This bill is a companion piece to S. 266 introduced by Senator Thad Cochran which passed the Senate on February 17, 2011. It is my understanding there are no differences between S. 266 and this bill. H.R. 588 honors Mr. Sam D. Hamilton, a lifetime conservationist and a great man who served more than 30 years at the Fish and Wildlife Service, ultimately rising to the position of Director in December of 2009.

As the panel is aware, the Refuge System was created in 1903 and has 548 national wildlife refuges and wetland management districts that are home to some 700 species of birds, 220 mammals and 280 threatened or endangered species. The Noxubee National Wildlife Refuge is located in East Central Mississippi. It was established in 1940 and consists of 48,000 acres inhabited by a variety of game and nongame fish and wildlife, including quail, deer, turkey, an endangered woodpecker, wood stork, American alligator, bald eagle and wintering waterfowl. Approximately 170,000 people visit the refuge annually and enjoy hunting, fishing, hiking and other outdoor and educational activities.

Mr. Hamilton has a long and personal history with the refuge. A native of Starkville, Mississippi, he recalled during his confirmation hearing testimony that he caught his very first fish at the Noxubee National Wildlife Refuge at the age of five and began his conservation career there as an employee at the age of 15. Sam called the Refuge System the finest collection of public lands and waters dedicated to fish and wildlife conservation in the world. Upon graduation from Mississippi State University, Sam started a 30-year career at the Fish and Wildlife Service. He worked in service field offices and Washington, D.C. headquarters, served extended details to the House Merchant Marine and Fisheries Committee and the Association of Fish and Wildlife Agencies and was a special assistant in the director's office.

He was selected to be the Fish and Wildlife Service's first state administrator in Austin, Texas, to work with state and local governments and private landowners on statewide conservation issues, and he served as the Fish and Wildlife Service's Regional Director for the Southeast Region. On September 1, 2009, Sam D. Hamilton was sworn in as the fifteenth director of the U.S. Fish and Wildlife Service. Sam passed away on February 20, 2010. Honoring Sam by renaming the refuge would be a tribute to his remarkable career and commitment to conservation. The National Fish and Wildlife Foundation recently provided a $100,000 grant to the friends of Noxubee Refuge that will fund new signs and capital improvements for the refuge, as well as a scholarship and education funding in honor of Sam. This grant will allow the name change to occur without the Federal Government incurring those costs. I would like now to ask for unanimous consent to submit a letter for the record from the ex-National Fish and Wildlife Foundation Executive Director, Jeff Trandahl, which outlines this grant.

Dr. FLEMING. The gentleman asks for unanimous consent. If there are no objections, so ordered.

[NOTE: The National Fish and Wildlife Foundation letter submitted for the record can be found at the end of Mr. Harper's prepared statement.]

Mr. HARPER. Chairman Fleming, Ranking Member Sablan and Members of the Subcommittee, thank you again for the opportunity to testify before you today regarding H.R. 588. I look forward to working with you to ensure this legislation is signed into law to remember a man who truly devoted his life and career to the ideals formed during his early days at the Noxubee National Wildlife Refuge. I thank you and welcome any questions that the Subcommittee may have.

[The prepared statement of Mr. Harper follows:]

Statement of The Honorable Gregg Harper, a Representative in Congress from the State of Mississippi, on H.R. 588

Chairman Fleming, Ranking Member Sablan, and members of the Subcommittee, thank you for the opportunity to testify today regarding H.R. 588, legislation I introduced to redesignate the Noxubee National Wildlife Refuge as the Sam D. Hamilton Noxubee National Wildlife Refuge. This bill is a companion piece to S. 266, introduced by Senator Thad Cochran, which passed the Senate on February 17, 2011. H.R. 588 honors Mr. Sam D. Hamilton, a lifetime conservationist and a great man who spent 30 years at the Fish and Wildlife Service, ultimately rising to Director in 2009.

As this panel is aware, The Refuge System was created in 1903 and has 548 national wildlife refuges and 37 wetland management districts that are home to some 700 species of birds, 220 mammals, and 280 threatened or endangered species.

The Noxubee National Wildlife Refuge is located in east-central Mississippi. It was established in 1940 and consists of 48,000 acres inhabited by a variety of game and non-game fish and wildlife including quail, deer, turkey, the endangered red-cockaded woodpecker, wood stork, American alligator, bald eagle and wintering waterfowl. Approximately 170,000 people visit the Refuge annually and enjoy hunting, fishing, hiking and other outdoor and educational activities.

Mr. Hamilton has a long and personal history with the Refuge. A native of Starkville, Mississippi, he recalled during his confirmation hearing testimony—he caught his first fish at the Noxubee National Wildlife Refuge at age 5 and began his conservation career there as an employee at age 15. Sam called the Refuge System the "finest collection of public lands and waters dedicated to fish and wildlife conservation in the world."

Upon graduation from Mississippi State University, Sam started a 30-year career at the Fish and Wildlife Service. He worked in Service field offices and Washington, D.C. headquarters, served extended details to the House Merchant Marine and Fisheries Committee and the Association of Fish and Wildlife Agencies, and was a special assistant in the Director's office. He was selected to be the Fish and Wildlife Service's first state administrator in Austin, Texas to work with state and local governments and private landowners on statewide conservation issues and he served as the Fish and Wildlife Service's Regional Director for the Southeast Region. On September 1, 2009, Sam D. Hamilton was sworn-in as the 15th Director of the U.S. Fish and Wildlife Service.

Sam passed away on February 20, 2010. Honoring Sam by renaming the Refuge would be a tribute to his remarkable career and commitment to conservation. The National Fish and Wildlife Foundation recently provided a $100,000 grant to the Friends of Noxubee Refuge that will fund new signs and capital improvements for the Refuge, as well as scholarship and education funding in honor of Sam. This grant will allow the name change to occur without the federal government incurring these costs. I would like to submit a letter for the record from the National Fish and Wildlife Foundation Executive Director, Jeff Trandahl, which outlines this grant.

Chairman Fleming, Ranking Member Sablan, and members of the Subcommittee, thank you again for the opportunity to testify before you today regarding H.R. 588. I look forward to working with you to ensure this legislation is signed into law to remember a man who devoted his life and career to the ideals formed during his early days at the Noxubee National Wildlife Refuge. Thank you, and I welcome any questions the committee may have.

[The letter from the National Fish and Wildlife Foundation submitted for the record by Mr. Harper follows:]

NATIONAL FISH and WILDLIFE FOUNDATION
1133 15th Street, NW Suite 1100
Washington, D.C. 20005
P 202-857-0166 F 202-857-0162 nfwf.org

March 21, 2011

The Honorable Gregg Harper
U.S. House of Representatives
Washington, DC 20510

Dear Representative Harper:

This letter is in reference to your legislation, H.R. 588, which seeks to rename the Noxubee National Wildlife Refuge after the late Sam D. Hamilton. Mr. Hamilton served on the National Fish and Wildlife Foundation's Board of Directors during his tenure as the Director of the U.S. Fish and Wildlife Service. He was an invaluable asset to the U.S. Fish and Wildlife Service and it was an honor to have him serve on the Foundation's Board.

The Foundation has awarded a grant of $100,000 to the Friends of the Noxubee Refuge that will provide funding for the new signs and capital improvements that will be necessary to rename the Refuge. In addition, the grant will partially fund a scholarship and education program at the Refuge in honor of Mr. Hamilton. This grant will allow for the name change of the Refuge without the federal government incurring these costs.

We appreciate your leadership on behalf of Sam Hamilton and his family and we look forward to working with you as the legislation moves forward.

Sincerely,

Jeff

Jeff Trandahl
Executive Director

Thank you for your assistance.
JT

Cc:
The Honorable Doc Hastings
The Honorable John Fleming
The Honorable Ed Markey
The Honorable Gregorio "Kilili" Sablan

Dr. FLEMING. I thank the distinguished witnesses and excellent testimonies of my colleagues and friends this morning. As is our tradition, we do not normally have a round of questions for our colleagues; however, I will open the table up for any specific questions that Members may have. If not, then our distinguished witnesses are excused. Thank you for your time.

Mr. HARPER. Thank you, Mr. Chairman.

Mr. JONES. Thank you, Mr. Chairman.

Dr. FLEMING. I am sorry. Do we have one? I am sorry.

Ms. BORDALLO. Thank you, Mr. Chairman. I just want to state that I am in support of all of these bills, in particular, H.R. 306 authored by Mr. Jones. I am very much in favor of horses and very interested in their well-being. Thank you.

Mr. JONES. Thank you, ma'am. Thank you.

Dr. FLEMING. I thank the gentlelady from Guam. No further questions? Then our witnesses are excused. Thank you for your

time and service. We will ask the second panel of witnesses to move forward. OK. It appears that our second panel is well-positioned so we will move forward. We are now ready for our second panel. This panel includes Mr. Greg Siekaniec, the U.S. Fish and Wildlife Service's Assistant Director for the National Wildlife Refuge System; Dr. Roger Mann, Professor of Marine Science at the Virginia Institute of Marine Science; Dr. Michael Hutchins, Executive Director of the Wildlife Society; and Ms. Karen McCalpin, Executive Director of the Corolla Wild Horse Fund. So of course the procedure here is you have five minutes each. We ask you to keep your remarks within the five minute window. When you see the yellow light, that means you have one minute left, and try to conclude, of course, your comments at the end of the five minute period. So I would like to first recognize Mr. Siekaniec. Five minutes, sir.

STATEMENT OF GREG SIEKANIEC, ASSISTANT DIRECTOR, NATIONAL WILDLIFE REFUGE SYSTEM

Mr. SIEKANIEC. Good morning, Chairman Fleming, Ranking Member Sablan and distinguished Members of the Subcommittee. I am Greg Siekaniec, presently the Acting Deputy Director of the U.S. Fish and Wildlife Service within the Department of the Interior. I appreciate the opportunity to appear before the Subcommittee today to present the Department's testimony on H.R. 306, the Corolla Wild Horse Protection Act, and H.R. 588 and S. 266, bills that would rename the Noxubee National Wildlife Refuge after our late director, Sam D. Hamilton. As outlined more fully in my written statement, the Department opposes passage of H.R. 306 and supports passage of H.R. 588. H.R. 306 would require the Secretary of the Interior to enter into an agreement to provide for management of horses in and around the Currituck National Wildlife Refuge.

The bill mandates a herd of not less than 110 horses in and around the refuge and severely limits the Service's ability to manage these horses. Currituck National Wildlife Refuge was established to protect and preserve migratory birds and other wildlife resources. Native species that depend upon this coastal barrier island ecosystem include waterfowl, wading birds, shore birds, raptors, mammals, reptiles, amphibians and a variety of plants. The refuge provides habitat for endangered species such as piping plover and sea turtles. The Service views wild horses as feral domestic animals. On the refuge, horses compete with native wildlife species for resources and often negatively impact habitat. For example, horses trample and consume plants, removing food and shelter for native species. Horses are also known to facilitate the introduction of invasive weeds.

H.R. 306 would weaken the Service's ability to accomplish the refuge's purposes. Under the bill, the Service will no longer be able to place its highest management priorities at the refuge on migratory bird management or endangered species protection. The bill also limits the Service's management discretion on the refuge by restricting our ability to close areas, remove horses or provide grazing opportunities beneficial to wildlife within enclosed areas. The Service also questions whether the area can sustain 110 or more

horses. This concern is heightened by ongoing development of private land which continues to diminish the quantity of suitable habitat outside the refuge. Maintaining a horse herd may eventually prevent us from fulfilling the purposes for which the refuge was established. Last, we view H.R. 309 as unnecessary because there is already a successful horse management plan in place. The current version of the Currituck Outer Banks Wild Horse Management Plan was reviewed and approved in partnership with the Corolla Wild Horse Fund, the County of Currituck and the North Carolina National Estuarine Research Reserve in 2007. For these reasons, the Department opposes passage of H.R. 306.

H.R. 588 and S. 266 would rename the Noxubee National Wildlife Refuge the Sam D. Hamilton Noxubee National Wildlife Refuge. We greatly appreciate Representative Harper's and Senator Cochran's efforts to honor our late director with these bills. I would like to say a few words about Sam, if I may. Sam's vision and commitment to wildlife conservation were extraordinary, as you have already heard. He was passionate about conservation of natural resources and about the Service's mission. He held a deep appreciation for the work done by each employee of the Service. Sam worked for over 30 years on a wide variety of positions that spanned field work in the marshes of Mississippi to policy work in the headquarters office in Washington, D.C.

He served for many years as the Southeast Regional Director before being nominated and confirmed as the Service's Director in 2009. Sam's tenure as director, though brief, was guided by his strongly held belief that no single entity, whether Federal, state or private, can ensure the sustainability of the nation's fish and wildlife resources working independently. He worked toward building collaborative partnerships to develop bold ideas and solutions to the challenges facing the nation's wildlife. His views and approaches toward conservation resonate deeply within the Service to this day. With regards to Noxubee National Wildlife Refuge, there is no doubt that Sam had a special place in his heart for this refuge. He grew up close to the refuge in Starkville, Mississippi.

He caught his first fish there with his father at age of five. Sam began his career in conservation with the Youth Conservation Corps at Noxubee Refuge. Although it is generally the policy of the Service not to recommend name changes after individuals, in recognition of Sam's contributions, we are all honored that Congress is actually considering honoring one of our own in the Fish and Wildlife Service and the Department supports H.R. 588 and S. 266. In closing, the Administration appreciates the Subcommittee's continued leadership and support for the conservation of the nation's wildlife and our National Wildlife Refuge System. I thank you for the opportunity to be here and testify today. I would be happy to answer any questions the Subcommittee may have.

[The prepared statement of Mr. Siekaniec follows:]

Statement of Greg Siekaniec, Acting Deputy Director, U.S. Fish and Wildlife Service, U.S. Department of the Interior

INTRODUCTION

Chairman Fleming and Members of the Subcommittee, I am Greg Siekaniec, Acting Deputy Director of the U.S. Fish and Wildlife Service (Service), within the Department of the Interior (Department).

I appreciate the opportunity to appear before the Subcommittee today to testify on two bills of interest to the Service: H.R. 306 the Corolla Wild Horses Protection Act and H.R. 588, a bill to rename the Noxubee National Wildlife Refuge the Sam D. Hamilton Noxubee National Wildlife Refuge. We greatly appreciate the Subcommittee's continued leadership and support for the conservation of the nation's wildlife and our National Wildlife Refuge System.

As outlined below, the Department opposes passage of H.R. 306 and supports passage of H.R. 588.

H.R. 306, THE COROLLA WILD HORSES PROTECTION ACT

H.R. 306, the Corolla Wild Horses Protection Act, would require the Secretary of the Interior to provide for management of horses in and around the Currituck National Wildlife Refuge. As discussed below, the Administration opposes this legislation.

Currituck National Wildlife Refuge was established in 1984 and is located on the northern end of North Carolina's Outer Banks. The refuge was established to preserve and protect the coastal barrier island ecosystem, and refuge lands are managed to provide wintering habitat for waterfowl and to protect endangered species such as piping plover, sea turtles, and sea beach amaranth. Various types of wading birds, shorebirds, waterfowl, raptors, mammals, reptiles, and amphibians common to the eastern United States, are found on the refuge. The refuge consists of six separate units all located between Corolla, North Carolina, and the state boundary between North Carolina and Virginia.

H.R. 306, the "Corolla Wild Horses Protection Act," would require the Secretary of the Interior to enter into an agreement with the Corolla Wild Horse Fund, a local nonprofit corporation, the County of Currituck, and the State of North Carolina to provide for management of horses in and around the Currituck National Wildlife Refuge. This mandated agreement must allow a herd of not less than 110 horses in and around the refuge, provide for management of the horses, and provide for the introduction of a small number of horses from Cape Lookout National Seashore, as necessary, to maintain genetic viability of the herd. Additionally, the bill provides no funding for management of horses on the refuge.

H.R. 306 precludes the Secretary from excluding horses from any portion of the refuge unless a finding is made that the presence of horses on a portion of the refuge threatens the survival of an endangered species for which such land is designated as critical habitat, the finding is based on a credible peer-reviewed scientific assessment, and the Secretary provides a period of public notice and comment on that finding.

The Department has significant concerns with H.R. 306, and opposes its passage. Currituck National Wildlife Refuge was established to manage for specific trust wildlife species including waterfowl, migratory birds, and endangered species. The Service views wild horses, as defined in 50 CFR 30.11(a), as feral domestic animals. On Currituck National Wildlife Refuge, horses compete with native wildlife for limited resources and horses negatively impact habitat. H.R. 306 would subrogate the refuge's purposes as the Service will no longer be able to place its highest priority on managing wildlife such as migratory birds and endangered species. The bill fails to consider the refuge's Comprehensive Conservation Plan, which was created with public involvement, and it overrides the requirements of the National Wildlife Refuge System Administration Act and the Endangered Species Act.

H.R. 306 would limit the Service's management discretion on the refuge by restricting our ability to close areas, remove horses, or provide grazing opportunities beneficial to wildlife within enclosed areas. For example, research is currently underway to assess the impacts of deer, pigs, and horses to refuge habitats. Such research requires excluding these species from areas to determine the extent of their impacts. H.R. 306 would compromise this study by precluding closure of these areas to horses, and eliminate future habitat impact research needed to meet the objectives for which the refuge was established. The requirement to show the presence of horses on a portion of the refuge threatens the survival of an endangered species—based on a peer-reviewed scientific assessment involving a public comment period—will require time and substantial resources that are currently not available at the refuge. The refuge has over 400 native wildlife species it is responsible for monitoring and sustaining with five staff stationed at Mackay Island National Wildlife Refuge. Requiring this level of intensive management for one feral species cuts into staff capacity for maintaining the native species for which the refuge was established.

The bill mandates maintaining a herd of not less than 110 free-roaming wild horses in and around the refuge, with a target population of between 120 and 130 free-roaming wild horses. The current Currituck Outer Banks Wild Horse Manage-

ment Plan provides for a maximum of 60 horses, with the population controlled through adoption, relocation, or contraceptive fertility methods. Sustaining a herd of 110 or more horses concerns us. We are also concerned that development of private land continues to erode the quantity of suitable habitat outside the refuge and this trend could cause future horse populations to be even more reliant on the refuge, thus further cutting into a habitat base intended for native wildlife.

Lastly, the Department views H.R. 306 as unnecessary because there is already a horse management plan in place. The current version of the Currituck Outer Banks Wild Horse Management Plan was reviewed and approved in partnership with the Corolla Wild Horse Fund, the County of Currituck, and the NC National Estuarine Research Reserve in 2007. The purpose of this plan is to provide guidelines and general management objectives for managing the Currituck Outer Banks horses. The management plan provides management flexibility to respond to changing circumstances in the area. This flexibility is now paramount as plans to construct a mid-Currituck bridge are moving forward. This bridge will significantly increase the rate of development and the amount of vehicular traffic, changing available habitats for both horses and native wildlife to some, currently unknown, extent. Refuge management plans have been updated to reflect the presence of horses on the refuge property and their use. Plans address the need to monitor horse impacts, make management decisions based upon sound wildlife management practices to protect critical resources, and to work with partners to protect these resources.

Accordingly, the Department opposes passage of H.R. 306, the "Corolla Wild Horses Protection Act."

H.R. 588 AND S. 266, BILLS TO RENAME NOXUBEE NATIONAL WILDLIFE REFUGE

H.R. 588 would rename the Noxubee National Wildlife Refuge the Sam D. Hamilton Noxubee National Wildlife Refuge. We greatly appreciate Representative Harper's efforts to honor our late Director with this bill, and appreciate the similar efforts of Senator Cochran. Although it is generally the policy of the Service not to name refuges after individuals, in recognition of Sam's contributions, the Department supports H.R. 588 and the Senate's unanimous passage of the Senate companion legislation, S. 266, earlier this year and urges the House of Representatives to take the same action.

Last year, the conservation community lost one of its most dynamic leaders with the passing of U.S. Fish and Wildlife Service Director Sam D. Hamilton, III. Sam's vision and commitment to wildlife conservation were extraordinary. His passion for conservation and the Service's mission, along with his deep appreciation for the work done by each employee of the Service, are his legacy.

Sam grew up in Starkville, Mississippi, and not long before his passing he recalled catching his first fish with his father at the age of five at nearby Noxubee National Wildlife Refuge. Sam began his career in conservation with the Youth Conservation Corps at Noxubee National Wildlife Refuge, and he had a special place in his heart for this refuge. Sam later joined the Service and worked in a number of field offices doing on the ground conservation in Alabama, Mississippi, Texas, Georgia and two stints in Washington. Prior to his confirmation in 2009, Sam served as the Southeast Regional Director. There he spearheaded a renewed commitment to the Region's national wildlife refuges—public lands that provide a multitude of benefits to wildlife and people—and its national fish hatcheries, which play a key role in managing the Nation's fisheries and aquatic resources.

After working for the Service for more than 30 years, Sam was nominated to lead the agency as its Director. Sam's tenure as Director, while brief, was guided by his strongly held belief that no single entity, whether Federal, State, or private, can ensure the sustainability of the nation's fish and wildlife resources working independently. He worked toward building collaborative partnerships to develop bold ideas and solutions to the challenges facing the nation's wildlife.

In general, Service policy establishes criteria for naming a refuge and states that first preference is given to a geographic or geologic feature that is tied to the identity of the refuge. If there is no such significant feature, then the refuge may be named after a wildlife, fish, or plant species. The policy specifically states that a refuge should not be named after any individual, although buildings, trails, and other facilities within the refuge may be named after an individual who played a significant role in the establishment or operation of the refuge.

The policy was adopted because the Service recognizes that most places have existing names that reflect the natural characteristics and history of the landscape. Many existing names have significant cultural meaning to local communities. The Service's stewardship of national wildlife refuges reflects a land ethic that recog-

nizes local land forms and features. Our policy is meant to keep the natural places and wild creatures as the focus of our work.

CONCLUSION

The Service greatly appreciates your leadership, and the interest and efforts of the Subcommittee in supporting the conservation of the nation's fish and wildlife resources and wildlife-dependent recreation. We look forward to working with Subcommittee members as you consider these bills and other legislation. I appreciate the opportunity to testify today and would be happy to answer any questions.

Dr. FLEMING. I thank the witness. Next we have Dr. Roger Mann. Sir, you have five minutes. Again, when ready.

STATEMENT OF DR. ROGER MANN, PROFESSOR OF MARINE SCIENCE, VIRGINIA INSTITUTE OF MARINE SCIENCE

Dr. MANN. Thank you. Mr. Chairman, Members of the Committee, it is a pleasure to be here today in response to your invitation to provide testimony on H.R. 258, the Chesapeake Bay Accountability and Recovery Act. My name is Roger Mann. I am a Professor of Marine Science and Director of Research and Advisory Services at the Virginia Institute of Marine Science. I have been a researcher examining natural ecosystems and their management for both ecological services and the provision of sustained harvest for 35 years, the last 25 of those in the Chesapeake Bay with particular emphasis on oyster restoration. The comments that I present today represent not just my own, but those of a strong consensus of colleagues who I polled in preparing this testimony.

Collectively, their expertise represents several hundred person years of direct experience in Chesapeake Bay science, management and policy. In my short statements I wish to highlight three points.

Adaptive management. The words are in the bill. Adaptive management is a dynamic and responsive process that includes stakeholder participation, setting of goals, monitoring, modeling, experimentation, research, continual reevaluation with modification of end points. It is an iterative, dynamic process, it is not static. You have to move toward the goal by the methods possible. With respect to the Chesapeake Bay restoration effort, the required dynamic and responsive process would be much improved by reengagement of the science community. This is a common answer when I ask my colleagues what can we do? They say we need to be reengaged, we need to be better engaged.

Finally, constructive peer-review is the backbone of science. It is the backbone of the National Science Foundation, it is the backbone of all science. Appointment of an independent evaluator, and this is not a new idea here, for Bay restoration is essential if we are only going to have the very best science guiding how we get the best with the limited amount of funds that we have available in these difficult economic times. The need to restore and maintain the Bay was formalized in 1983 as a partnership between the Federal Government and the Bay partners with, "this is an ongoing commitment to share responsibility for management decisions and resources regarding the high priority issues of the Chesapeake Bay". How do we maximize progress toward restoration goals? We do it, again, through a responsive dynamic process.

In the early days of the Bay program this was realized by an action committee of scientific involvement, a robust scientific tech-

nical and advisory committee, researchers and a small, but efficient, Chesapeake Bay program whose directive was to support the staff. Again, reengagement. We need to go back to this base clean, mean model. The baseline of environmental challenges is not moving in the Bay because it is not only stressed by population growth, but also by sea level rise and climate changes. The baseline moves, you must move with it. Restoration goals must therefore be responsive. In practically all applied economic, social, engineering and scientific endeavors, the current approach is to employ numerical models. These both assimilate prior knowledge and they provide guidance.

The Bay Monitoring Program is extraordinarily rich in data sets that can allow us to do this. The challenge that presents itself to us at the moment in terms of where we go between the Bay program and the Bay scientific community is to do a better job of making the existing models work better. The TMVL one is a good example. It is about making these things work better and making them accurate and understandable to a nontechnical community that uses them. This is where we should be investing. The current generation of models is complex, but they are getting better and their costs are going down. One only has to look at the advances we have made in tide surge models over the last five to 10 years. We can predict to street level accuracy now with these models precisely what happened in Hurricane Isabelle. What a marvelous forecasting tool.

We need to invest. We must not confuse activity with accomplishment. We need to refocus, when necessary. We need to incorporate new findings and engage new talent. It is an iterative process. H.R. 258 proposes appointment of an independent evaluator. Again, not a new idea. This is in the Executive Order, and when this subject was last here in testimony in June of 2009, this was also debated. Critical independent peer-review is the backbone of science. It is the key to restoring what we want to do and to do it with the most cost-efficient approach. The current Bay program has grown. It is large, it has complex infrastructure, and, in my opinion, is lacking in flexibility.

If you reengage the scientific community, you will be able to make it more efficient. Again, the National Science Foundation does this all the time. The states, in both their academic institutions and their state agencies, are with reservoirs of enormous talent that can be engaged with short lead times and high cost efficiency because, in many instances, as these tasks emerge that tell us where to go, many of the infrastructures are already in place and the talent is already in place, we should take it. We should take advantage of this. Independent review by a proposed office of independent evaluator I think will just underscore these options and highlight these opportunities. We need to go there.

In summary, I thank the Committee for the opportunity to provide testimony, and I applaud the goals of H.R. 258 by developing a crosscutting budget. In these times of extraordinary debates about where our national budget is going, this is absolutely critical. We need it as a tool to evaluate progress, and we need to appoint an independent evaluator. This is long overdue. The challenges remain significant, but I think with a concerted effort to reengage the

science community and use these state-of-the-art and proactive modeling tools as drivers, these do work and adopt a more flexible dynamic approach. We can make progress. We can make a lot of progress. Let us proceed. Thank you. This completes my testimony.

[The prepared statement of Dr. Mann follows:]

Statement of Professor Roger Mann, Director for Research and Advisory Services, Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, Virginia, on H.R. 258.

Mr. Chairman, Members of the Committee, it is a pleasure to be here today in response to your invitation to provide testimony on H.R. 258: the Chesapeake Bay Accountability and Recovery Act of 2011.

My name is Roger Mann. I am a Professor of Marine Science and Director for Research and Advisory Services, Virginia Institute of Marine Science, College of William and Mary. I have been a researcher examining natural ecosystems and their management for both ecological services and sustained harvest of commercially valuable products for thirty five years. For the past twenty five I have been active in fisheries resource management and restoration in the Chesapeake Bay, in particular in the field of oyster restoration. The comments that I present today represent not just my own, but a strong consensus of colleagues with whom I have discussed this important bill. Collectively, their expertise amounts to several hundred person years of direct experience in Chesapeake Bay science, management, and policy.

In my testimony today I wish to highlight three statements:

1. Adaptive management is a dynamic and responsive process that includes stakeholder participation, setting of goals, monitoring, modeling, experimentation, research, and continual re-evaluation with modification of end points and goals as directed by this iterative process.
2. With respect to the Chesapeake Bay restoration effort, the required dynamic and responsive process would be much improved by a fresh re-engagment of the science community.
3. Constructive peer review is the backbone of science. Appointment of an Independent Evaluator for bay restoration is essential to insure that only the very best science guides these actions.

The Chesapeake Bay has been described as a National Treasure—a description with which I wholeheartedly agree. The largest estuary in the continental United States, the bay watershed includes over 100,000 streams, 150 major rivers, and 11,500 miles of shoreline in a 64,000 square mile footprint in the states of New York, Delaware, Maryland, West Virginia, the Commonwealths of Pennsylvania and Virginia, and the District of Columbia. The bay watershed is also home to approxmately 15,000,000 people and an ecosystem under significant stress. Over 4.4 million acres have been developed, at least half of that in the past fifty years. Agricultural, urban and industrial development have inevitable impacts on receiving waters. Direct expolitation of living resources and modification of bay shorelines to shipping channels have lasting signatures.

The need to restore and maintain the Chesapeake Bay has long been recognized and enjoys wide public support. Formalized through the 1983 Chesapeake Bay Agreement and susbequent instruments, the bay partners (the federal government, represented by the Environmental Protection Agency, joined the State of Maryland, and the Commonwealths of Pennsylvania and Virginia, and the District of Columbia) commited to "share the responsibility for management decisions and resources regarding the high priority issues of the Chesapeake Bay." This is an ongoing commitment. The task before us in these difficult economic times may be stated thus: "How do we maximize progress towards restoration goals per dollar invested?"

Maximizing progress in restoration requires a responsive, dynamic structure to support actions that lead to progress by the state partners. Progress in the early days of the Chesapeake Bay Program was realized by coordinated actions of external scientific involvement, a robust Scientific Technical Advisory Committee, Bay researchers, and a small but efficient Chesapeake Bay Program whose directive was to support the states. A return to this model requires re-engagement of the greater Bay scientific community in an open review process.

The baseline of environmental challenges is moving as the Bay is stressed not only by population growth but also by sea level rise and climate change. Restoration goals and the means to attain them must be flexible in response. In practically all applied economic, social, engineering and scientific endeavors the current approach is to employ numerical models to evaluate current knowledge and guide project actions. Continuing revision of the goals and actions are expected as more information

emerges. The Bay monitoring programs have produced enormously rich data sets that can be used to assess progress to date and plan future action. The role of the Chesapeake Bay Program, and the Bay scientific community is to do a better job of making existing numerical models both more accurate and understandable to the non-technical Bay community who are also the stakeholders in the process. This can be achieved with appropriate resources.

The current generation of numerical models is complex, but their development times and costs are decreasing while the output is increasingly sought for societal purposes—progress in tidal surge models associated with storm events provide a good example. Engaging a wide representation of the science community to build such proactive tools is tractable, but progress also requires a commitment to change what does not work, redefine acceptable outcomes if required, not confuse activity with accomplishment, refocus efforts outside of the original goals if new options emerge in the management process, incorporate new findings, and engage new talent where talent is needed. Bay restoration must be progressive science, not just progressive bureaucracy and policy.

H.R. 258 proposes appointment of an Independent Evaluator. Critical, independent, open, constructive peer review is the backbone of scientific progress. Peer review is the key to achieving restoration goals and doing it with highest cost efficiency. The current Bay Program effort is large with complex infrastructure and lacking in flexibility. Re-engaging the scientific community in a flexible, dynamic approach to restoration actions will achieve better results. The states, in both academic institutions and the state agencies, are reservoirs of enormous talent that can be engaged with short lead times and high cost efficiency because in many instances the task specific talents and infrastructure already exist within those agencies. Independent review by the proposed Office of the Independent Evaluator will, I have no doubt, highlight these opportunities.

In summary, I again thank the Committee for the opportunity to provide testimony. I applaud the goals stated in H.R. 258 of developing a cross cutting budget as a tool to evaluate progress in Bay restoration activity and appoint an Independent Evaluator. The challenges are significant, but with a concerted effort to re-engage the science community, use state of the art proactive modeling tools as drivers, and adopt a more flexible, dynamic and responsive operations structure these challenges can be met. Let us proceed. This completes my testimony.

Mr. WITTMAN [presiding]. Thank you, Dr. Mann. We appreciate that, and we are going to move on next to Dr. Hutchins and remind you that the lighting system there starts off with five minutes, at the yellow light you are at one minute, and we would like for you as best you can to stay within those five minutes. So, Dr. Hutchins, thank you so much for joining us and we look forward to your testimony.

STATEMENT OF DR. MICHAEL HUTCHINS, EXECUTIVE DIRECTOR, THE WILDLIFE SOCIETY

Dr. HUTCHINS. Mr. Chairman and distinguished Committee Members, my name is Michael Hutchins and I am the Executive Director and CEO of the Wildlife Society. We appreciate the opportunity to comment on H.R. 306, the Corolla Wild Horse Protection Act. Funded in 1937, the Wildlife Society is a nonprofit scientific and educational association representing over 10,000 professional wildlife biologists and managers. The Wildlife Society defines wildlife as living organisms that are not humans, domesticated animals or plants. Wild animals' ancestors have never been domesticated or modified by selective breading, where as feral animals' ancestors were once domesticated but are now free-roaming in the absence of human care.

Coming from domesticated stock, the wild horses in America are actually feral, or not part of the native ecosystem. Although many nonextinct horse lineages have all been North American, today's feral horses are not members of the same species as North

American fossil specimens. Invasive or non-native species are among the most widespread and serious threats to the integrity of native wildlife populations because they invade and degrade natural ecosystems. The feral horses that roam freely along the Atlantic Coast are examples of such species. They are iconic and much loved by some, but they compete with native species, damage habitats and require focused and sustained management.

Herds of feral horses cause significant changes to barrier islands through trampling of soils and vegetation, selectively grazing palatable plants and altering the distribution of nutrients in the ecosystem. Overgrazing affects plant community dynamics and renders sensitive dunes and marshlands more vulnerable to erosion by severely reducing vegetative cover. Trampling of nesting sites has a direct impact on ground nesting birds, which are numerous on the offshore islands. These effects are of particular concern in the context of Currituck National Wildlife Refuge which was established in 1984 to preserve and protect coastal barrier island ecosystems. Refuge lands are managed to provide wintering habitat for waterfowl and to protect endangered species, such as piping plovers and sea turtles.

Various types of birds, mammals, reptiles and amphibians are also found on the refuge. H.R. 306 puts the Service in the difficult position of being legislatively required to manage for the conservation of native wildlife and habitat on the one hand, and to support a non-native invasive species on the other. The Wildlife Society has several concerns with this legislation. First, although the current management plan calls for a maximum herd of 60, this has not been achieved since 2002. The 2010 count was 115 with the population on a clear upward trend. We are concerned that the herd will soon overshoot the legislation's maximum population size of 120. In addition, the effects of the current herd size on the refuge are not well-documented.

Such a herd size should not be legislatively mandated until its effects on the area's native wildlife and habitat are made clear. Second, it is not clear what cost-effective management means in Section 2 of the Act. Maintaining a stable population of feral horses will likely require a long-term combination of expensive fertility control and removal of excess horses. The cost of managing a non-native species should not come at the expense of our native species. Finally, the legislation would place unnecessary restrictions on the Fish and Wildlife Service's ability to exclude feral horses from sections of the refuge. As written, the bill would only allow removals of feral horses that are threatening the survival of an endangered species for which such land is designated as critical habitat.

Expert refuge staff trained in wildlife management and conservation should have the discretion to exclude horses from any area of the refuge when they are causing undesirable effects. Furthermore, the Act is unnecessary because there is already a horse management in place, as already pointed out. We strongly recommend that the herd be kept at the 60 horse maximum currently required by the existing management plan, thus minimizing the negative impacts on native wildlife and habitat. Ideally, feral horses should be removed from the refuge entirely to allow the native wildlife there to thrive. If this is not done, however, the areas from which feral

horses are excluded should be increased to include any sensitive habitats on the island. Thank you for the opportunity to testify and for considering the views of wildlife professionals. I would be happy to answer any questions you might have at this time.

[The prepared statement of Dr. Hutchins follows:]

Statement of Michael Hutchins, Executive Director/CEO, The Wildlife Society on H.R. 306, H.R. 588, S. 266 and H.R. 285

Mr. Chairman:

Thank you for the opportunity to testify before the House Natural Resources Committee, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs. My name is Michael Hutchins, and I am the Executive Director and CEO of The Wildlife Society.

We appreciate the opportunity to submit testimony regarding H.R. 306, the Corolla Wild Horse Protection Act. Founded in 1937, The Wildlife Society is a non-profit scientific and educational association of over 10,000 professional wildlife biologists and managers, dedicated to excellence in wildlife stewardship through science and education. Our mission is to represent and serve the professional community of scientists, managers, educators, technicians, planners, and others who work actively to study, manage, and conserve wildlife and its habitats worldwide.

TWS seeks a world where people and wildlife co-exist, where biological diversity is maintained, and decisions affecting the management, use, and conservation of wildlife and their habitats are made after careful consideration of relevant scientific information and with the engagement and support of an informed and caring citizenry. TWS defines *wildlife* as living organisms that are not humans, domesticated animals, or plants. Wild animals' ancestors have never been domesticated—modified by selective breeding—whereas feral animals' ancestors were once domesticated but are now free-ranging in the absence of human care. The "wild" horses in America are actually feral and are not part of the native ecosystem.

Invasive, or non-native, species are among the most widespread and serious threats to the integrity of native wildlife populations because of their potential to invade and degrade native ecosystems. These species present special challenges for wildlife managers because their impacts on the native biota are poorly understood by the general public, and many people erroneously regard them as a component of the natural ecosystem. Feral horses (*Equus caballus)* that roam freely along the Atlantic coast of the U.S. are examples of such species: they are iconic and much-loved by some, but damage wildlife habitat and require focused and sustainable management practices.

Although many now-extinct horse lineages evolved in North America, today's feral horses are not members of the same species as North American fossil specimens. Scientists consider these feral horses to be a recent and disruptive addition to North American ecology, rather than a native species.

Herds of feral horses cause significant changes to barrier island environments. As large herbivores, they alter landscapes through trampling soils and vegetation, selectively grazing palatable plants, and altering the distribution of nutrients in the ecosystem. Specifically, grazing impacts the distribution and abundance of native plant species and affects plant community dynamics (Furbish and Albano 1994). It may alter net aboveground primary production and belowground biomass, produce a network of paths through sensitive systems, and affect plant regeneration (Turner 1987). Trampling of nesting sites is a direct impact to birds. Indirect impacts to marsh faunal communities may also result, including shifts in bird, fish, and invertebrate assemblages and abundances as well as changes in interspecific interactions (Levin et al. 2002).

The result of grazing impacts depends on the location of the grazing activity (i.e. intertidal versus upland), interspecific competition, and herbivory intensity (Furbish and Albano 1994). Overgrazing is a major concern on barrier islands, as it has been shown to degrade habitat and negatively impact sensitive dunes and marshlands by increasing susceptibility to erosion (Seliskar 2003, Keiper 1990). Marshes may also be made more vulnerable to erosion and storm damage if sediment accretion is impaired by reduced grass density (Turner 1987).

The effects of overgrazing are of particular concern in the context of the National Wildlife Refuge System. The National Wildlife Refuge System Improvement Act of 1997 described the mission of the System as follows: the Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wild-

life, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Currituck National Wildlife Refuge, located on the northern end of North Carolina's Outer Banks, was established in 1984 to preserve and protect the coastal barrier island ecosystem. Refuge lands are managed to provide wintering habitat for waterfowl and to protect endangered species such as piping plover, sea turtles, and sea beach amaranth. Various types of wading birds, shorebirds, waterfowl, raptors, mammals, reptiles, and amphibians common to the eastern United States are found on the refuge.

H.R. 306 would make it more difficult for the U.S. Fish and Wildlife Service to manage the feral horses on Currituck National Wildlife Refuge and hamper the Refuge System's mission. The legislation puts the Fish and Wildlife Service in the difficult position of being legislatively required to manage for the conservation of native wildlife and habitat on the one hand and to support a non-native invasive species on the other.

The Wildlife Society has several concerns with the legislation. First, we note that although the current management plan calls for a maximum herd size of 60, this has not been achieved since 2002. The 2010 count was 115, with the horses on a clear upward trajectory. Since the Corolla Wild Horse Fund has been unable to manage to the previously required level of 60, we are concerned that the herd will soon overshoot the legislation's maximum population size of 120. In addition, the effects of the current herd size of 115, on the refuge and elsewhere, are not documented. Such a herd size should not be legislatively mandated until its effects on the area's native wildlife and habitat are clear.

Second, it is not clear what 'cost-effective' management means in Section 2. Maintaining a stable population of feral horses, which can double in population every four years, will likely require a combination of fertility control measures and removal of excess horses for sale or adoption. The cost of managing a non-native species should not come at the expense of native species. In this case, Currituck Refuge is unstaffed and unfunded. We fear that the funds necessary to manage feral horses on Currituck Refuge will come from Mackay Island Refuge, where they could have been used to manage for native wildlife or improve hunting or other recreational opportunities for visitors. The Corolla area has a strong tradition of waterfowl hunting and related recreation, and we would hate to see this compromised for the sake of an invasive species.

Finally, the legislation would place unnecessary restrictions on the Fish and Wildlife Service's ability to exclude feral horses from sections of the refuge. As written, the bill would only allow removals when the feral horses are threatening the survival of an endangered species for which such land is designated as critical habitat, as documented by a peer-reviewed scientific assessment involving a public comment period. Such a process will require time and substantial resources that are currently not available at the refuge. Refuge staff, trained in wildlife management and conservation, should have the discretion to exclude horses from any area of the refuge when they are causing undesirable effects. This provision would also effectively eliminate the ability of refuge staff to conduct research on the impacts of feral horses on habitat and native species by excluding them from some areas and then comparing the vegetation structure and biological diversity between the exclosure area and areas where feral horses are permitted.

The Corolla Wild Horses Act bill fails to consider the refuge's Comprehensive Conservation Plan and overrides the requirements of the National Wildlife Refuge System Administration Act and Endangered Species Act. Furthermore, it is unnecessary because there is already a horse management plan in place. The current version of the Currituck Wild Horse Management Plan was reviewed and approved in partnership with the Corolla Wild Horse Fund, the County of Currituck, and the NC National Estuarine Research Reserve in 2007.

We strongly recommend that the herd be kept at the 60-horse maximum currently required by the Currituck Wild Horse Management Plan. The lower number of horses would decrease the effects on native wildlife and habitat. Occasionally bringing horses in from the Cape Lookout herd will allay any concerns about genetic diversity. Ideally, feral horses should be removed from the Refuge to allow the native wildlife there to thrive. If this is not done, the areas from which feral horses are excluded on the refuge should be increased to include any sensitive habitats.

Feral horse inventories should be performed at sufficient intervals to quickly determine whether they are having adverse impacts and rapidly implement management actions to control and reduce ecological damage. We also support increased funding for scientifically defensible assessments of ecosystem conditions that are used to make decisions about feral horse management. Such assessments should consider the welfare of the feral horses, as well as the ability of the system to con-

serve native plant and animal populations and provide ecosystem services—clean air, clean water, and carbon sequestration.

Literature Cited

Furbish, C.E. and M. Albano. 1994. Selective herbivory and plant community structure in a Mid-Atlantic salt marsh. *Ecology* 75(4): 1015–1022.

Levin, P.S., J. Ellis, R. Petrik, and M.E. Hay. 2002. Indirect effects of feral horses on estuarine communities. *Conservation Biology* 16(4): 1364–1371.

Keiper, R.R. 1990. Biology of large grazing mammals on the Virginia barrier islands. *Virginia Journal of Science* 41(4A): 352–363.

Seliskar, D.M. 2003. The response of *Ammophila breviligulata* and *Spartina patens* (Poaceae) to grazing by feral horses on a dynamic Mid-Atlantic barrier island. *American Journal of Botany* 90(7): 1038–1044.

Turner, M.G. 1987. Effects of grazing by feral horses, clipping, trampling, and burning on a Georgia salt marsh. *Estuaries* 10(10): 54–60.

Mr. WITTMAN. Thank you, Dr. Hutchins. We appreciate, again, your testimony and we look forward to being able to ask a few questions. We are going to move on now to Ms. McCalpin. We thank you so much for joining us and want to remind you, too, again about our system here of five minutes. We look forward to your testimony. Thank you.

STATEMENT OF KAREN McCALPIN, EXECUTIVE DIRECTOR, COROLLA WILD HORSE FUND

Ms. MCCALPIN. Thank you. Congressman Wittman, Congressman Sablan, Members of the Subcommittee, thank you for this opportunity to testify in support of H.R. 306. The wild horses of North Carolina's Currituck Outer Banks have survived nearly five centuries but they cannot survive the critically low herd number dictated by the current management plan, as well as a scientifically documented dangerous decline in genetic diversity. Spanish ships' logs verify horses on the shores of North Carolina around 1520. In 1926, there were 5,000 to 6,000 wild horses all up and down the Outer Banks. Today, the current herd of registered Colonial Spanish Mustangs has dwindled to 108. DNA testing completed in 1992, and again in 2008, by Dr. Gus Cothran of Texas, an expert on wild herds, show that the Corolla horses have less genetic diversity and have reached a genetic bottleneck.

The Corolla wild horses live on approximately 7,500 acres north of Corolla, 2,500 acres of which is Currituck National Wildlife Refuge property. The remaining land is privately owned. A written management plan was created in 1997. The Fund requested at least 100 horses, but the Federal representatives' position was zero. After a prolonged and contentious debate, the herd size was set at a maximum of 60, a number not based on any existing scientific data, but merely a number upon which all parties were finally able to agree. In April of 2008, the Fund staff formally requested that the herd size be changed to a target population of 120 to 130, the minimum number recommended by Dr. Cothran. The Fund also requested permission to introduce a small number of mares from Shackleford to add diversity to a dying gene pool.

Our request was denied by Fish and Wildlife, citing competition for resources, although there is no existing scientific data to support their position. A 1997 impact study by Drs. Richard and Martha Rheinhardt covered over 11,000 acres from the northern end of Back Bay Wildlife Refuge in Virginia, south to Corolla. The results

showed that horses consumed few shrub species and grass species seemed to recover from grazing by early summer. No plants eaten by wild horses are included on the Federal threatened species list. When determining impact, we cannot overlook humans. Thousands of vehicles drive on the beach and behind the dunes daily. The fragile dunes are negatively impacted by climbing and driving on them.

It is not the horses that leave trash, deep tire ruts, drop oil and other contaminants. Our herd manager maintains a database of the wild horses that is updated weekly. The 22 to 23 harems are evenly distributed over the 7,500 acres. Each harem stays in its own home region and generally remains there until the end of their life. July 22, 2010 photos taken outside the 135-acre refuge fence where 13 horses were forced out on March 12 of that year, and photos of the 16'-by-16' exclosures show thick vegetation outside the fence. There is no evidence of overgrazing in these photos, even in last summer's extreme drought conditions. The Corolla Wild Horse Fund is the NGO that physically manages and cares for the herd.

We employ four full-time staff, five seasonal staff and utilize a pool of over 30 volunteers. We operate a year-round educational facility with 75,000 visitors annually. We are on call 24/7, 365 days a year. We rescue and rehabilitate sick and injured horses and have placed 38 horses in loving adoptive homes from Texas to Maine since September of 2006. We transport deceased horses to Raleigh for necropsy, assist in veterinary euthanizations in the field and maintain all barrier fences, including the cabled fence into the ocean. All expenses related to wild horse management are incurred by the Fund with no cost to the Federal Government, nor would the implementation of H.R. 306 create any additional management costs as long as the Fund continues to manage the herd.

In the last year, we have worked cooperatively with Currituck County to create and implement several new ordinances to protect the horses, collected and tested water, soil and plant samples from all areas of the North Beach, distributed thousands of handouts regarding the wild horse ordinance and coordinated a campaign to designate the Colonial Spanish Mustang as the North Carolina state horse. The Fund holds 70 acres in a conservation easement and our website lists land donation as a method of helping to protect and preserve the wild horses. Our long-term goal is to hold significant acreage in conservation easements. For nearly 500 years, the wild horses of Corolla have persevered against all odds.

I am always moved by their strength, intelligence, beauty and iron will to live. These sons and daughters of the sand carry a wealth of genetic history that is quickly, not slowly, dying. We are already seeing a decline in the number of healthy foals being born and an increasing number of horses with abnormalities. We are not asking for hundreds of horses, we are asking for 120 to 130, the number recommended by scientific data generated by an expert in the field, the same number that has existed on Federal property at Cape Lookout National Seashore for the last 12 years on half the land with no documented impact. Raising the allowable herd size alone will not solve the issue of our horses being too closely related to one another. Introduction of mares from the Shackleford herd is

the only way to breed new DNA into a gene pool headed for certain collapse. Like the wild horses, we are determined and we find strength in their presence. They are nobody's horses, but they are everybody's horses. I am honored to be their voice and ask you today to honor their history and protect their future. Please move H.R. 306 forward and save these endangered horses for future generations to view, admire and respect. Thank you.

[The prepared statement of Ms. McCalpin follows:]

Statement of Karen H. McCalpin, Executive Director, Corolla Wild Horse Fund, Inc., Corolla, North Carolina. on H.R. 306

Chairman Fleming and members of the Subcommittee, my name is Karen McCalpin and I am the Executive Director of the Corolla Wild Horse Fund. Thank you for the opportunity to testify in support of H.R. 306, the Corolla Wild Horses Protection Act. I speak on behalf of the citizens of Currituck County, North Carolina, the hundreds of thousands of annual visitors who travel to the Outer Banks specifically to view the number one tourist attraction—our wild horses, and most importantly, I speak for the wild horses who have recently been designated by the North Carolina legislature as the North Carolina state horse. I would also like to express my gratitude to Representative Walter Jones for sponsoring the bill as well as cosponsors Representatives Howard Coble, Gerry Connolly, David Price and Ed Whitfield.

Background:

Powerful, intelligent, breathtakingly beautiful, and determined to survive—the wild horses of North Carolina's Currituck Outer Banks have survived nearly five centuries of fierce hurricanes, unrelenting nor'easters, severe droughts, floods, and swarms of biting insects. But can they survive the critically low herd number as defined in the current management plan as well as a scientifically documented dangerous decline in genetic diversity?

Spanish ships' logs verify horses being brought to the shores of North Carolina around 1520. Historians believe that some horses were able to survive shipwrecks and swam ashore. Horses were also among the heavy cargo shoved overboard in an attempt to refloat ships grounded on sand bars, and some were simply left behind when colonies failed.

Recognized and registered as Colonial Spanish Mustangs in 2007 by the international Horse of the Americas Registry (HOA), the wild horses now roaming the northernmost Outer Banks have adapted to a very specialized diet of coarse salt grass, sea oats, panic grass, American beach grass, cordgrass, acorns and persimmons found in five main habitat areas. Areas of dune grass, dry grassland, wet grassland, tidal fresh water marsh, and maritime forest provide food and shelter. The Currituck Sound (a fresh water estuarine system) provides a constant source of water, as do numerous ponds, puddles, and manmade canals.

According to a 1926 National Geographic magazine article entitled "*Motor Coaching the Outer Banks,*" there were five to six thousand wild horses on the 175 mile stretch that makes up the Outer Banks. Today, the current herd count has dwindled to 108.

DNA testing completed in 1992 by Dr. E. Gus Cothran, an internationally recognized equine geneticist and expert on wild herds, showed that the Corolla horses have "less genetic diversity than any other group of horses." In 2008, DNA samples were collected via remotely delivered dart for an updated study of the herd's current overall genetic health. Dr. Cothran reported that the horses had now reached a "genetic bottleneck," with high levels of inbreeding and low levels of genetic diversity. Further mitochondrial DNA analysis confirmed that the Corolla herd has only one maternal line, while the wild Colonial Spanish Mustangs on Shackleford Banks (Cape Lookout National Seashore) have four maternal lines. The wild horses on Shackleford Banks have been managed at a target population of 120—130 since the passage of the Shackleford Banks Wild Horses Protection Act in 1998. Dr. Cothran generally recommends a herd size of 120—130 as the minimum for a feral herd.

The low Corolla herd size also presents an imminent danger to the survival of the horses that goes beyond high levels of inbreeding. When the number drops below the absolute minimum of 110, the herd is at extreme risk for being completely eradicated by a disease, drought, fire, flood, or hurricane. They could easily be gone forever. The Corolla horses are already listed as a critically endangered breed by the American Livestock Breed Conservancy and the Equus Survival Trust, national

nonprofit organizations that work to conserve rare breeds. The next category is extinction.

Until 1985, the paved road (NC 12) came to an end at what is now the Sanderling Resort in Duck, North Carolina. Only 4 wheel drive vehicles could access the next 25 miles to the North Carolina/Virginia border. A guard gate ensured that only the few permanent residents or their guests went any further. At that time, the wild horses had a territory encompassing nearly 13,000 acres. When the road from Duck to Corolla was paved in 1985, what was once a remote and rugged wild horse sanctuary with a handful of residents exploded with the development of thousands of vacation homes.

By 1989, so many horses had been injured or killed on NC 12 and horse/human interactions had become so frequent, a group of concerned residents formed the all volunteer Corolla Wild Horse Fund (CWHF). Members of the Fund set out to find ways to protect the wild horses. After much time, effort, and tears, the twenty or so wild horses left in Corolla were rounded up in 1995 and moved to the only remaining area left with no paved roads. Referred to as the 4X4 beach or north beach, a sound to sea fence was built to keep the horses out of the populated areas of Corolla. A partial fence already existed near the North Carolina/Virginia border but had to be extended. Cattle guards were installed near the end of the paved road and at a gate along the northern fence. The cattle guards allow access by vehicles but not horses. The two fences are 11 miles apart. There were an unknown number of wild horses already inhabiting the north beach when the additional twenty were added.

The wild horses that once called the entire 175 miles of this barrier island their home, now live on approximately 7,544.25 acres of the north beach. Of that, 4,671.35 acres is privately owned by individuals and corporations; 2,495.4 is Currituck National Wildlife Refuge property; 326.5 is the North Carolina National Estuarine Research Reserve; and 51 acres is owned by the nonprofit Nature Conservancy. There are over 1300 houses in the three developed subdivisions of Swan Beach, North Swan Beach, and Carova. People reach their houses and beach rentals by driving on the beach and over the dunes on sand cartways. (Attachment 1—Wild Horse Range Acreage map)

Management Plan:

A written management plan was created in 1997 by an advisory group (Currituck Outer Banks Wild Horse Advisory Board) consisting of representatives from the Corolla Wild Horse Fund (CWHF), United States Fish and Wildlife Service (USFWS), North Carolina National Estuarine Research Reserve (NCNERR), and Currituck County as well as two county appointed citizen representatives who reside on the north beach. The CWHF requested a herd size of at least 100, in sharp contrast to the federal representatives' position of zero. Even though the 1992 genetic study had already revealed low genetic diversity, the herd size was eventually set at a maximum of 60. This number was not selected based on any existing scientific data but was merely a number upon which all parties were able to agree after prolonged and contentious debate.

I began my duties as the first fulltime Executive Director of the Fund on September 4, 2006. After reading the management plan and as a life-long horsewoman I was stunned to see such a low maximum herd size. The management plan was due to be reviewed and signed again by the end of the year. Although I immediately recognized that a wild herd of 60 was not viable, being so new to the position, I had no scientific data available to support a request for a larger herd number. However, because the plan reads, "This plan will be reviewed and updated at least on a five year cycle. All signatories recognize that any management plan is a living document and will change based upon current circumstances," I felt that once I acquired data from a credible source, the management plan could be changed "based on current circumstances" and "that all signatories recognize that any management plan is a living document."

In April of 2008, the Fund staff formally requested that the maximum herd size be changed to the scientific number recommended by Dr. Cothran in relation to his DNA findings from the most recent DNA samples. The Fund also requested permission to introduce a small number of mares from Shackleford Banks to begin to restore diversity to the dying gene pool. USFWS and the NCNERR denied the request citing the potential for damage to the refuge and reserve as a result of a larger herd, although there is no existing scientific data to support their denial. The Fund was told to continue to permanently remove healthy horses for adoption and dart healthy breeding age mares with contraceptives to work toward a herd size of 60. (Corolla: 7,544.25 acres; 60 horses; Shackleford: 3,000 acres 120—130 horses)

I turned to Congressman Jones for assistance and he traveled to Corolla in October of 2008 to meet with the Currituck Outer Banks Wild Horse Advisory Board. At this meeting, USFWS verbally agreed to allow the herd to remain at the current level then (100) until a multi-year exclosure study funded by North Carolina State University and USFWS could be conducted and the data analyzed. They again denied our request to change the written management plan and to date it remains at a maximum herd size of 60.

Impact:

Before making my request for an increase in herd size, I spoke extensively with Dr. Sue Stuska, National Park Service Wildlife Biologist and Carolyn Mason, President of the nonprofit Foundation for Shackleford Horses. The Foundation, a small and unstaffed organization, works cooperatively through a Memorandum of Understanding with the National Park Service to manage the herd of wild Colonial Spanish Mustangs living on 3,000 acres of Shackleford Banks (an east/west island that is part of Cape Lookout National Seashore near Beaufort, NC.) These horses are managed in accordance with the Shackleford Banks Wild Horses Protection Act as previously mentioned. This Act was also sponsored by your colleague, Walter Jones. In 1997, their herd was in danger of complete eradication. Called a "disturbing precedent" at the time by the National Park Service, the 12 years since the passage of the Act into Public Law 105–229 have elapsed successfully. The herd is maintained at a target population of 120—130 and the day to day management of the horses is conducted by the National Park Service Wildlife Biologist, Dr. Sue Stuska. The population is controlled through the physical removal and adoption of horses most closely related to one another and the administration of the non-hormonal contraceptive, PZP. "The horses are thriving and the island's ecology is holding its own." (The Wild Horses of Shackleford Banks by Carmine Prioli, 2007.) (3,000 acres; 120—130 horses)

I also conducted extensive research on the management of other east coast wild horses as well as existing impact studies before making my request. The Chincoteague, VA ponies are owned by the Chincoteague Volunteer Fire Department and are grazed on two portions of the Chincoteague National Wildlife Refuge under a Special Use Permit between USFWS and the Fire Department. These ponies are managed at a herd size of 150 by the Fire Department. They reduce the herd by holding an annual auction of foals. The Assateague herd (VA) is managed by the National Park Service and maintained at 150 as well. No information was available regarding the disposition of any horses physically removed from the National Park.

The Journal of Range Management 57(3) May 2004 published a 1997 impact study by Drs. Richard D. Rheinhardt and Martha C. Rheinhardt titled "Feral horse seasonal habitat use on a coastal barrier spit." The research was funded by NCNERR and an airplane was furnished by USFWS. The objective was to obtain information on the relative preference for forage species by season and the seasonal utilization of forage habitat by wild horses. The study area extended from the northern end of Back Bay Wildlife Refuge in Virginia to Corolla, bounded on the east by the Atlantic Ocean and on the west by the Currituck Sound. The entire study area encompassed 11,414 acres. Results: "Horses consume few forb species and graminoid species seem to recover from grazing by early summer when primary production is highest...Because rooting impacts of feral hogs may be more severe than horse grazing impacts on Currituck Banks, exclosure experiments would have to be designed to separate horse grazing from hog rooting."

The Rheinhardt and Rheinhardt study also included an extensive list of plants eaten by wild horses and no plants grazed are included on the federal threatened species list. The wild horses of the Currituck Outer Banks eat only native vegetation (they are not supplementally fed hay or grain) and then reseed it in their manure.

Refuge Manager, Mike Hoff has pointed out that the endangered plant, seabeach amaranth has disappeared from the dunes and has suggested that the horses may be responsible for this. Research has shown that not only is the seabeach amaranth not eaten by the horses, the USFWS website states: "weather events, rainfall, hurricanes, temperature extremes and predation by webworms have strong effects on the length of the seabeach amaranth's reproduction season...Seabeach amaranth appears to be intolerant of competition and does not occur on well vegetated sites. . .The most serious threats to the continued existence of seabeach amaranth include the construction of beach stabilization structures, beach erosion and tidal inundation, beach grooming, herbivory by insects and feral animals and, in certain circumstances, by off-road vehicles." The north beach is directly affected by all of the above.

If we want to determine impact, we cannot overlook the animal that leaves the largest footprint of all—humans. On any given day in July, there can be 3,000 vehicles driving on the beach and behind the dunes. (Attachment 2—cars driving along refuge dune line) Every day, the fragile dunes are compromised by humans walking over them, using them for sliding boards, and driving over them in off road vehicles. (Attachment 3 people on refuge dunes) It is not the horses that leave behind plastic bags, beer bottles, plastic water bottles and other trash. It is not the horses' trash near the shore bird nest. (Attachment 4—nesting shore bird on refuge and trash) It is not the horses that leave deep tire ruts in the sand, or drop oil and other contaminates on the beach. (Attachment 5—cement trucks stuck in front of refuge)

Census:

Before 2006, no official census records were found in CWHF archives. Beginning in 2006, aerial counts were conducted by the CWHF Herd Manager and the CNWR Manager. Attachment A (Wild Horse Range Acreage, Corolla, NC) shows the entire horse range with CNWR and NCNERR property delineated.

- 2006—119 horses (CWHF Herd Manager, Steve Rogers; CNWR Manager, Tim Cooper)
- 2007—94 (CWHF Herd Manager, Steve Rogers; CNWR Manager, Mike Hoff) **26 horses on CNWR property; 68 on private property; 0 on NCNERR**
- 2008—101 (CWHF Herd Manager, Steve Rogers; CNWR Manager, Mike Hoff) **23 horses on CNWR property; 74 on private property; 4 on NCNERR**
- 2009—88 (CWHF Herd Manager, Wesley Stallings; CNWR Manager, Mike Hoff) **0 horses on CNWR property; 84 on private property; 4 on NCNERR.**
- 2010—115 (CWHF Herd Manager Wesley Stallings; CNWR Manager, Mike Hoff) 35 horses on CNWR property; 71 on private property; 9 on NCNERR

The CWHF Herd Manager maintains a data base of the wild horses with photos, descriptions of physical markings and colors; health status, and identification of home territory. It is updated at least weekly and we have purchased and been working cooperatively with Dr. Sue Stuska, NPS, Cape Lookout National Seashore, on utilizing WHIMS (Wild Horse Information Software).

There are 22—23 harems (stallion and 1—4 mares) as well as groups of bachelor stallions evenly distributed over the 7,544 acres. Each harem stays in its own home region and generally remains there until the end of life. Straying from their home territory precipitates violent fighting between stallions and results in mares being stolen from their family group.

The CNWR has two areas fenced with high tensile electric wire to exclude wild horses. One fence is located in Swan Beach and covers143 acres. An additional 135-acre fence was constructed in North Swan Beach in March of 2010. On March 12, 2010 CWHF Herd Manager Wesley Stallings removed 13 wild horses from within the newly fenced area at the request of CNWR Manager, Mike Hoff. These 13 horses were then forced into the home territory of other existing harems and violent fighting occurred for days as dominant stallions fought over mares and attempted to drive the intruders from the home area. One pregnant mare from the group removed from inside the fence miscarried a foal that would have been born in about a month. Another mare, whose body condition was good when removed, had to be euthanized a month later after her body condition deteriorated dramatically. She was captured by CWHF and an aggressive but unsuccessful week long attempt was made to save her life. Attachment 6 (a mare from one of the removed harems waiting in vain to return to her home.)

Attachment 7 (vegetation outside 135-acre refuge fence) is a photo taken on Thursday, July 22, 2010. The new refuge fence is in the background. As you can see, there is no overgrazing outside the fence even after five months. Attachment 8 (small exclosure and vegetation) is a photo also taken on July 22nd next to one of six 16' X 16' exclosures constructed as part of the current NCSU/USFWS study. There is also no evidence of overgrazing in these photos, even in last summer's drought conditions.

Wild Horse Management:

The Corolla Wild Horse Fund is the NGO that physically manages and cares for the herd. We currently employ four fulltime staff (executive director, herd manager, director of operations, program coordinator), and five seasonal staff. Four volunteers serve as Sanctuary Patrol Officers who regularly assist with education on the beach and behind the dunes. Twenty volunteers are available to assist with captures or return of escaped horses. Another group of volunteers assist in our two mission related stores and with fund raising activities. We work closely with the Currituck Sherriff's Department regarding enforcement of the Currituck County Wild Horse

Ordinance and any other issues regarding the safety of the horses and public. CWHF is on call 24/7, 365 days a year to respond to emergencies with the horses. We have rescued and rehabilitated 19 horses in the last four years and found adoptive homes for 38 horses. CWHF maintains a monthly boarding contract at a private stable for horses awaiting adoption because they cannot be returned to the wild. The CWHF Herd Manager works with the horses to domesticate and train them and match them with a loving adoptive home. He is a natural horse trainer and a farrier. We routinely transport a formerly wild horse to offsite events for education and bring a gentled horse awaiting adoption to the grounds of our Wild Horse Museum every Wednesday from Memorial Day through October. (Attachment 9—children petting rescued and gentled wild horse) For the last three years, four formerly wild horses have been ridden in the local Fourth of July parade on a street lined with 5,000 spectators.

CWHF also transports deceased horses to Raleigh for necropsy and covers all associated costs. It is also our responsibility to assist in veterinary euthanizations in the field.

The CWHF Herd Manager maintains all barrier fences including the cabled fence out into the ocean and CWHF routinely arranges for the accumulated sand to be removed from the cattle guards.

All expenses related to wild horse management are incurred by CWHF with no cost to the federal government. The implementation of H.R. 306 would not create any horse management costs to the federal government as long as the CWHF continues to manage the herd. In 2006, when there were 119 horses, no additional CNWR staff was required to address herd size. Currituck County contributes 18% of the CWHF's annual budget through occupancy taxes and CWHF raises the remaining $346,000 through our nationwide membership program, our two mission related stores, donations, grants, and special events. Our free Wild Horse Museum educates over 75,000 national and international visitors annually. The CWHF distributes over 50,000 educational brochures each year, produces a quarterly newsletter, and has recently published a book.

In the last year CWHF has worked cooperatively with the county to create and implement a new ordinance prohibiting domestic horses on the north beach to eliminate the potential of disease (either housed on private property or ridden on the beach); to strengthen the existing County Wild Horse Ordinance by adding stronger language; supported changes to the County' s Unified Development Ordinance to better monitor the actions of commercial horse tours; testified at a public hearing against commercial airboat tours in the private canals and Currituck Sound; collected and tested water, soil, and plant samples from all areas of the north beach; worked with area real estate companies to inform all persons renting in the Corolla area about the Wild Horse Ordinance; supplied jeep rental companies in Dare County with handouts regarding the Wild Horse Ordinance; and coordinated the campaign to designate the Colonial Spanish Mustang as the North Carolina state horse.

Land Conservation:

The CWHF holds 70 acres in a donated conservation easement and we are working with a local realtor (who is also a volunteer), to compile a list of available land for sale. Many lots have been on the market for a considerable time period or are unbuildable.

The CWHF website lists land donation as a method of helping to protect and preserve the wild horses and has initiated the "Freedom Fund," a restricted account for the purchase of land to be placed in permanent conservation easements for the horses.

The CWHF Herd Manager is currently working with Currituck County Cooperative Extension to determine what types of grasses can be seeded in our conservation area for additional use by the horses and is exploring methods to cost effectively open up more available grazing area in the conservation area.

The long-term goal of the Corolla Wild Horse Fund is to own significant land and place it in permanent conservation easements for use by the wild horses and other wildlife. The north beach of the Currituck Outer Banks is one of the last remaining underdeveloped coastal areas left. It is home to a wide variety of wildlife—including wild horses. As someone who travels that area frequently, I am constantly reminded how very important it is to protect and preserve what is left. I see it weekly and often times daily during the height of tourist season.

Conclusion:

For nearly 500 years, the wild horses of Corolla have persevered against all odds. I never tire of seeing them and I am always moved by their strength, intelligence and great beauty. They have a strong sense of family and grieve for lost members.

Their will to live is unparalleled by any other breed of horse. They are without a doubt one of the most athletic breeds I have ever encountered. (Attachment 9—floating trot of a stallion) These sons and daughters of the sand carry a wealth of genetic history that is quickly, not slowly, dying. High levels of inbreeding have already produced a few exceptionally small horses. We are seeing a decline in the number of foals living to adulthood and an increasing number of horses with other abnormalities.

The North Carolina State Horse will soon disappear from the northern Outer Banks. Managing the wild horses of Corolla at a maximum of 60 is managing for extinction. This is not just my opinion; it is the opinion of two world renowned equine geneticists, Dr. E. Gus Cothran and Dr. Phil Sponenberg.

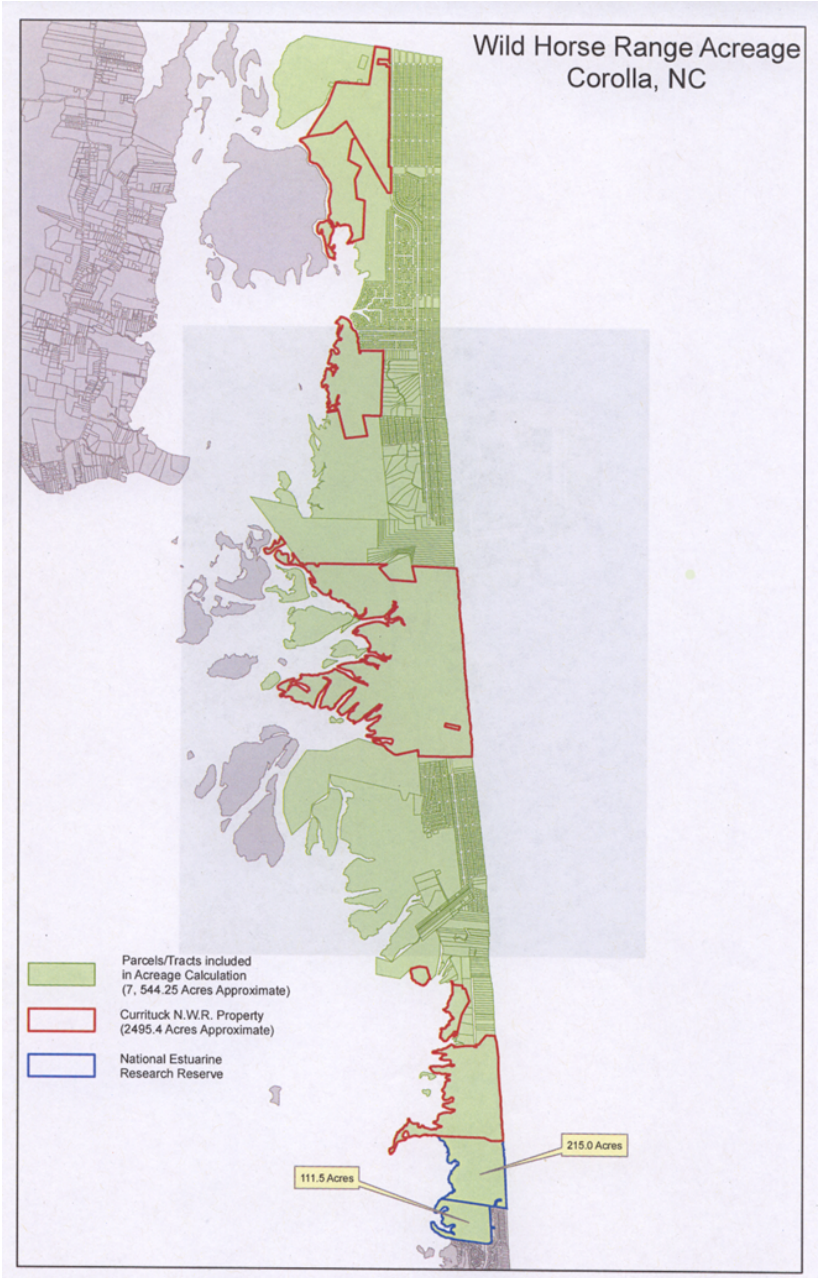
In response to the April 2008 denial of my request for a larger herd size, Dr. Sponenberg, DVM, PhD. (professor of Pathology and Genetics, Department of Biomedical Sciences, Virginia-Maryland Regional College of Veterinary Medicine) wrote in an August 5, 2008 e mail to me: "In this, as in other cases, the competing interests need to somehow come to an effective compromise. I don't know what that will look like, but I do know that if a genetically isolated horse population is to be genetically secure for the future, then the total population must be much closer to 100 than 60."

The Corolla Wild Horse Fund is not asking for hundreds of horses. We are asking for a target population of 120—130—the number recommended by scientific data generated by an expert in the field. This is the same number that has existed on federal property on Shackleford Banks for the last 12 years on half the land that is available to the wild horses of Corolla.

In the case of the wild horses of Corolla, just raising the allowable herd size alone will not solve the issue of our horses all being too closely related to one another. Introductions of mares from the Shackleford herd are the only way to breathe new DNA into a gene pool headed for certain collapse. I have already had discussions with Dr. Stuska and Carolyn Mason and both are in favor of moving mares to Corolla when they are available. Two to four mares at a time will be sure to become the instant family of a Corolla stallion or two. Their offspring would be genetically diverse.

The Corolla Wild Horse Fund has done an admirable job of managing wild horses in a complex and challenging environment with a small staff and a core group of dedicated volunteers. Like the wild horses, we are determined, and we find strength in their presence. (Attachment 10) I am honored to be their voice and ask you today to honor their history and protect their future. Please move H.R. 306 forward and save these historic horses for future generations to view, admire, and respect.

[NOTE: A map entitled "Wild Horse Range Acreage, Corolla, NC" follows. Pictures submitted for the record have been retained in the Committee's official files.]



Dr. FLEMING [presiding]. I thank the witnesses this morning for your testimonies. At this point we will begin questions of the witnesses. Again, to allow our Members to participate, Members are limited to five minutes for their questions; however, we may have more than one round of questioning. I now recognize myself for five

minutes. The Fiscal Year 2010 appropriation bill included funding for Chesapeake Bay projects through the Interior Department, the Army Corps of Engineers, the Department of Agriculture, the Department of Commerce, NOAA, the Department of Labor and the EPA. Since all these agencies and programs have different goals and missions, here is the question, Dr. Mann, how much scientific coordination is there between agency scientists?

Dr. MANN. I think your statement illustrates the magnitude of the problem in terms of trying to develop a coherent program. The Chesapeake Bay Executive Order essentially directs this. When I look at the grassroots level amongst all the scientists who are in the Bay, we are verging on bewildered at trying to work out how this all works at the grassroots level in terms of trying to provide input back into the planning process. I think we have an opportunity here simply because of our budget restrictions at this point in time to ask some critical questions about how we maximize this productivity per dollar invested. I, for one, would be happy to participate in a broad interagency discussion to try to coalesce these into a more ordered manner. I do not think it is as well done as it could be.

Dr. FLEMING. Yes. And that is really a problem governmentwide, the desperate need to streamline our research, streamline our regulations. We have, well, in fact, there was a GAO report just the other day that showed unbelievable duplication. It is costly and it actually makes the process worse. How much coordination is there between scientists and policymakers without outside scientists who may be doing work either through Federal grants or through independent research?

Dr. MANN. I think there is coordination and one of the reasons why we have the Scientific Technical Advisory Committee is to provide that as a conduit. I think what you see, though, when I again talk to a lot of my colleagues is the growth in the bureaucracy of the process is really difficult to try to have a two way information exchange that is efficient and dynamic. Yesterday I was at the Environment Virginia Conference in Lexington at VMI, and I was pleased to hear two people make the same statement. One of them was Jeff Corbin who is a Senior Advisor to the Administrator of the Chesapeake Bay Anacostia River Section of EPA, a Federal employee representing EPA, and Anthony Moore who is the Assistant Secretary of Natural Resources in Virginia. Both of them said what we need is flexibility, an adaptive approach, listen to innovative ideas, and then we have to get it back into the mechanisms as we go through our two year milestone reviews. With a program the size of the Chesapeake Bay Program, this is clearly difficult to do, but you have to find a mechanism of having that iteration to realign the goals, especially when we have a limited amount of funds, otherwise we are going to miss targets and we are going to miss opportunities.

Dr. FLEMING. Thank you. How will the development of an adaptive management plan help the coordination?

Dr. MANN. It is all about communication. It is as simple as that. The better that you communicate and the better that you respect, the better off you will be. Adaptive management is one way of addressing issues. I think the independent evaluator, however, is the

other component to it. Scientists have this strange way of doing things in that if you have a bright idea, you write it down, then you send it off to one of the agencies, and then what the agency does is it shares it with everyone else. You do not get to keep ideas. Only good ideas survive the peer-review process. It seems like a strange way of beating yourself up to get through a profession. We are all a little bit thick-skinned about this but it is the way in which you go forward. What you have to do in taking this philosophy is adopt the attitude that someone will come up with a better idea than mine and science will progress. It is very difficult to look at large programs that have long-term goals where the goal is way over there where the scientists keep telling you that in order to get here you have to continually move. Flexibility in large programs is very difficult. The problem that you have is compromising those two goals to make it work more efficiently. That is where an independent evaluator's office I think is going to be very useful. Again, I go back and I provide the examples of the way in which the National Science Foundation runs large programs. They do it through a peer-review system that is critical and it demands quality. We have other models in other parts of the government and we should adopt them here. It is about communication.

Dr. FLEMING. I thank the witnesses. I now recognize the Ranking Member for any questions he may have. Mr. Sablan?

Mr. SABLAN. Yes. Thank you very much, Mr. Chairman. Before I ask questions, Mr. Chairman, I would like to ask for unanimous consent to enter into the record a statement on H.R. 306 submitted by the Nature Conservancy.

Dr. FLEMING. Without objection, so ordered.

[The letter from the Nature Conservancy follows:]

The Nature Conservancy
North Carolina Chapter
4705 University Drive
Suite 290
Durham, NC 27707

tel (919) 403.8558
fax (919) 403-0379
nature.org/northcarolina

April 5, 2011

The Honorable John Fleming
Chairman
Fisheries, Wildlife, Oceans, & Insular Affairs
1324 LHOB
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Gregorio Sablan
Ranking Minority Member
Fisheries, Wildlife, Oceans, & Insular Affairs
1329 LHOB
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Fleming and Congressman Sablan:

The Nature Conservancy owns land near the U.S. Fish and Wildlife Service's National Wildlife Refuge on the Currituck Outer Banks. In reference to H.R. 306 the Conservancy's offers these observations.

As space for horses to roam has decreased since the introduction of the fence at the South Ramp, it may be unreasonable and unsustainable to expand the size of the permitted herd. The Nature Conservancy is concerned that this larger herd will only result in further damage to the native ecosystem.

Degradation of habitat caused by expansion of the herd will also negatively affect the health of the horse population itself, as well as the health of native species. Consistently, over the last decade we have seen a substantial decline in the health of the ecosystem due to the rooting of the vegetation by the feral pigs and the trampling of vegetation by the feral horses. Despite their charismatic appeal, excessive numbers of feral horses threaten vegetation and wildlife through trampling and consumption. The Estuarine Research Reserve and the National Wildlife Refuge were not established to provide for the effective management of a feral horse population.

A similar problem exists on other national wildlife refuges on the eastern seaboard. Before enacting this legislation, you may want to examine what has occurred to effectively manage the feral horses without causing serious degradation to the landscape.

Thank you for taking our views into consideration.

Sincerely,

Katherine D. Skinner
State Director
North Carolina

Mr. SABLAN. Thank you very much, Mr. Chairman. I will just go right to the questions. Mr. Siekaniec. I hope I said that right, Greg.

Mr. SIEKANIEC. That is correct. Thank you.

Mr. SABLAN. Yes. Let me ask you, what resources would the Service currently expend to implement the Currituck Outer Banks Wild Horse Management Fund?

Mr. SIEKANIEC. Presently, we estimate that the Fish and Wildlife Service spends approximately $100,000 of our budget to address the management of horses on Currituck National Wildlife Refuge. This is primarily comprised of staff time, monitoring and fencing costs. In addition to, you know, what we spend sort of on an annual budget, we have also taken some steps, last year we spent $28,000 to put in place a 143 acre sort of fenced exclosure from what we identified as our prime waterfowl habitat, sort of the best of the best. We also expended an aerial survey, we have $5,000 to complete an aerial survey, and we have expended $10,000 on a horse trailer, and dart guns and associated equipment.

Mr. SABLAN. Thank you. Notwithstanding this legislation, what resources does the Service expect to expend given the increasing herd size on the refuge?

Mr. SIEKANIEC. Our best estimate is that our budgetary needs would rise to approximately $260,000 per year in recurring costs. Again, staff time, surveys, capture handling costs for horses, vehicles and facility type maintenance.

Mr. SABLAN. All right.

Mr. SIEKANIEC. I think there is also an implication of, you know, not just the financial costs to us, but the resource costs that we are also very concerned with. You know, I think we have already heard that the area was identified as a 12,000 acre horse management area, which I understand already through fencing and development has been reduced to 7,700 acres of which the refuge represents 4,100 acres, so, as you can see, as we reduce this due to private developments that our concern is that we are going to start having the majority of the horse use and occupancy occurring on the National Wildlife Refuge.

Mr. SABLAN. And if this is enacted, what additional resources would the Service expect to spend to implement the law?

Mr. SIEKANIEC. I had a little trouble hearing your question, but you are asking what would we expect to be spending?

Mr. SABLAN. Right. Additional expenses if the law were enacted. If H.R. 306 were enacted.

Mr. SIEKANIEC. Yes. If the law was not enacted we would expect that, you know, our budget of $260,000 would need to be expanded just for us to be a part of the management operations for the Currituck refuge and the wild horses.

Mr. SABLAN. All right. Thank you. Thank you very much. Ms. McCalpin, right? Karen, good morning.

Ms. MCCALPIN. Good morning.

Mr. SABLAN. Do you have any estimates for how much it will cost the Federal Government to manage this wild horse herd should H.R. 306 become law? How much of this cost would be borne by your organization, please?

Ms. MCCALPIN. We bear all of the management costs. I think the vehicle and horse trailer that Mr., I am sorry, Siekaniec, to which he was referring came from a grant in 2007. We have not asked for any other monies after that. I raise about $360,000 of our $421,000 budget ourselves. In the future, we would not need to request anything from the Service in terms of horse management costs. We also bear the cost of all of the immunocontraceptive drugs, PZP, which we administer. The guns that were acquired for

that also came from a $7,000 grant that provided us with the horse trailer that we did in partnership with the U.S. Fish and Wildlife Service. We have a full-time herd manager that is on site almost on a daily basis. Also, the exclosure fence that put up I thought was part of a grant with North Carolina State University.

Mr. SABLAN. So let me take one more shot. So we are saying that what you are spending and what they are spending is really the actual cost that we are spending to manage the herds right now, and that would probably increase with the enactment of H.R. 306?

Ms. MCCALPIN. I do not see our budget increasing at all with the enactment, and I am not really sure, you know, I cannot speak for them, but we do the horse management. We are the ones that respond to the emergencies. I would also like to say that when we do the aerial counts every year, the maximum number of horses that have been ever counted on refuge property is 35. The rest of them are found on private land. In terms of development and the reduction of habitat, when they referred to the map, that reduction in acreage was because when the map was originally done it included a lot of areas to which the horses had no access, and so the new map of 7,500 acres is actual land to which the horses have access. It included water and islands that the horses were not using.

Mr. SABLAN. Thank you very much, ma'am. My time is up, Mr. Chairman.

Dr. FLEMING. Gentleman's time is complete. I now recognize Mr. Wittman from Virginia.

Mr. WITTMAN. Thank you, Mr. Chairman. I would like to thank our panelists again for joining us today. I would like to begin by asking unanimous consent to submit my full remarks for the record and to include supporting letters from Ducks Unlimited and the Chesapeake Bay Foundation.

Dr. FLEMING. Without objection, so ordered.

[A letter submitted for the record by the Chesapeake Bay Foundation follows:]

April 6, 2011

The Honorable John Fleming, Chairman
Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs
House Committee on Natural Resources
Washington, DC 20515

Dear Mr. Chairman,

On behalf of the Chesapeake Bay Foundation, we respectfully request that this conditional letter of support for bill H.R. 258, the Chesapeake Bay Accountability and Recovery Act of 2011, introduced by Representative Rob Wittman, be submitted for in inclusion into the record at the House Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs scheduled for Thursday, April 7, 2011.

H.R. 258 includes several elements that we believe further ongoing efforts to restore the Chesapeake Bay. The bill would require the Director of the Office of Management and Budget, in consultation with the Chesapeake Executive Council, the chief executive of each Chesapeake Bay state, and the Chesapeake Bay Commission, to submit to Congress a financial report containing: an interagency crosscut budget for restoration activities in the Chesapeake Bay watershed; an accounting of funds received and obligated by all federal agencies for restoration activities. In addition, H.R. 258 would require the Administrator of the Environmental Protection Agency (EPA) to develop and update every three years an adaptive management plan for restoration activities in the Chesapeake Bay watershed while also requiring the appointment of Independent Evaluator for the Chesapeake Bay watershed, who review

and report to Congress every three years on restoration activities and the use of adaptive management in such activities.

H.R. 258 would provide transparency for Congress and the public to track ongoing federal, state, and local efforts and expenditures as part of Chesapeake Bay restoration activities, which is valuable in its own right and would also be useful to furthering public understanding of the sources, pathways, and effects of pollution on the Chesapeake Bay and its tributaries.

Our one concern with the text of H.R. 258 is with section three, which would require the EPA Administrator to develop a time-consuming report on Chesapeake Bay restoration activities, presumably at the federal as well as the state and local levels. In the year 2000, the Federal Government and the Chesapeake Bay States agreed to work together to develop and implement a comprehensive plan for the recovery and restoration of water quality in the Chesapeake Bay. More than ten years later, at the end of 2010, the Federal Government, six states, and the District of Columbia finally ushered in this new era of cooperation when they released detailed plans to reduce Chesapeake Bay pollution to restore water quality over the next fifteen years.

We believe that the states are the appropriate authors for the types of detailed adaptive management plans envisioned in HR 258, and that a great deal of work has already been done by them. As a consequence, we believe that the bill language should be somewhat modified to direct the Administrator to ensure that the next iteration of the states' plans include the various criteria listed in the bill. The language could further state that the Federal Leadership Committee, which the Administrator chairs, should include similar criteria in its Annual Action Plan and Annual Progress Report required by Executive Order 13508. In our view, these modest changes would allow Representative Wittman's legislation to be more supportive of state-level planning and avoid duplication of work that has already been done to a large degree.

We acknowledge and applaud the efforts of Representative Wittman and the other cosponsors of the bill to further the restoration of the Chesapeake Bay and its many tributaries, and we look forward to continuing to work with him and the other members of the House Natural Resources Committee on H.R. 258. We urge the Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs to modify the legislation along the lines suggested above and then favorably report the legislation to the full House Natural Resources Committee.

Respectfully submitted,

Doug Siglin
Director of Federal Affairs
Chesapeake Bay Foundation

[A letter submitted for the record by Ducks Unlimited, Annapolis, Maryland, on H.R. 258 follows:]

ANNAPOLIS OFFICE
34 Defense Street, Suite 200
Annapolis, MD 21401
(410) 224-6620 Fax (410) 224-2077
www.ducks.org

April 7, 2011

The Honorable Doc Hastings
Chairman, House Committee on Natural Resources
1324 Longworth House Office Building
Washington, D.C. 20515

The Honorable Edward Markey
Ranking Member, House Committee on Natural Resources
1324 Longworth House Office Building
Washington, D.C. 20515

Dear Chairman Hastings and Ranking Member Markey:

Thank you for the opportunity to comment on **H.R. 258, the Chesapeake Bay Accountability and Recovery Act of 2011**. As your Committee considers this bill, Ducks Unlimited would like to offer its full support for this important legislation.

As you may know, Ducks Unlimited (D) is the world's largest non-profit organization dedicated to conserving North America's continually disappearing waterfowl habitats. Established in 1937, DU has conserved more than 12 million acres thanks to contributions from more than a million supporters across the continent. Guided by science and dedicated to program efficiency, DU works toward the vision of wetlands sufficient to fill the skies with waterfowl today, tomorrow, and forever.

One of the critical geographic areas for migrating waterfowl is the Chesapeake Bay. H.R. 258 would require the Office of Management and Budget to prepare an interagency crosscut budget that details federal and state dollars spent on Bay restoration. In these tight budget times, this crosscut budget is critically important to ensure taxpayer dollars are used efficiently and effectively on Bay restoration efforts. H.R. 258 also requires the Environmental Protection Agency to develop and implement an adaptive management plan for the Bay so the best available science dictates public policy in the watershed. DU scientists regularly partner with federal and state agencies on habitat restoration projects, and it is critical that these projects are driven by the most up to date science available.

Once again, thank you for the opportunity to comment on H.R. 258. DU asks for your support of this important bill, which passed the House by a vote of 418-1 in 2009. If DU can be of assistance, please do not hesitate to contact Bernie Marczyk, Governmental Affairs Representative, at 410-224-6620 x12 or bmarczyk@ducks.org.

Sincerely,

Bernie Marczyk
Governmental Affairs Representative

Mr. WITTMAN. Thank you. Dr. Mann, again, thank you for your testimony today and for your service to the citizens of Virginia, especially in your work there at VIMS. I wanted to follow up from your last comment where you talked about the independent evaluator and the utility of an independent evaluator in looking at how to evaluate restoration activities and the implementation of adaptive management. I want to get your overall view about how do you think an independent evaluator could best be utilized in this process of looking at what is happening, making sure that that independent evaluator is shaping decisionmaking at the agency level.

Dr. MANN. Let me respond to that by giving the example of what we do at the Virginia Institute of Marine Science. Over our 60 year history, we have a task that is spread throughout the code of Virginia to provide independent advisory review of issues for the Governor, for his cabinet, for the General Assembly, for the state agencies, for the citizens of the Commonwealth and further afield as requested. This footprint covers everything from the size of flounder that you can take to whether or not a gas pipeline should be put underneath the James River, to the large scale development and economic and ecological impacts of reservoirs, and at this point in time we are actually working with the Commonwealth and other state agencies on siting for what could be some of the largest wind power windmills anywhere in the world. We have a broad swath of expertise and our role is to provide independent scientific assessment. Now, these are not always popular. When we essentially guarded against the development of the King William Reservoir, before I got back to my office there were calls to the president of the university to have me fired. The point is is that we provide this independent evaluation, you do it publicly and you do it into the agencies at the point where they can best use that information, and you do it critically and without bias. It is a matter of communication and it is a matter of being honest, and if you do not like what you are going to hear from us, you are going to hear it anyway. This is how scientific review works. I think there is opportunity within the Bay program structure to do that. I think our history of doing this as an institution using the broad base of expertise that is available to us shows that we can contribute in just the same way to the Bay programs. So review is not the problem. Get us the information. If we cannot review it, we will find you somebody who can and we will provide the input in the other direction, and from there on, you have a conversation.

Mr. WITTMAN. So it sounds like what you are saying is that an institution like VIMS would be particularly well-suited to play this independent evaluator role by looking at the science and to be a purveyor of that information, to be the facilitator of communication back and forth between the decisionmakers and the agencies, those folks having to implement parts of the Chesapeake Bay Act, and looking at what works, what does not and then using science as the foundation to determine how decisionmaking takes place, which, as you pointed out earlier, especially in days of resource challenges, we cannot afford to be taking wrong tracks that expend significant amounts of money that do not produce results. So I just wanted to get your thoughts along those lines.

Dr. MANN. In a sentence, I would be happy to offer the resources of the institution toward this end.

Mr. WITTMAN. OK. Very good. I wanted to get your thoughts, too, on why adaptive management as a model or as a paradigm is particularly applicable to complex environmental systems like the Bay. As we know, the Bay has many, many different aspects to it, and wanted to get your thoughts about why adaptive management would be a better paradigm than the existing paradigm that is being used to implement Bay programs and to attempt to achieve results, whether it is in restoration of natural resources or improvement in water quality and those types of areas.

Dr. MANN. I have commented on the fact that the Bay is a changing environment. Let me give you one example. Twenty-five years in one minute. Twenty-five years ago the striped bass populations in the Chesapeake Bay were extraordinarily depressed. Based upon a comprehensive and peer-reviewed numerical model, population dynamics, extraordinary measures were taken to rebuild the population, including moratoriums on fishing. Those people who enjoy striped bass fishing now, they know that it worked. We are done? No, we are not. About 10 years ago, many of the striped bass started to appear with huge, red lesions on the outside of them, truly grotesque red lesions, and everybody said it is a new disease that has come in, we should be worrying about a new disease. What did we learn from adaptive management?

It turns out that this disease is caused by something called mycobacterium. It turns out that mycobacterium is present in most of the striped bass in the Chesapeake Bay, in just the same way as you carry around the cold bugs. It is when you get stressed in the winter that it manifests itself and you start sneezing. So what we have learned is is that these animals that we thought were free may, in fact, carry a very low level of an infectious disease, but why did this infectious disease suddenly manifest itself after a long period of time? It turns out that this might be due to the fact that the low oxygen pools in the bottom of the Bay are getting bigger.

What has that got to do with striped bass? They use deep water, cold water, as refuges in the summer. If they cannot go into the refuges, they live in high temperatures. If they are in high temperatures, then the disease manifests itself. What we have here is an extraordinarily complex web that just deals with one species. So how do you manage striped bass now as opposed to how you did it 25 years ago? You need to incorporate into the management plan a component that deals with disease. That is adaptive management—taking new information, adding it back in, refining what you do, going forward and being prepared to change it again if it does not work.

Mr. WITTMAN. Very good.

Dr. FLEMING. I thank the gentleman. Next up is Mr. Southerland from Florida.

Mr. SOUTHERLAND. Thank you, Mr. Chairman. I would like to thank all the witnesses for being here today. I want to ask, if I could, Dr. Hutchins, as far as the horses and the herd that we are discussing today, is it not possible that the horses arrived on these shores long before some of the other species that you are committed to protecting in the refuge?

Dr. HUTCHINS. Well, that is unlikely. I mean, the horses arrived there approximately 500 years ago, as pointed out. That is just a drop in time when you are talking about geological time.

Mr. SOUTHERLAND. But we do not know, do we?

Dr. HUTCHINS. I am sure that most of our native species have been here for millennia.

Mr. SOUTHERLAND. Is it true, though, that in your statement you said in a perfect scenario the Federal horses should be removed from the refuge altogether? I mean, is the Wildlife Service, are you interested in them disappearing at all, I mean, that they would to-

tally be removed and you would not have to deal with this issue at all?

Dr. HUTCHINS. In a perfect world, yes.

Mr. SOUTHERLAND. OK. Based on that, then if you are managing at 60, then you would literally be, in your perfect environment you would be managing this herd to extinction, correct?

Dr. HUTCHINS. Well, we have talked a little bit about the genetic diversity in this herd which could easily be maintained by bringing in animals on a regular basis from outside that herd.

Mr. SOUTHERLAND. Right.

Dr. HUTCHINS. You can maintain small, isolated populations genetically through that technique.

Mr. SOUTHERLAND. I am curious about your philosophy that these are feral and they are pests. Obviously, you know, the foundation of this country, I mean, in your belief, that definition of feral, definition of pest, I guess it could also be said that the White man, the Caucasian, is feral.

Dr. HUTCHINS. Well, if you wanted to take it that far.

Mr. SOUTHERLAND. I am serious. No, no, no, no, no.

Dr. HUTCHINS. This is a very different situation.

Mr. SOUTHERLAND. No, no, no. But based on your definition that they were not here 500 years ago, we are feral.

Dr. HUTCHINS. Well, let me just say that——

Mr. SOUTHERLAND. That is a yes or no. I am running out of time.

Dr. HUTCHINS. It is a no.

Mr. SOUTHERLAND. Really?

Dr. HUTCHINS. Well, I mean, humans are the most adaptive species that is on this planet. We have gone everywhere on our own. We have not, you know, been removed around artificially, which is what we have done with other species. I might notice, or note that one of the issues that came up here was the impact of humans on the island ecosystem, but these results are cumulative. When you are getting non-native species and the impacts of humans on these sensitive habitats there are cumulative impacts that can really seriously affect our native wildlife. It really comes down to values. Do we really value our native wildlife and our refuges——

Mr. SOUTHERLAND. Right.

Dr. HUTCHINS.—or are we going to create theme parks for non-native species.

Mr. SOUTHERLAND. Well, I think, sir, you made a great argument, though, for the Native Americans, OK? I think we should be on the reservations, OK? This was their land, OK, when we got here, OK? I think that if you take your theory, OK, which I think is a theory, and apply that to the way the country was founded, I think that the Caucasians, the Hispanics, the Asians, the Spanish-Americans, that we would be, by your definition, feral and clearly pests to the Native Americans. I want to ask, and Siekaniec? Is that? I apologize if I pronounced that wrong. You know, obviously it has been stated that people come—I remember when I was 12 years old my grandparents took me up there to see these horses and to see, you know, horses like this on the barrier islands, swim the channels, and I mean it was fascinating. It is a huge economic impact. If, in your world, there was an extinction

and they were removed and not there, what is the economic impact on jobs, small businesses, heads in beds, I mean really cranking the economy, what is the negative impact of, in your world, these horses not being there at all? Do we know that?

Mr. SIEKANIEC. I do not have information that would lead us to an economic analysis having been done on whether they would be present or absent.

Mr. SOUTHERLAND. Right. So if we do not know the economic impact, and the negative economic impact, then it seems like you are pursuing a policy that would be like ready, shoot, aim, and so I would, I just, I find it amazing that we have total disregard, OK, to humans since we have the ability to adapt. I mean, you are asking us to adapt in a way that I think is very unfair and I think it is irresponsible. Finally to you, Ms. McCalpin, thank you for your efforts. I think these horses have great value. I think they are part of the culture here. Five hundred years. They were here welcoming us when we got here. I applaud them for their longevity and their ability to adapt. I think this is perhaps the strongest challenge they have, to adapt to people that would love to see them become extinct. So I know I am over my time, but, Mr. Chairman, I yield back.

Dr. FLEMING. I thank the gentleman from Florida. I think we are all still very interested in these subjects so we would like to have another round if the witnesses would hang with us. We may be up against a vote in a few minutes so we will try to go ahead and squeeze this round in. I will begin the second round. Ms. McCalpin, in your testimony you mention that written record of these horses arrived on the Outer Banks of North Carolina dates back to 1520.

Ms. MCCALPIN. Yes, sir.

Dr. FLEMING. The Fish and Wildlife Service has consistently referred to these horses as pests or feral domestic animals, but the Service is committed to protecting another historic species at the Currituck National Wildlife Refuge that arrived after the Corolla horses. Let me say parenthetically here, last year we had hearings and a bill was passed out of here that increased the range for feral donkeys and horses out West which is being paid for by taxpayers, or would be should that come to fruition. On the other hand, as I understand it, this is a program that is being supported privately. So I am really a bit mystified and befuddled about this sort of double standard that we seem to have, so I would first of all ask how long does a species have to be here in the United States before the Fish and Wildlife Service gives them a green card?

Ms. MCCALPIN. I cannot answer that, sir.

Dr. FLEMING. Sorry. Tough question. I apologize. Are you asking for, or do you anticipate asking the Federal Government for funding to implement H.R. 306?

Ms. MCCALPIN. No, sir. Not a dime.

Dr. FLEMING. OK. The witness shakes her head no. Do you have any plans for land acquisition?

Ms. MCCALPIN. In fact, we have just initiated the Green Fund. Now is a great time for us to be acquiring land. Unfortunately, with the economy, there are a lot of people that are sitting on land that is going into foreclosure, so our board has voted to move forward with a very concerted effort on trying to acquire land both

through grants and through donations, and that land would be put into conservation easements so that it would be permanently available not just to the wild horses, but to all the wildlife.

Dr. FLEMING. OK. It is my understanding that the Chincoteague National Wildlife Refuge allows grazing on two tracts for up to 150 ponies through a special use permit with the nonprofit Chincoteague Fire Department.

Ms. MCCALPIN. That is correct.

Dr. FLEMING. Has the Fish and Wildlife Service objected to the management of these ponies?

Ms. MCCALPIN. I am not aware of that. We have not had any of those discussions in the Wild Horse Advisory Board meetings that we have.

Dr. FLEMING. So certainly you have no knowledge of any objections that they have——

Ms. MCCALPIN. No, and that is an activity that has been going on for quite a number of years.

Dr. FLEMING. Where do the ponies live?

Ms. MCCALPIN. They live on the wildlife refuge in two separate tracts.

Dr. FLEMING. All right. What is the cost to the Service to manage the ponies?

Ms. MCCALPIN. In Chincoteague?

Dr. FLEMING. Yes.

Ms. MCCALPIN. I do not know the answer to the question. I believe the cost is primarily incurred by the Chincoteague Fire Department, similarly to the Corolla Wild Horse Fund incurring the cost for managing the wild horses on Currituck.

Dr. FLEMING. Yes. Mr. Siekaniec, do you know what the cost is?

Mr. SIEKANIEC. On Chincoteague refuge I do not have an estimate of what the costs are. I do have a little bit of information that sort of describes the relationship between us and the fire, the group that actually administers the horses. The horses do, they are on the refuge for a period of time, but they are also off the refuge for a period of time. We have actually entered into a successful management plan so we have a very clear understanding of how many horses would be on the refuge at what particular points in time and it is administered through a special use permit, and there was a point in time when we did recognize there was a lot of damage being done by horses on the Chincoteague refuge, which is how we had to end up in a management strategy plan. Through our comprehensive conservation plan, we now recognize that the best approach for management——

Dr. FLEMING. Well, let me interrupt you a moment because I am running out of time. Just, if you would, sir, explain to me why these are a species of ponies that certainly we treasure, and on the other hand the Corolla horses are pests that we seem not to want to try to support. Can you give me an idea of why we—I mean, this seems to be so internally inconsistent and contradictory.

Mr. SIEKANIEC. Yes. Well, I think what we actually do is we would view the horses at Chincoteague as well as feral wild horses, just like we would at Currituck. We have entered into a very successful management plan at Chincoteague. We have a management plan that we have entered into at Currituck that we believe can

be very successful. What we are really arguing about is the number. We believe that a number of 110 to 120 would probably over stress the habitats associated with the amount available at Currituck. I believe Chincoteague has 13,000 acres available. Currituck is now 4,000 refuge and an additional three in the private land surrounding. So we have just two different relationships.

Dr. FLEMING. My understanding is that three of the four signatories on that disagree with that. Anyway, my time is done so I thank the witnesses. I now yield to the Ranking Member for five minutes, sir.

Mr. SABLAN. Thank you very much, Mr. Chairman. This is a time when I am actually glad I come from islands, and 14 islands, I represent 14. Three of the islands are actually full conservation islands. People, individuals, whether you are Chamorro or Caucasian, you are not allowed on the island. We keep it for the birds, and the coconut crabs and things like that, so I do not have this problem. Dr. Mann, I mean, I am sorry, Dr. Hutchins, please. Do you have any concerns about the genetic viability of the herds?

Dr. HUTCHINS. Well, once again, genetic viability, certainly small populations are susceptible to the loss of genetic diversity fairly rapidly because of inbreeding concerns. However, that can be taken care of by the occasional immigration of a few animals that would introduce, you know, genetic diversity into the herd. So I would not be that concerned about it. I think if it was an enclosed population that was there for a long time without the introduction of new genetic diversity, then it would be a concern. If new diversity can be introduced to the herd, it is not a concern.

Mr. SABLAN. Thank you very much. Dr. Mann, can you please explain or elaborate on what resources are needed by the scientific community to improve upon existing models and to be able to communicate those results to the stakeholders of the Chesapeake Bay.

Dr. MANN. Synthesis in terms of models is something that we can do using the data that is available. Support for those synthesis is relatively modest in terms of actual processing data that is available. That will I think be a very good place to start. Communication is something that scientists do not always do well, but it is something that we should be tasked with. It is matter of communicating with both the Federal offices and with the public in terms of stakeholders. It is something that I do a lot of in my role as an advisory service director. Not all of the science community does it well. It should be part of our mandate to do that. I think if you wish to reengage the science community in this, a general statement from this Committee that this is something that is important in terms of progressing with the Executive Order to get there, I think the community will respond.

Mr. SABLAN. And because we are all dealing with conservation here, Mr. Chairman, I do not have to use up my time. I yield back the remainder.

Dr. FLEMING. The gentleman yields back. Next up for questions is the gentleman from Virginia, Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman. I want to go back to Dr. Mann again and pick up where you left off in talking about adaptive management. I want to take that to the next step. You talked very eloquently about making sure that the partners in Bay

restorations are engaged and that there are communications back and forth and how critical that is in decisionmaking, and to make sure that there are actually results being achieved. I want to ask you, you have an awful lot of experience in dealing with agencies there in Virginia, both state agencies and the Federal agencies, in many of these restoration activities, and in that experience are there any examples that you can cite, and maybe even recent examples, where there has not been that kind of cooperation or where we could be better at engagement and communications and making decisions about restoration activities, or water quality improvement, whatever it may be? I was just wondering if you might be able to share an example with us where that is critical to decisionmaking and outcomes.

Dr. MANN. I think there are probably two very good examples where the pointed end of the stick is getting shoved in both directions at the moment. One of them is the TMVL debate which got to be quite testy and has now, I think, been resolved through a very good line of communication, I keep using that, between the state agencies and the EPA. This is total maximum daily loads. I think we are making progress there. If you want an example in the natural resource area, it is impossible to talk about the Chesapeake Bay without talking about oysters. Oyster restoration is probably one of the continuing controversies. If you look at the words in the Executive Order, 20 estuaries by 2025, I mean this is an extraordinarily bold goal. I mean, John Kennedy set bold goals to fly to the moon and back. When I talked about the striped bass example, the decisions on the moratorium on striped bass were based on a very comprehensive understanding of biology and a strong peer-reviewed mathematical model. We do not have one of those for oysters, and so at the moment, we are setting goals and we are setting strategies based on those. Now, the current NOAA strategy is to invest in sanctuaries. During my career in restoration I have been a strong proponent of these areas to keep out fishermen. Sanctuaries are great, and, in fact, they are used well in wildlife biology. There is also an attitude that if you invest in continuing to rebuild areas that are subject to fishing but limit fishing, you might also increase populations by this approach in areas that are not sanctuaries. You control access to them. I have also been a proponent of that. I have worked with the National Marine Fisheries on these sorts of things for 20 plus years. So there are two approaches here. Which one are you going to use? Well, in a period of unlimited resources, let us do both. We are not in a period of unlimited resources, and that is what is critical at the moment to have an active debate between the NOAA approach, it is not that this is wrong, or the state approach, and it is not that that is wrong either, it is just that if you have a limited amount of money, then each put forward a proposal and then have it reviewed by entities outside of the Chesapeake Bay or independent of this, this is the independent evaluator, and let them decide and give some guidance back as to how we could best invest where we are looking at a future of trying to build on relatively modest investments that are dictated by your budget. I think this is an example where I am not trying to gore anybody's ox, but it is where an active debate,

peer-review, an independent evaluator and holding everyone accountable, this is an example where we can do this. Thank you.

Mr. WITTMAN. Thank you, Mr. Chairman. I yield back.

Dr. FLEMING. The gentleman yields back. It appears that all questions have been asked today. I would like to again thank the witnesses for their valuable testimony and for their appearance before this Subcommittee today. Members of the Subcommittee may have additional questions and we may ask that you respond to these in writing. The hearing record will stay open for 10 days to receive these responses. I want to thank Members and staff for their contributions to this hearing. If there is no further business, without objection, the Subcommittee stands adjourned.

[Whereupon, at 11:27 a.m., the Subcommittee was adjourned.]