

only small business but encourage the opportunity for big business and small business to be more competitive around the globe. In my prior life, I worked for a company that was called Bell Communications Research, formerly known as Bell Labs. It was our mission at that time to make sure that we ensured the standards for the telecommunications industry were the same across the United States, albeit the world.

The ability to speak together in the same language, as the gentleman from Minnesota (Mr. GUTKNECHT) talked about, is so critical to the success of people who are trying to provide products worldwide. This not only makes sense, what we are doing, but it will help America be more competitive. I wholeheartedly support not only this rule but the underlying legislation. And I would say, Mr. Speaker, that this is a great bill; and I urge my colleagues to support this.

Mr. Speaker, I yield back the balance of my time, and I move the previous question on the resolution.

The previous question was ordered.

The resolution was agreed to.

A motion to reconsider was laid on the table.

INLAND FLOOD FORECASTING AND WARNING SYSTEM ACT OF 2002

The SPEAKER pro tempore (Mr. SESSIONS). Pursuant to House Resolution 473 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the State of the Union for the consideration of the bill, H.R. 2486.

□ 1118

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 2486) to authorize the National Weather Service to conduct research and development, training, and outreach activities relating to tropical cyclone inland forecasting improvement, and for other purposes, with Mr. QUINN in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. Pursuant to the rule, the bill is considered as having been read the first time.

Under the rule, the gentleman from Michigan (Mr. EHLERS) and the gentleman from Texas (Mr. HALL) each will control 30 minutes.

The Chair recognizes the gentleman from Michigan (Mr. EHLERS).

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume.

I rise today in strong support of H.R. 2486, the Inland Flood Forecast and Warning System Act of 2002.

Mr. Chairman, everyone talks about the weather, but no one does anything about it. That is a famous statement I remember from my youth, but I am here today to talk about a way that we are going to do something about the weather.

When it comes to hurricanes, wind speeds do not tell the whole story. Hurricanes produce storm surges, tornadoes, and often the most deadly of all, inland flooding. While storm surge is always a potential threat, more than half of all deaths associated with tropical cyclones during the last 30 years are due to inland flooding.

Inland flooding can be a major threat to communities hundreds of miles from the coast. In 1999, Hurricane Floyd killed 48 people and caused nearly \$3 billion in property damage, primarily because of flooding of inland communities. The severity was quite unexpected because these communities are 50 to 100 miles inland from hurricane landfall. However, this type of flooding has become all too common.

While the National Weather Service has the ability to accurately predict most flood events, it has difficulty in forecasting inland flooding events that are caused by tropical cyclones.

In addition, the flood warning index currently used by the National Weather Service for all flood events does not include enough information about the potential risks and dangers posed by expected floods. This index defines floods as minor, moderate, or major. Sometimes the category is accompanied by a warning of a comparable flood from another year. However, most major floods happen several years or even decades apart, so this information may not be very helpful. We need only to watch the news during the past few weeks as flooding in Texas has caused the deaths of many people.

It is time for a new warning system that will provide more information to emergency managers and the public and will save lives in the process.

This bill, H.R. 2486, the Inland Flood Forecasting and Warning System Act of 2002, provides the National Oceanic and Atmospheric Administration, lovingly known as NOAA, an authorization of \$5.75 million over 5 years to do several things: first, improve the capability to accurately forecast inland flooding, including flooding influenced by coastal and ocean storms, through research and modeling; second, develop, test, and deploy an inland flood-warning index that will give the public, the media, and emergency management officials more accurate information about the risks and dangers posed by expected floods; third, train emergency management officials, National Weather Service personnel, meteorologists, and others regarding the improved forecasting techniques for inland flooding, risk-management techniques, and the use of the new flood-warning index; and, fourth, conduct research, outreach, and education activities for local meteorologists, media, and the public regarding the dangers and risks associated with inland flooding, as well as the use and understanding of the new inland flood-warning index.

Mr. Chairman, I want to thank the gentleman from North Carolina (Mr.

ETHERIDGE) for introducing this important bill. It was my pleasure to work closely with him in perfecting it.

I might add, Mr. Chairman, that the two bills before us this day coming from my subcommittee were both authored by Democrats, and in both cases I worked very closely with them. That is a good example of the bipartisanship that one experiences on the Committee on Science, and I believe is a model for other committees, as well.

It was the district of the gentleman from North Carolina (Mr. ETHERIDGE) that suffered the loss of 48 people in 1999 because of the unexpected severe inland flooding caused by Hurricane Floyd. I appreciate his leadership by responding with this legislation, which will help communities to more fully understand the risks and dangers of floods. We worked together closely during consideration of the bill in the Committee on Science to ensure that the new flood-warning index would help all our States, whether landlocked or coastal.

But, more importantly, I am confident that training managers in the use of this new index and educating the public on its meaning and importance will save lives.

This bill received strong bipartisan support in the Committee on Science, and I urge all of my colleagues to vote in favor of this important and timely piece of legislation.

Mr. Chairman, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I rise in strong support of H.R. 2486, the Inland Flood Forecasting and Warning System Act of 2002. This legislation was developed by the gentleman from North Carolina (Mr. ETHERIDGE), who has done a good job on it. He has worked on it for quite some time. I have great admiration for the gentleman. He is from the home State of my father and most of my family. He is a gentleman, and good to work with.

This bill has strong bipartisan support, not only on the committee but among Members from coastal areas, as well. The gentleman from Michigan (Chairman EHLERS) has already outlined the provisions of this bill, so I just want to take a few minutes to talk about the need for this legislation.

Flooding affects, of course, every part of the country; and although we have improved our flood forecasting capabilities, we still lack an effective means of transmitting to the public the nature and severity of a flood.

Mr. Chairman, one day this country will capture and hold the devastating flood waters to fight future droughts in additional lakes, above-ground giant containers, and some underwater storage. Water and fire, fearful enemies, could become wonderful friends for the future to allow these devastating floods to fight the droughts.

One of the least-understood flood patterns is related to tropical storms. For

example, we still do not fully understand the interaction between storm surges and flooding caused by precipitation. As a result, our flood forecasting is often inaccurate. In addition, tropical storms impact not only coastal areas, but can have devastating and disastrous effects as they continue to move inland.

For example, Tropical Storm Allison dumped more than 35 inches of rain on my State of Texas. There were 50 deaths. The flood damage to Houston and surrounding areas was estimated in the several billions of dollars. Just last week, parts of central Texas received more than 30 inches of rain.

In Texas, we have firsthand knowledge about the damaging effects of floods, so I am proud to be a cosponsor of this legislation, and I strongly support the efforts of the gentleman from North Carolina (Mr. ETHERIDGE) to develop an improved inland flood-forecasting index. I also want to thank the gentleman from Michigan (Chairman EHLERS) and the gentleman from New York (Chairman BOEHLERT) for their strong support of this legislation. I urge my colleagues to vote "yes" on the so-called Etheridge bill.

Mr. Chairman, I reserve the balance of my time.

Mr. EHLERS. Mr. Chairman, it is my pleasure to yield 5 minutes to the gentleman from Texas (Mr. BRADY), who has firsthand experience with the problems this bill is designed to address, because, as we know, there have been some disastrous floods in Texas the past week.

Mr. BRADY of Texas. Mr. Chairman, I appreciate the gentleman's leadership as subcommittee chairman on this important issue to our region and the Nation as well. I also especially appreciate the leadership of my colleague, the gentleman from North Carolina (Mr. ETHERIDGE), as well as the gentleman from Texas (Mr. HALL), who have taken such a lead role in this legislation.

When flood waters come through our homes, destroy our businesses, knock out our local hospitals, it does not care if we are Republican or Democrat; it just does the damage. In Houston, Tropical Storm Allison, we are told, was the costliest tropical storm. We lost 50 lives, 50 neighbors in that storm.

We have lost some \$5 billion in our damage to our homes and businesses; and in our medical research center, we lost just tons of research in so many areas, from cancer to genetics, in some of our life-saving research that is being done. Some of the experiments that we lost were 10 years in the making. Scientific experts tell us that there was not a single discipline of science that was not in some way set back from the loss of research from Tropical Storm Allison.

What we heard over and over in our community was that people, families and businesses, were saying, if we only had some notice; if we only had some

warning about this devastation, we could have prevented it, or we could have lessened the damage. This is why I appreciate the lead of the gentleman from North Carolina.

Mr. Chairman, this bill is so commonsense. It says, let us invest in the research which tells us why this flooding is coming and how quickly it is coming, and then let us do an early warning system for us, for those of us in the community, so we know how severe this storm would be on inland flooding and how it could affect us, so we can take those preventive steps.

Then it goes another step and works with our local emergency response people to train them how to respond so they can assist us in leaving that area and preventing that damage, that loss of lives and loss of property.

I am convinced that in our region, which is very experienced in flooding, we were watching for flooding from the coast. We were prepared for the punch from the right; we did not see the punch from the left, from inland flooding. That is what I appreciate so much about this bill.

□ 1130

It takes the inland flooding, provides the research, gives us the warning, trains the communities to prevent. And I am convinced this will save lives, it will save properties, it will save tax dollars to us in the end. It is a compassionate, smart, intelligent investment and the very best next step in preventing inland flooding.

Mr. HALL of Texas. Mr. Chairman, I yield 5 minutes to the gentleman from North Carolina (Mr. ETHERIDGE).

Mr. ETHERIDGE. Mr. Chairman, I thank the gentleman from Texas (Mr. HALL) for yielding me time. I also want to take this opportunity to thank the gentleman from New York (Mr. BOEHLERT) and the gentleman from Michigan (Mr. EHLERS) and others who have been on the Committee on Science, who have helped so much with this piece of legislation. As the gentleman said earlier, the Committee on Science has a tradition of bipartisanship and this bill is another indication of that bipartisanship at work.

Mr. Chairman, as the 2002 hurricane season begins to heat up, I am pleased that we were able to get H.R. 2486, a bill to improve the forecasting of inland flooding and develop an inland flooding index on the floor of the House, and hopefully we can get it through quickly to the Senate and on to the President.

I know it seems a bit strange, and if the folks back home happen to be watching this morning, to be talking about flooding when my State and many other States across this country are facing some extreme drought conditions, some of the worst we have seen certainly in our State in almost 100 years. But much of my district desperately needs rain today, and right now they would like to have a little rain to bring some of the plants to life

and replenish our falling water supplies.

However, we in North Carolina know all too well how devastating tropical storms and hurricanes can be. As you have already heard, just 3 years ago in 1999, Hurricane Floyd killed 48 of our citizens. Almost all of them lived hundreds of miles from the coast, and died not from storm surge as we have heard, not from hurricane wind forces, but from flooding caused by the torrential rains associated with the tropical storms. And as we have already heard this morning, the one thing they did not have was time because this storm hit at night. People lost their lives, they lost their property, and many people lost everything they had because they did not have the one thing that would have made all the difference in the world, which was time.

Last year Tropical Storm Allison, as we have heard others talking about already, demonstrated all too effectively the power of these floods, killing more than 50 people in several States, starting in Texas and moving up the eastern coast; and more recently torrential rains have caused major flooding in Texas all over again, killing 12 people. These and other storms clearly indicate that current methods of predicting whether storm rains will produce heavy flooding are insufficient and that flood warnings are tragically inadequate.

Last year, the House Subcommittee on Environment, Technology and Standards of the Committee on Science heard testimony as to the need of improving the inland flooding forecasting and developing a better warning system that raises public awareness on the destructiveness of inland flooding so people can protect themselves, their property and their families.

Ever since Floyd hit my State with such devastating power, I have been working with experts in storm predictions to help develop an effective piece of legislation to respond, and H.R. 2486 is the result of that effort with my colleagues here in the House.

This bill authorizes a small sum in the terms of the dollars we produce, only \$5.75 million over 5 years to provide the National Oceanic and Atmospheric Administration with additional resources to enhance the science of flood prediction and, more importantly, develop an improved, effective flood warning index that really will save lives and warn people. NOAA's forecast for this year calls for the potential of nine to 13 tropical storms in the Atlantic, including six to eight hurricanes with two to three of them to be classified as major hurricanes, Category 3 or higher on the Saffir-Simpson scale.

William Gray, a professor of atmospheric sciences at Colorado State University and a leading hurricane expert, predicts a 75 percent chance of a Category 3 or higher hurricane striking land in the United States this year. In an average year, that chance is only 52

percent, so you can see this year we stand a chance of really getting hit. Let me repeat that. Experts say there is a 75 percent chance the United States could experience another Floyd, another Fran, another Andrew, or another devastating storm hitting the U.S. coast.

When you consider that more than 50 percent of America's population lives in coastal areas around this country, that makes it a frightening prediction. That is why, along with 23 of my colleagues, I have sponsored H.R. 2486, because as our Nation enters what appears to be a period of increasing storm activity, we need to better understand the damages these storms can cause and better inform our citizens of the danger that these storms pose.

I am pleased that this measure has won the bipartisan support of so many of my colleagues on the Committee on Science, including the gentleman from New York (Mr. BOEHLERT), the gentleman from Texas (Mr. HALL), the gentleman from Michigan (Mr. EHLERS) and others. I want to thank the gentlemen, as well as the gentleman from Michigan (Mr. BARCIA), for their help on the subcommittee, for their assistance in moving this legislation forward.

I want to express my appreciation to the staff of the full Committee on Science and the subcommittee on both the majority and the minority side, in particular Mike Quear, Eric Webster, Bob Palmer, Mark Harkins, and Dave Godston and others who have worked to get this bill to the floor.

I also want to acknowledge the help of the staff of NOAA and the National Weather Service, and cite the work of Dr. Leonard Pietrafesa, a professor at North Carolina State University, who helped in the crafting of this legislation.

Mr. Chairman, at this very moment a storm is brewing in the Gulf of Mexico that may or may not develop into a tropical storm. Time is of the essence. I encourage my colleagues to pass this with haste, get it to the Senate so the President can sign this legislation as quickly as possible.

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I am pleased to join the gentleman from North Carolina in commending the chairman of the Committee on Science, the gentleman from New York (Mr. BOEHLERT) for his good work, and also the ranking member, the gentleman from Texas (Mr. HALL), as well as the staff. They have made the Committee on Science into a smoothly working machine, one of the most productive committees in the House, and I commend all of them for that.

Mr. Chairman, I yield such time as he may consume to the gentleman from Pennsylvania (Mr. GEKAS).

Mr. GEKAS. Mr. Chairman, I thank the gentleman for yielding me time.

I too rise in support of this legislation. I remember very well being a wit-

ness to one of the most devastating floods that ever hit Pennsylvania, and I was reminded of the fact that in Hurricane Floyd, which was just referred to by the previous speaker, many Pennsylvanians went down to help in that disaster; and they did so because they remembered, did these Pennsylvanians, what happened to us in central Pennsylvania in 1972. Agnes, the mother of all hurricanes, swept over Pennsylvania and lingered on top of that topographical area for a long period of time.

We learned many, many different lessons at that time. And one of them was, of course, what is common sense: that the more ability we have to forecast and prepare, the less risk there is to human life and the less risk there is to destruction of property. And that is what the essence is of this piece of legislation.

We are all eager to put into place the highest form of technology possible so that we can have these early warnings and be able to give the warnings that are necessary to residents, to businesses, to everyone concerned, and thereby minimize the damage.

Since Agnes, we have formed a task force with the Susquehanna River Basin in which flood warning is the key element. So we are becoming more and more aware of the new science that can help in flood forecasting and also in the quick recovery from damage and flooding that may occur.

So I rise with great enthusiasm to support this legislation. If it is a matter of common sense, we ought to have a unanimous vote in the Chamber for this piece of legislation. It will reap numbers of thousands of dollars and millions of dollars in savings as we proceed down the line of preparing our populace for natural disasters in the most scientific way possible.

Mr. HALL of Texas. Mr. Chairman, I yield 5 minutes to the gentlewoman from Houston, Texas (Ms. JACKSON-LEE).

Ms. JACKSON-LEE of Texas. Mr. Chairman, I thank the distinguished chairman and the distinguished ranking member of the full committee and the gentleman from Michigan (Mr. EHLERS) for their leadership and, of course, my friend and colleague from North Carolina, the distinguished Congressman who has come forward with an enormously important legislative initiative that deals with inland flooding forecasting and warning system.

Mr. Chairman, I think it is important with the changes, climatic changes that we are facing, so many of us who come from very warm climates are used to what the Northeast and the Midwest are facing now over the last couple of years with intense heat over the summer and, in fact, intense heat during some of the winter and fall months.

We know that the weather and prediction of such is coming upon a new turn. And this legislation will be an indicator, a predictor of saving lives and

saving property and saving local government. Having come from a local government situation, being a member of the Houston city council, I am very close to our local officials, both county and city.

Mr. Chairman, if I can express to you a phenomenon that none of us expected to happen, that was the occurrence of June 10 approximately, 2001, where a few days of rain turned into the largest storm that we had ever seen and one that the Gulf Coast had never experienced. There were areas in our communities that were under the 500-year flood warning, under the 100-year flood warning and, unfortunately, received enormous amounts of water in the inner city and surrounding areas.

I remember that morning. It was a Saturday morning. I remember being here at the United States Congress earlier in the week, and as it began to rain and I checked on my constituents in Houston, all they said was, it was heavy rain and I am sure things will be well. It stopped and then started again on Friday night. And, lo and behold, when we arose early that morning, the medical center, hundreds of billions of dollars, under water. Millions and millions of dollars of research lost. Thousands upon thousands of research mice lost. Individuals in that medical center having to be or patients having to be, en masse, evacuated. Literally, the medical center was shut down. Universities shut down. Thousands of homes under water. Twenty plus deaths and all because of Tropical Storm Allison.

The concept of forecasting is imperative. It is imperative for saving dollars in the Federal Government. It is imperative for planning for local governments. It is imperative for helping in our local communities; and, yes, in causing or decreasing the amount of pain experienced by those impacted by these floods.

Right now, as we speak, we know that the Guadalupe River is overflowing in areas that many of the residents in that area never expected. This legislation will go throughout the country to not only areas that are used to flooding in some of the outlying areas, but in the inland areas.

My area happens to be 50 miles inland, but it is also 50 feet under sea level; and it is by a port, it is by waters that might overflow. The idea of forecasting is imperative. So I would ask my colleagues to be particularly sensitive to the importance of this legislation. I look forward to presenting an amendment that will complement this legislation in its structure. I will be looking for long-term forecasting as this legislation has short-term forecasting.

I am very delighted to be able to work with my colleague who had a brilliant idea in seeing this legislation come to fruition. I look forward again to discussing the proposal I have and would ask my colleagues to consider it as I will be giving my enthusiastic support to this legislation.

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Mr. EHLERS. Mr. Chairman, I am delighted to yield such time as she may consume to the gentlewoman from Maryland (Mrs. MORELLA), the angel of NIST and NOAA.

Mrs. MORELLA. Mr. Chairman, I want to thank the gentleman from Michigan (Mr. EHLERS) for that wonderful introduction that I hardly deserve, but this has been a good week for the Committee on Science. It demonstrates again how we work together on both sides of the aisle to do what we believe is in the best interests of scientific research, development, education and what is best for the country.

It is with pleasure that I rise in support of H.R. 2486, the Inland Flood Forecasting and Warning System Development Act of 2002. Congratulations to the gentleman from North Carolina (Mr. ETHERIDGE) for his leadership on the issue, his willingness to work with members of the Committee on Science. Congratulations to the gentleman from Michigan (Mr. EHLERS), chairman, the gentleman from Virginia (Mr. BOUCHER), the ranking member, as well as the gentleman from Ohio (Mr. BOEHLERT), chairman, and the gentleman from Texas (Mr. HALL), ranking member of the full committee, for having this piece of legislation come to the floor today.

Together we have expanded the focus of the original bill to take it beyond North Carolina and other hurricane-prone regions to include the protection of all regions subject to inland flooding due to severe weather events. The Committee on Science has a strong history of bipartisan collaboration, and this bill, as I have said, is yet again another example of how working together we can forge a bill that is much stronger than the original intent.

Each year hazardous weather causes thousands of fatalities and tens of billions of dollars in property damage, largely due to inland flooding. Moreover, the problem appears to be growing. Severe weather events, particularly hurricanes, appear to be cyclical, and we are recently coming off a period of low frequency. The Atlantic Ocean is beginning to enter another active period, and scientists tell us we can expect increasingly frequent events of greater and greater severity.

In addition, the capacity for damage has increased dramatically, as coastal development has continued to boom for the last 20 years. More and more people are living near coastal, estuarian or inland waters, creating a heightened potential for disaster and loss of life.

The improved ability to predict and prepare for severe storm events can have a substantial and immediate impact. Research dollars are desperately needed to protect both the lives and the livelihoods of the millions of Americans who live in regions susceptible to severe inland flooding.

The purpose of this bill is simply to develop, test and deploy an effective inland flood warning index for use by

public and emergency management officials. Managing disasters by predicting their occurrence is much more effective than reacting to their results.

It is a modest bill with modest goals that will have a huge impact. I urge my colleagues to support its passage.

Mr. HALL of Texas. Mr. Chairman, I yield 4 minutes to the gentleman from North Carolina (Mr. WATT).

Mr. WATT of North Carolina. Mr. Chairman, I thank the gentleman for yielding time.

I actually seldom come to the floor to speak on a bill that I have not had any personal involvement in before it comes to the floor, that does not come through a committee that I sit on, but I wanted to take the opportunity today to come and praise this bill and say that it is a wonderful bill for North Carolina and for the Nation and to say some nice things about the gentleman from North Carolina (Mr. ETHERIDGE) who is the sponsor of this bill.

I have been following him for quite a while. We started out in the State legislature together and in the State legislature sometimes, people come up to a person and say, there are people in this body who are destined for other things in life, and we all knew at that time that the gentleman from North Carolina (Mr. ETHERIDGE) was one of those people.

He went on, after serving in the State legislature, to serve as Superintendent of Public Construction in North Carolina and did an outstanding job there, and the thing that has been characteristic of him throughout this process is his ability to reach across party lines and understand that education and science and all of the issues that we deal with on an ongoing basis really are not Republican or Democrat, they are American issues, world issues, issues that are important to deal with on a bipartisan basis.

This bill is another example of that, where he has recognized a need based on the experiences that we observed in North Carolina as a result of hurricanes, and used that same kind of bipartisan approach and added to try to solve a problem that existed and addressed that need.

I want to applaud the chairman and ranking member of the Committee on Science for putting aside, as they always do, the partisanship that so often can pervade this institution, and recognizing the importance of this bill to the people of our country. The problem of inland flooding, I am not sure we were as much aware of until we had a series of floods in North Carolina.

I live in Charlotte, North Carolina, and that is about 150 miles from the coast. I grew up thinking that a hurricane was fed by the ocean and the water and that it really could not come that far inland to impact a community, until Hurricane Hugo came charging right through the center of the city that I lived in and did tremendous damage and devastation to the community.

If we had had better warning systems and research available to detect that possibility, I think we would all have been better served. We would have saved substantial amounts of money, and whatever amount is going to be expended for this important purpose, I think we will more than benefit from it over time, and I applaud the Committee on Science for the work that it has done on this bill in recognition of that fact.

I want to just thank my colleague again for the introduction of this bill, and I thank the gentleman for yielding time for me to say some nice things about my colleague and about the bill and about the Committee on Science.

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume.

First of all, I would observe that at one time my parents lived in Canada and the area north of Toronto suffered tremendously from a hurricane. So we are not safe from hurricanes almost anywhere inland.

Mr. Chairman, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Chairman, I yield back the balance of my time.

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume, and I will proceed to close.

The preamble to our Constitution specifies as one of the major duties of government to promote the general welfare of its people. This bill is an example of what we can do to promote the general welfare of our people.

This bill will save lives, it will save property, and it will cost very little. In fact, the cost per capita in this Nation of this bill is 10 cents per capita, and I think that is a good bargain. By developing an inland waterway and flooding bill of this nature, that will protect the people of this country, we will save undoubtedly at least 15, probably 100 lives per year and we pay only 10 cents apiece—that is a good deal.

So I strongly encourage this House to pass this bill.

Mr. Chairman, I yield back the balance of my time.

The CHAIRMAN. All time for general debate has expired.

Pursuant to the rule, the Committee amendment in the nature of a substitute printed in the bill shall be considered by sections as an original bill for the purpose of amendment, and each section is considered read.

During consideration of the bill for amendment, the Chair may accord priority in recognition to a Member offering an amendment that he has printed in the designated place in the CONGRESSIONAL RECORD. Those amendments will be considered read.

The Clerk will designate section 1.

The text of section 1 is as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Inland Flood Forecasting and Warning System Act of 2002".

The CHAIRMAN. Are there any amendments to section 1?

If not, the Clerk will designate section 2.

The text of section 2 is as follows:

SEC. 2. AUTHORIZED ACTIVITIES.

The National Oceanic and Atmospheric Administration, through the United States Weather Research Program, shall—

(1) *improve the capability to accurately forecast inland flooding (including inland flooding influenced by coastal and ocean storms) through research and modeling;*

(2) *develop, test, and deploy a new flood warning index that will give the public and emergency management officials fuller, clearer, and more accurate information about the risks and dangers posed by expected floods;*

(3) *train emergency management officials, National Weather Service personnel, meteorologists, and others as appropriate regarding improved forecasting techniques for inland flooding, risk management techniques, and use of the inland flood warning index developed under paragraph (2); and*

(4) *conduct outreach and education activities for local meteorologists and the public regarding the dangers and risks associated with inland flooding and the use and understanding of the inland flood warning index developed under paragraph (2).*

The CHAIRMAN. Are there any amendments to section 2?

Mr. EHLERS. Mr. Chairman, I ask unanimous consent that the remainder of the bill be printed in the RECORD and open to amendment at any point.

The CHAIRMAN. Is there objection to the request of the gentleman from Michigan?

There was no objection.

The text of the remainder of the bill is as follows:

SEC. 3. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the National Oceanic and Atmospheric Administration for carrying out this Act \$1,150,000 for each of the fiscal years 2003 through 2007. Of the amounts authorized under this section, \$250,000 for each fiscal year shall be available for competitive merit-reviewed grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) to develop models that can improve the ability to forecast the coastal and estuary-inland flooding that is influenced by tropical cyclones. The models should incorporate the interaction of such factors as storm surges, soil saturation, and other relevant phenomena.

SEC. 4. REPORT.

Not later than 90 days after the date of the enactment of this Act, and annually thereafter through fiscal year 2007, the National Oceanic and Atmospheric Administration shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on its activities under this Act and the success and acceptance of the inland flood warning index developed under section 2(2) by the public and emergency management professionals.

AMENDMENT OFFERED BY MS. JACKSON-LEE OF TEXAS

Ms. JACKSON-LEE of Texas. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Ms. JACKSON-LEE of Texas:

Page 2, line 24, strike "and".

Page 3, line 5, strike the period and insert "; and".

Page 3, after line 5, insert the following new paragraph:

(5) *assess, through research and analysis of previous trends, among other activities—*

(A) *the long-term trends in frequency and severity of inland flooding; and*

(B) *how shifts in climate, development, and erosion patterns might make certain regions vulnerable to more continual or escalating flood damage in the future.*

Page 3, lines 9 and 10, strike "\$1,150,000 for each of the fiscal years 2003 through 2007" and insert "\$1,250,000 for each of the fiscal years 2003 through 2005, of which \$100,000 for each fiscal year shall be available for competitive merit-reviewed grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) to carry out the activities described in section 2(5), and \$150,000 for each of the fiscal years 2006 and 2007".

Page 4, line 4, insert "The National Oceanic and Atmospheric Administration shall also, not later than January 1, 2006, transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the likely long-term trends in inland flooding, the results of which shall be used in outreach activities conducted under section 2(4), especially to alert the public and builders to flood hazards." after "emergency management professionals."

Ms. JACKSON-LEE of Texas (during the reading). Mr. Chairman, I ask unanimous consent that the amendment be considered as read and printed in the RECORD.

The CHAIRMAN. Is there objection to the request of the gentlewoman from Texas?

There was no objection.

Ms. JACKSON-LEE. Mr. Chairman, again, let me rise, expressing my very strong support for H.R. 2486, the Inland Flood Forecasting and Warning System Development Act which will save lives and money by improving forecasting, education and by setting the stage to get timely and useful information to the people in the way of big storms and subsequent floods.

Let me also add again my appreciation to the gentleman from Michigan (Mr. EHLERS) and as well to the proponent of this bill, the gentleman from North Carolina (Mr. ETHERIDGE), who has firsthand experienced the devastation of flooding and has taken this issue up and worked this issue in a way that will help all of America.

I thank the gentleman from Texas (Mr. HALL), the ranking member, for his support on this legislation and as well his leadership and knowledge about these issues as he has continued to serve on the House Committee on Science.

We come from an area, as I indicated earlier, that knows water and knows it in many ways. We enjoy it. We recreate in it. We make our livings from it in the Gulf Coast of Texas, but at the same time we know of its power. In Harris County, Texas, alone in the past 10 years, there have been five major flooding events, in 1992, 1994, mid-1998, late 1998 and the big one, Tropical Storm Allison of 2001, that individuals 80-years-plus had never seen a flood such as Tropical Storm Allison. Remember, I said a storm and not a hurricane.

Flood waters in Tropical Storm Allison reached heights known as hundred-

year flood levels. These five storms damaged or destroyed thousands of homes and businesses, and so it is imperative that this legislation be passed and that I would offer this amendment that would, in fact, provide a long-term study for a period of 3 years, costing \$100,000.

As it stands, the bill will improve short-term forecasting of cyclones and associated flooding and will provide for the development of a warning system to get minute-to-minute information to the public and to emergency management officials regarding flood dangers. These functions will operate on the time scales of days to weeks, for example, saying there will be a storm this weekend or evacuate our homes now.

My amendment will simply add a long-term component to this important project. This will enable officials to warn people what they might expect over the next 5 years or even the next decades. A small amount of money I am proposing to spend on this long-term component could save billions of dollars and save many lives in the future by providing information to help people make prudent decisions today.

We will have to look at other science in order to determine how we can provide a safe place for people to live and save lives prospectively, but as we move this legislation along, I think the idea of providing a long-term component will be very effective.

In my home district alone in the past 10 years, as I indicated, we have had several storms, and as I indicated as well, the Tropical Storm Allison, the big one, caused an estimated \$5 billion in damage, flooded almost 100,000 homes and killed at least 20 people in our community. Right now, Mr. Chairman, I am still living with those who are suffering from the damages of the flood.

The questions I have are, after the first four floods, why are so many people and homes still in flood zones when the big one hit a year later?

□ 1200

It seems that the first four floods might have let us know that more may be coming soon and people should move to higher ground.

And, two, why have there been so many devastating 100-year floods in rapid succession? In other words, are floods, indeed, becoming more severe over recent years?

I have been asking these questions and cannot find anyone to give me an answer with even a modicum of confidence. It seems that no one knows exactly why this happens; and if they do, they have information that should be shared, whether it is simply a natural variation or if it is due to shifts in development or erosion patterns or climate. And no one knows whether there is a real long-term trend in such major flooding events.

Right now, people in Texas are getting over yet another flood, and they

need to make informed decisions about whether to rebuild their homes. These are life-altering and costly decisions which can devastate communities, families, and neighborhoods, and also break down the spirit.

Some of these people right now are deciding what to do and how to do it after losing their precious resources. It was hearing of their struggles last week that inspired me to write this amendment. The proposed act, as it stands, would have helped those people protect their lives and property before and during the floods, but my amendment would be helping them make tough decisions now by giving them an indication of whether they should expect more frequent or severe floods in the future. It is about planning.

With this amendment, the National Oceanic and Atmospheric Administration would receive an additional \$100,000 only during the first 3 years of the program. This money would fund grants for research at higher institutions to study the long-term trends in flooding to help predict future risk in flood zones.

May I first start by expressing my strong support for H.R. 2486. The Inland Flood Forecasting and Warning System Development Act will save lives and money by improving forecasting, and education, and by setting the stage to get timely and useful information to people in the way of big storms and subsequent floods. The Congressman from North Carolina has been a champion of this issue, and deserves great credit. I am pleased to have co-sponsored the proposed legislation with him.

As it stands, the bill will improve short-term forecasting of cyclones and associated flooding, and will provide for the development of a warning system to get minute-to-minute information to the public, and to emergency management officials regarding flood dangers. These functions will operate on the time-scales of days to weeks, for example saying "there will be a storm this weekend," or "evacuate your homes now."

My bill will simply add a long-term component to this important project. This will enable officials to warn people of what they might expect over the next five years, or even the next decades. The small amount of money I am proposing to spend on this long-term component could save billions of dollars and save many lives in the future, by providing information to help people make prudent decisions today.

In my home district alone, in the past 10 years there have been five major flooding events. In 1992, 1994, mid-98, late-98, and the big one—Tropical Storm Allison in 2001—flood waters reached heights known as "100 year flood levels." These 5 storms damaged or destroyed thousands of homes and businesses. The last storm, Allison, alone caused an estimated five billion dollars in damage, flooded almost 100,000 homes, and killed 41 people nationwide.

The questions I have are (1) After the first four floods, why were so many people and homes still in flood zones when the big one hit a year later? It seems that the first four floods might have let us know that more may be coming soon and people should move to higher ground. And (2) Why have there been so many devastating "100 year floods" in rapid succession? In other words, are floods indeed becoming more frequent and severe over the years?

I have been asking these questions, and cannot find anyone who can give me an answer with even a modicum of confidence. It seems that no one knows exactly why this happened—whether it is simply natural variation, or if it is due to shifts in development, or erosion patterns, or climate. And no one knows whether there is a real long-term trend in such major flooding events.

Right now people in Texas are getting over yet another flood, and they need to make informed decisions about whether to rebuild their homes or relocate to higher ground. These are life-altering and costly decisions, which can devastate neighborhoods or even entire towns.

It was hearing of their struggles last week that inspired me to write this amendment. The proposed Act as it stands would have helped these people protect their lives and property before and during the floods. But my amendment would be helping them make tough decisions now by giving them an indication of whether they should expect more frequent or severe floods in the future.

In my proposed amendment, the National Oceanic and Atmospheric Administration would receive an additional \$100,000 per year, only during the first 3 years of the program. This money would fund grants for research at higher institutions, to study the long-term trends in flooding, to help predict future risk in flood zones.

At the end of the 3 years, a report will be written that will be sent to Congress to report its findings. More importantly, the findings will be disseminated to the public, through the educational outreach already planned in the original bill. This will enable citizens, builders, and planners to make better-informed decisions about where people should live, or stop living.

This amendment has quite a narrow scope. It is not a global warming amendment. It is small, and focuses only on the flooding associated with cyclones which affect a limited region of the country. However, my amendment has a very important target. The amendment is meant to get much-needed information to people who might be in continual danger from escalating flooding. It could also give assurance to those people whose risks of continual flooding might be low.

If insights gleaned from these studies lead to a smarter distribution of homes and businesses, and prevent a tiny fraction of the damage in the next five billion dollar flood—this amendment will earn its pay. I urge my colleagues to support this amendment.

Mr. Chairman, I want to applaud this legislation, as I close, because it has a

great outreach provision, and this amendment will help with this outreach.

I ask my colleagues to support this amendment because it is narrow in scope.

Mr. EHLERS. Mr. Chairman, I rise in support of the amendment, and I thank the gentlewoman from Texas for it. This is something we have worked on together. It is something I had hoped that would happen anyway when this the bill reached NOAA; that they would interpret it this way. But it is good of her to point out that this must be done. This makes things very specific, and we have reached agreement on this amendment, so I am pleased to accept it.

I would just comment that I will have to revise my cost estimate. I commented earlier this bill would cost us a grand total of 10 cents per person in this country. Because of this amendment I have to raise that to 11 cents per person in this country. But I should also make it clear, which I did not before, that that cost is spread over 5 years. So rounding off, it is still 2 cents per person per year for 5 years, and we are getting a lot for our money. But I am very pleased to accept this amendment.

Ms. JACKSON-LEE of Texas. Mr. Chairman, will the gentleman yield?

Mr. EHLERS. I yield to the gentlewoman from Texas.

Ms. JACKSON-LEE of Texas. First, let me thank the gentleman very much, Mr. Chairman, for working with our office and, of course, working with the champion of this legislation, the gentleman from North Carolina (Mr. ETHERIDGE).

We come from different parts of the country, and I think it is important to note that Michigan, Texas, and North Carolina all worked together because these issues are far-reaching. And I would simply hope, as the gentleman has been so fiscally responsible, that they can see the amount of money that we will save in the future. Again, I thank the gentleman for supporting this amendment.

Mr. HALL of Texas. Mr. Chairman, I move to strike the last word.

Mr. Chairman, I support this amendment and I support this gentlewoman. I think we have observed here representation at its very best. The gentleman from North Carolina (Mr. WATT) and the gentlewoman from Texas (Ms. JACKSON-LEE) personally testified to the tragedies that they had experienced in their own hometowns of Houston and Charlotte, and I think it was refreshing to hear the gentleman from North Carolina (Mr. WATT) express his admiration for a long-time, fellow public servant.

This is the way it ought to be, and I certainly thank the gentlewoman from Texas (Ms. JACKSON-LEE) for going that extra mile, offering this study, a needed study, and I appreciate the gentleman from Michigan (Mr. EHLERS) accepting it. I urge the adoption of this amendment.

The CHAIRMAN pro tempore (Mr. JEFF MILLER of Florida). The question is on the amendment offered by the gentlewoman from Texas (Ms. JACKSON-LEE).

The amendment was agreed to.

The CHAIRMAN pro tempore. Are there any further amendments?

If not, the question is on the committee amendment in the nature of a substitute, as amended.

The committee amendment in the nature of a substitute, as amended, was agreed to.

The CHAIRMAN pro tempore. Under the rule, the committee rises.

Accordingly, the Committee rose; and the Speaker pro tempore (Mrs. BIGGERT) having assumed the chair, Mr. JEFF MILLER of Florida, Chairman pro tempore of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (H.R. 2486), to authorize the National Weather Service to conduct research and development, training, and outreach activities relating to tropical cyclone inland forecasting improvement, and for other purposes, pursuant to House Resolution 473, he reported the bill back to the House with an amendment adopted by the Committee of the Whole.

The SPEAKER pro tempore. Under the rule, the previous question is ordered.

Is a separate vote demanded on the amendment to the committee amendment in the nature of a substitute adopted by the Committee of the Whole? If not, the question is on the committee amendment in the nature of a substitute.

The committee amendment in the nature of a substitute was agreed to.

The SPEAKER pro tempore. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

The SPEAKER pro tempore. The question is on the passage of the bill.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

Mr. EHLERS. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this question will be postponed.

GENERAL LEAVE

Mr. EHLERS. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and to include extraneous material in the RECORD on the bill just considered, H.R. 2486.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Michigan?

There was no objection.

ENTERPRISE INTEGRATION ACT OF 2002

The SPEAKER pro tempore. Pursuant to House Resolution 474 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the State of the Union for the consideration of the bill, H.R. 2733.

□ 1210

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 2733) to authorize the National Institute of Standards and Technology to work with major manufacturing industries on an initiative of standards development and implementation for electronic enterprise integration, with Mr. JEFF MILLER of Florida in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. Pursuant to the rule, the bill is considered as having been read the first time.

Under the rule, the gentleman from Michigan (Mr. EHLERS) and the gentleman from Texas (Mr. HALL) each will control 30 minutes.

The Chair recognizes the gentleman from Michigan (Mr. EHLERS).

Mr. EHLERS. Mr. Chairman, I yield myself such time as I may consume; and I rise in support of the Enterprise Integration Act of 2002.

Much has changed about the manufacturing industry during the past 30 years. In the 1970s and 1980s, our manufacturing sector was in trouble. Plagued by quality problems and inefficiency, our domestic manufacturing sector was on the decline, and it was costing U.S. workers their jobs. I saw this firsthand in my home State of Michigan, when one observer noted in a national column how much Michigan's auto manufacturing sector had fallen and asked for, in print, "The last person to leave the State to please turn off the lights."

This decline served as a wake-up call not only for State and Federal governments but especially for domestic manufacturers, and they have worked hard over the past three decades to become leaner and more competitive in the global marketplace. Automation, outsourcing, efficiency, and quality became the buzzwords of this effort, as manufacturers made fundamental changes to their business models. When these changes were coupled with the information technology revolution, manufacturers were able to unleash the untapped potential of American workers.

Over the past 10 years, our workers increased their productivity as never before in the modern era. These gains led to one of the greatest economic expansions in U.S. history and made a bold statement that U.S. domestic manufacturing was ready to compete in the global marketplace.

Domestic manufacturing industries are now beginning to undertake new steps to ensure that they stay globally

competitive. Our manufacturing industries are moving away from the traditional models where products are mass produced and consumer preferences are aggregated at the end of a manufacturing chain. The new model is marked by a commitment to flexibility, networked supply chains, just-in-time inventories, and responsiveness to changes and customers' preferences. Underpinning all these elements is the need to be able to exchange information quickly, reliably, and without fear that the information contains errors or is incomplete.

The purpose of the legislation before us today is to support this critical component. H.R. 2733 will establish an enterprise integration initiative within the National Institute of Standards and Technology, better known as NIST. At the heart of this initiative is what modern manufacturing industry craves—the ability to exchange information up and down the supply chain without error or loss.

For example, with a fully integrated supply chain, if Ford were to design a change for a bumper, every one of the suppliers that contributes parts to Ford for that bumper would be able quickly and easily to see how the new specifications would affect the component they manufacture. Each supplier would be able to redesign the component knowing that the information used does not have errors and has not lost data along the way.

As I said earlier, the new manufacturing model requires industry to respond to consumer choices quickly and with a high degree of quality and reliability. This flexibility can only be achieved with a fully integrated supply chain.

Two of Michigan's key industries, automotive and furniture, can derive tremendous benefits from this legislation. A 1999 study by NIST found that General Motors, Ford and Chrysler together could save \$1 billion per year if they fully integrated their supply chains. West Michigan's worldwide office furniture suppliers, Steelcase, Herman Miller, and Haworth, are facing significant challenges both as a result of the economic downturn and stiff foreign competition. Information technology is a powerful tool for bringing together the various elements of design, manufacturing, and delivery of furniture, and the U.S. furniture industry is beginning to utilize this tool to better integrate these elements.

□ 1215

All three firms, and others, can realize huge benefits through better linkage with their suppliers, which will lead to reductions in inventory, fewer manufacturing slow downs, lower purchasing costs, and higher quality.

Achieving this level of integration, however, is complex and requires a substantial amount of research regarding what information exchange standards need to be developed and implemented for different supply changes. H.R. 2733