

PRESIDENTS' FORUM ON MEETING COASTAL CHALLENGES

LOUISIANA STATE UNIVERSITY  
LOD AND CAROLE COOK ALUMNI CENTER  
BATON ROUGE, LOUISIANA  
JANUARY 25, 2005

MODERATORS:

PAUL COREIL  
BERWICK DUVAL  
DON DAVIS  
AARON BROUSSARD

SPEAKERS:

GOVERNOR KATHLEEN BABINEAUX BLANCO  
LSU SYSTEM PRESIDENT WILLIAM JENKINS  
LSU AgCENTER VICE CHANCELLOR PAUL COREIL  
KING MILLING - CHAIRMAN OF THE GOVERNOR'S  
ADVISORY COMMISSION

PANEL 1: CONFRONTING THE SCIENTIFIC REALITIES OF COASTAL LAND LOSS

ROBERT TWILLEY  
IVOR Van HEERDEN  
TIM OSBORN  
DEWITT BRAUD  
REX CAFFEY

PANEL 2: CONFRONTING THE CURRENT REALITIES OF COASTAL COMMUNITIES

TIM MATTE - ST. MARY PARISH  
CHARLOTTE RANDOLPH - LAFOURCHE PARISH  
TINA HORN - CAMERON PARISH  
RANDY ROACH - CALCASIEU PARISH  
MIKE BERTRAND - VERMILION PARISH  
AL LEVRON - TERREBONNE PARISH  
DAVID CAMARDELLE - GRAND ISLE (Not Present)  
TIMOTHY KERNER - JEFFERSON PARISH  
BENNY ROUSSELLE - PLAQUEMINES PARISH  
YARROW ETHEREDGE - ORLEANS PARISH  
HENRY RODRIGUEZ, JR. - ST. BERNARD PARISH

1 DR. PAUL COREIL:

2 Good morning, everybody.

3 AUDIENCE:

4 Good morning.

5 DR. PAUL COREIL:

6 We really appreciate the great  
7 response we have had to the Presidents' Forum  
8 on Meeting Coastal Challenges. We have been  
9 planning this conference for quite a while in  
10 cooperation with the Governor's Commission on  
11 Coastal Restoration and Conservation, among  
12 other people, and we really tried hard to  
13 bring to you today a forum that's a little  
14 different than the meetings that you have  
15 been to before.

16 We know that there's current  
17 realities that our coastal parishes are  
18 dealing with. We know we have university  
19 capacity across this state that could really  
20 be part of a solution to helping parishes,  
21 and we are trying to enhance, and in many  
22 cases, continue developing a dialogue with  
23 our coastal leaders whereby our universities  
24 can really become even more of a partner in  
25 helping them deal with these realities.

1 I'm very proud today to be up on  
2 the podium with Dr. Bill Jenkins. Dr.  
3 Jenkins accepted this whole coastal challenge  
4 issue as a priority for him as the president  
5 of the LSU System several years ago and  
6 really has ratcheted that up in the last  
7 several months as he is a member of this  
8 commission that the Governor has appointed.  
9 He has pointed this out to his Board of  
10 Supervisors and anyone that would listen how  
11 important this issue is to the universities  
12 and to the state of Louisiana, and he agreed,  
13 as he has asked other university presidents,  
14 to host this meeting and point out to you how  
15 important it is to him as a priority here at  
16 LSU and across the state at other  
17 universities.

18 President Jenkins is also serving  
19 right now as interim chancellor of the LSU  
20 A&M campus as well. Our new chancellor has  
21 been selected. He has been wearing two hats  
22 for the last several months, and he has done  
23 this before and has done an outstanding job  
24 juggling those two jobs and also accepting a  
25 task like this because we have really had to

1 take a lot of his time to help plan this  
2 conference working with our planning  
3 committee.

4 I want to personally thank him for  
5 that, but to welcome us and give some  
6 introductory comments, I would like to  
7 introduce to you President Bill Jenkins.

8 (Applause).

9 DR. WILLIAM JENKINS:

10 Thank you very much, Paul,  
11 distinguished parish presidents and delegates  
12 from our coastal parishes, members of the  
13 higher education community, and other  
14 attendees who have assembled this morning to  
15 discuss and wrestle with what I personally  
16 regard as one of the very major challenges  
17 facing the future of our truly remarkable and  
18 wonderful state, and I would like to welcome  
19 you then to the Presidents' Forum on Coastal  
20 Challenges and to say how pleased we are,  
21 speaking now wearing my LSU hat, to welcome  
22 you to the Lod Cook Conference Center and to  
23 have you on the campus, but it's important  
24 for me to note that the presidents' part of  
25 this, in fact, is in the plural. This is a

1 higher education community initiative to meet  
2 with you and to engage in what I am certain  
3 will be a number of forums here in which some  
4 very thorny and challenging issues are going  
5 to be discussed.

6 Unusually for me, I'm actually  
7 going to read my remarks and place them on  
8 record, and then I will conclude with a few  
9 personal observations.

10 For more than half a century,  
11 Louisiana's institutions of higher education  
12 have provided the research and educational  
13 resources needed to address our state's  
14 coastal land loss crisis; for example,  
15 Coastal Studies established in 1954,  
16 Louisiana Sea Grant established in 1968,  
17 LUMCON established in 1979, and more recently  
18 the LSU School of Coast and Environment  
19 established in 2002.

20 This commitment has expanded  
21 greatly in the past decade through support of  
22 numerous state and federal initiatives such  
23 as the Coastal Wetland Planning, Protection,  
24 and Restoration Act (CWPPRA) and the recent  
25 Louisiana Coastal Area, the LCA,

1 Comprehensive Ecosystem Restoration Study.

2           While we remain steadfastly  
3 engaged in the emerging science and policy of  
4 ecosystem restoration, we must also  
5 acknowledge that there are many other  
6 challenges associated with the rapid  
7 deterioration of our coastal infrastructure  
8 and communities.

9           Indeed, as a member of the  
10 Governor's Coastal Advisory Commission, I  
11 have encountered widespread concern about the  
12 state's capacity to fully address the  
13 physical and socioeconomic sustainability of  
14 our coastal communities. I can only conclude  
15 that we must redouble, and in some cases,  
16 redirect our university resources to fully  
17 address the future of our beloved coast.

18           Reauthorization of the 1990 Breaux  
19 Act means that Louisiana will have an  
20 additional 15 years of funding for small and  
21 medium scale restoration. Yet, the Coast  
22 2050 Report of 1998 showed that, as  
23 beneficial as CWPPRA has been, it constitutes  
24 less than 10 percent of the restoration  
25 funding required to merely sustain coastal

1 Louisiana as it exists today.

2           The proposed Conservation and  
3 Reinvestment Act (CARA) of 2000 would have  
4 significantly bolstered our situation by  
5 returning a small fraction of the billions in  
6 federal royalty payments derived annually  
7 from Louisiana-supported petroleum activities  
8 on the Outer Continental Shelf. That  
9 legislation died in the U.S. Senate the same  
10 year that Congress overwhelmingly supported  
11 the \$8 billion authorization of the  
12 Comprehensive Everglades Restoration Plan  
13 (CERP).

14           And our equivalent to CERP, the  
15 LCA Plan, has been paired-down in scale from  
16 \$14 billion, to \$2 billion, to \$375 million,  
17 to ultimate failure in receiving WRDA  
18 authorization in 2004.

19           Though Louisiana must continue  
20 pursuing just and adequate restoration  
21 funding for its coast, we must also proceed  
22 now in developing an articulated  
23 understanding of the true implications of a  
24 "no-action" -- or very limited action --  
25 scenario. It is only fitting that our

1 universities take a lead role in addressing  
2 the politically-sensitive and  
3 economically-challenging aspects of these  
4 scenarios.

5           And so we convene this meeting  
6 with hopes of developing with our coastal  
7 constituents the type of candid and realistic  
8 dialogue that will be required for  
9 responsible planning and policy development  
10 in the years that lie ahead.

11           Finally, as we rededicate our  
12 academic resources, we must also acknowledge  
13 our own limitations. Our universities cannot  
14 solve all of the problems facing Louisiana's  
15 coast. At best, we can only promise to serve  
16 as partners. Clearly, this will involve  
17 continuing to support and enhance the many  
18 partnerships that have emerged during the  
19 past 50 years. But it will also involve  
20 finding new and innovative partnerships  
21 between coastal stakeholders and higher  
22 education as we strive to meet the many  
23 difficult challenges facing coastal  
24 Louisiana.

25           I want you to know, now speaking

1 as the LSU System president, that, as Paul  
2 noted, this is a very high priority for us  
3 and for my personal agenda. I understand the  
4 complexities of what we are dealing with, and  
5 as I noted in these prepared comments, I'm  
6 well aware that we have our limitations, but  
7 on the other hand, universities are known for  
8 innovative research for solving problems, for  
9 challenging what's not known and not  
10 understood and bringing enlightenment and  
11 appreciation to many aspects of whatever the  
12 complex problem that lies before us may be,  
13 and that's what I intend our universities to  
14 do. We need to work with you to understand  
15 the terrible problems that confront us, to  
16 work with you to developing solutions, but  
17 realistically we can only do this in  
18 partnership and also, to be honest with one  
19 another, this can not happen overnight.

20 As I have said often and will  
21 reiterate today, no one must ever forget --  
22 speaking as LSU now; though, the other state  
23 institution presidents would agree to the  
24 same statement -- that we are the state and  
25 the state is us, and we are in this together,

1 and I commit to you as president of LSU we  
2 will do everything within our power to assist  
3 you in any way we are able and, in fact, to  
4 assist our Commission under the very able  
5 leadership of King Milling to bring about  
6 what relief, what alleviation, what  
7 solutions, we are able to do collectively.

8         With that, I wish you everything  
9 of the very best during this day, and I  
10 certainly look forward to the deliberations.

11         And with that, I will turn it back  
12 to Paul Coreil. Thank you.

13         (Applause).

14         DR. PAUL COREIL:

15         I think you can see from the  
16 agenda that we are expecting Governor  
17 Kathleen Blanco to be here at any time, so we  
18 are going to adjust our agenda accordingly  
19 because I know she is coming to make some  
20 comments in support of our efforts today.

21         Also joining us is King Milling  
22 that was recognized by the president.  
23 Mr. Milling is our chairman of the Governor's  
24 Advisory Commission on Coastal Restoration  
25 and Conservation, and he will be making a

1 presentation during lunch.

2 I would like to review for you the  
3 meeting objectives today. I think this has  
4 probably been the most asked question that we  
5 have had over the last several months as we  
6 have attempted to put together a meeting that  
7 we think would accomplish quite a bit we hope  
8 in looking at the realities that we are  
9 facing and complement the major efforts that  
10 are underway to try to attain support for a  
11 massive coastal restoration effort across  
12 this coast.

13 We do have a lot of support in the  
14 Governor's office and across the state and  
15 all of our federal agencies and in local  
16 government for our coastal restoration  
17 efforts. We are in the middle of seeking  
18 major funding, and we all have to pull  
19 together for that effort.

20 This meeting is more looking at  
21 what is the rest of the story that we must  
22 deal with beyond the restoration of our  
23 coast, looking at the current realities of the  
24 fact that we have lost so many hundreds of  
25 thousands of acres, and we are seeing some

1 impacts that people are dealing with on a  
2 daily basis, and as the university, what can  
3 we do to help our parishes and our residents  
4 and our citizens across the coast, and  
5 businesses and industry as well, deal with  
6 these issues in a more effective way.

7       For 15 years now, Louisiana has  
8 been on a rapid course of expanding programs  
9 for restoration. We have reviewed some of  
10 those in many meetings and in frequent times,  
11 Act 6, Louisiana Coastal Wetlands Restoration  
12 Plan in 1993, the Coast 2050 Report and  
13 recently LCA. All of these initiatives have  
14 demanded tremendous time and resources from  
15 our local governments and from state and  
16 federal agencies, and throughout this period,  
17 Louisiana institutions of higher education  
18 have remained actively engaged in providing  
19 the research and education required for a  
20 comprehensive long-term restoration strategy,  
21 but as with any long-term process, there  
22 occasionally comes a time to look back, step  
23 away from our pursuits, and take stock of our  
24 strategy and tactics.

25       As we begin 2005, we are pausing

1 to reexamine past and current relationships  
2 and discuss future relationships between  
3 state universities and our coastal  
4 communities.

5       The main meeting objectives, as  
6 you see up on the screen now, is, one, to  
7 present a small sampling of the new  
8 information and research available to coastal  
9 residents, communities, and industries, and  
10 we put together a fine panel of scientists  
11 that have been given a task that's almost  
12 impossible, but in 10 minutes each of them  
13 are going to give you some real solid  
14 information that has been developed through  
15 research across this state by scientists from  
16 the universities here in Louisiana.

17       Number two, to solicit the input,  
18 expertise, and needs of coastal communities  
19 and authorities so that they can identify and  
20 refine the research and service priorities  
21 for our universities. We need to hear from  
22 you to make sure that we are on task and that  
23 we know the realities as you are dealing with  
24 them in today's current coastal restoration  
25 and coastal land loss realities that we are

1 faced with.

2           And, three, and our main  
3 objective, is to simply expand the coastal  
4 dialogue beyond the long-term goals of  
5 restoration and to partially shift the focus  
6 and resources of our universities towards the  
7 current reality facing the citizens and  
8 communities across the coast.

9           Is there a positive relationship  
10 that we can develop looking at the science we  
11 have that will help you deal with these  
12 realities? And we want to do this in a  
13 complimentary fashion with our massive  
14 priorities in LCA.

15           What this meeting is not about and  
16 what it is about is what I would like to  
17 share with you. This meeting is not about  
18 giving up on any large-scale, long-term  
19 coastal restoration initiative. It is about  
20 being more realistic about what we can do in  
21 the near term with the limited resources that  
22 we have. This meeting is not a referendum on  
23 coastal restoration, CWPPRA, or LCA, but it  
24 is completely appropriate, however, to engage  
25 in a candid and proactive discussion that

1 acknowledges both strengths and weaknesses of  
2 everything we are doing, while recommending  
3 alternative approaches for dealing with the  
4 threatening situations currently facing our  
5 coast.

6         This meeting is not a venue for  
7 featuring all of the coastal research and  
8 outreach that universities and agencies bring  
9 to bear on the coast today. It's simply our  
10 attempt to generate discussion by touching on  
11 a few topics in a very limited time scale  
12 showing respect for your time because we know  
13 that is an issue.

14         This meeting is not about  
15 advocating a "wholesale retreat" from the  
16 coast, yet it is about acknowledging that  
17 some coastal communities are already being  
18 forced to relocate, and so it is only fitting  
19 that we discuss how university talents can  
20 best aid these communities that are facing  
21 these physical, economic, and cultural  
22 challenges and their sustainability.

23         This meeting is not limited to  
24 discussions of engineering, geology, and  
25 ecology, which are the traditional sciences

1 of ecosystem restoration. Rather, it is an  
2 attempt to further expand discussions to  
3 include economists, sociologists, political  
4 scientists, educators, health and human  
5 services professionals, legal and policy  
6 analysts, transportation experts, and  
7 communicators.

8         This meeting is not about where we  
9 want to be in year 2050. It's about where we  
10 are now in the year 2005. What issues do  
11 coastal residents face today? What is their  
12 "current reality" and what opportunities are  
13 there to more fully engage Louisiana  
14 universities and their resources in a more  
15 timely and relevant manner?

16         And, finally, as President Jenkins  
17 has indicated, this meeting is not about  
18 promising that our universities can and will  
19 solve all of the problems of Louisiana's  
20 coastal communities. This meeting is simply  
21 about reinforcing old partnerships and  
22 establishing new ones. We are here to listen  
23 to your needs and to reexamine and  
24 reprioritize our efforts in a manner that  
25 will better serve the public interest and the

1 state of Louisiana.

2           The partnerships that we seek to  
3 reinforce and expand here today are not novel  
4 to the university system. Dr. Jenkins spoke  
5 of 50 years of coastal science support, yet  
6 the mandate for university service dates back  
7 over a century through the Land Grant  
8 university system.

9           The faculty of LSU have been  
10 partnering with coastal stakeholders for more  
11 than 37 years through a network of marine  
12 extension specialists and agents sponsored  
13 jointly by the LSU AgCenter, Extension  
14 Service, and the LSU Sea Grant Program.  
15 Indeed, many of you in this very room have  
16 worked with our specific coastal issues, and  
17 some of you once served as marine extension  
18 faculty. For example, Ted Falgout, Windell  
19 Curole, Jerome Zeringue, and others that are  
20 now actively working along the coast in  
21 private and other public interests.

22           Over the years our marine  
23 extension ranks have remained static, but the  
24 number and breadth of constituents and  
25 challenges has expanded greatly. So we have

1 realigned our efforts, altered our structure,  
2 and employed new technologies. We have a GIS  
3 person now on board, we have wetland  
4 specialists in Extension and in Sea Grant.  
5 We need to do this to expand our reach.

6       Though we continue to evolve, the  
7 current fiscal situation facing higher  
8 education and its disproportional impact on  
9 Extension programming, which is limiting our  
10 capacity, does not hold us back. We are  
11 continuing to move forward. It is clear that  
12 we can no longer bill ourselves as the only  
13 "go-to" communicators for coastal outreach.  
14 We are fortunate in that regard.

15       The advent of new outreach and  
16 educational programs in the past decade has  
17 greatly expanded the state's ability to  
18 assist coastal residents. Some examples of  
19 this expansion and this increased capacity  
20 can be found in many non-government  
21 organizations that help us in outreach every  
22 day -- the Coalition to Restore Coastal  
23 Louisiana, the Barataria-Terrebonne National  
24 Program, the Lake Pontchartrain Basin  
25 Foundation, Gulf of Mexico Program, State

1 Agencies, Louisiana Department of Natural  
2 Resources's local coastal programs, and the  
3 Information on Education Division of  
4 Louisiana Department of Wildlife & Fisheries,  
5 just to name a few. All of these and many  
6 other local initiatives, local coastal  
7 programs, local coastal zone management  
8 programs, and now Parishes Against Coastal  
9 Erosion, they are all helping us as we  
10 continue to do outreach and education.

11       Thus, any directives resulting  
12 from today's exercise do not fall solely upon  
13 the LSU faculty, Sea Grant or Extension.  
14 Indeed, Dr. Jenkins has challenged all of  
15 higher education to renewed commitment for  
16 the applied research and public service  
17 required to address these serious coastal  
18 challenges and needs.

19       We recognize that this is not an  
20 easy challenge. The incentive structure that  
21 many of our universities face include few  
22 rewards for applied research in public  
23 service in some cases. Nevertheless, there  
24 are numerous scientists from outside of the  
25 traditional ranks of Extension and many

1 universities that are here today, the  
2 University of Louisiana at Lafayette, ULM,  
3 LSU, UNO, Tulane, Nicholls, McNeese, Loyola,  
4 many universities. The faculty at all of  
5 these universities are increasingly engaged  
6 in applied research, public policy formation,  
7 public outreach, and education to help  
8 coastal citizens.

9         These engaged scientists, along  
10 with the NGOs, non-government organizations,  
11 agencies, local initiatives, and our  
12 Traditional Extension Service faculty,  
13 represent the full suite of partners  
14 available to parishes that are striving to  
15 address these challenges.

16         So, once again, we are here to  
17 solicit your input, to benefit from your  
18 expertise, and listen to your needs so that  
19 we might better identify and refine our  
20 near-term priorities for coastal research and  
21 public service.

22         I would like to thank all of you  
23 for participating in what I am certain will  
24 be a very productive exchange of ideas, and I  
25 would like to especially thank Governor

1 Blanco and President Jenkins for their vision  
2 and leadership in supporting and sponsoring  
3 this forum today.

4 I see that our governor has  
5 arrived. We really appreciate Governor  
6 Blanco being here. We are going to move  
7 right into President Jenkins' introduction of  
8 our governor, Governor Kathleen Blanco.

9 DR. WILLIAMS JENKINS:

10 Thank you very much, Paul. I can  
11 think of nothing more fitting than having our  
12 governor amongst you, and as I call her  
13 forward. A lady so deeply, deeply committed  
14 to Louisiana, a lady who exercises leadership  
15 at every turn, a lady who understands the  
16 challenges, the so many challenges, facing  
17 our state from the small issues to the  
18 mammoth issues, such as education, our  
19 coastal issue, infrastructure, economic  
20 development, and so on, a lady who represents  
21 our state in a superb and admirable fashion  
22 and a lady who is appropriately here with you  
23 today to discuss our coastal challenges,  
24 please help me greet our governor, Kathleen  
25 Babineaux Blanco.

1 (Applause).

2 GOVERNOR KATHLEEN BLANCO:

3 First, let me thank Dr. Jenkins  
4 for initiating this forum and for bringing  
5 together the leaders of our parishes that  
6 have the most at risk with the leaders of our  
7 universities where we have the talent and the  
8 brain power to help us to resolve these  
9 difficult questions. It's certainly  
10 imperative that our researchers at our  
11 universities make every tool possible to  
12 assist coastal parishes as we altogether face  
13 the challenges that are presented to us.

14 We all know how much is at stake;  
15 the safety of our citizens, navigation,  
16 economic development, our fisheries, our oil  
17 and gas economy. Altogether that sounds like  
18 a lot of Louisiana life to me. These  
19 challenges will only become greater and the  
20 urgency to address them will only grow as  
21 time goes on. We are working hard to try to  
22 get support across the nation, but it does  
23 take all of us working together; our academic  
24 institutions, our local governments, state  
25 governments certainly, the federal

1 government, and the private sector working  
2 together to solve these imminent problems  
3 that we all now know so well.

4         The scientific research being  
5 conducted at universities throughout our  
6 state is critical in leading the way for  
7 restoration efforts, and I know a lot of  
8 groundwork has been laid.

9         This forum will certainly help to  
10 highlight examples of how our academic  
11 institutions serve the public in real ways,  
12 and I think it's good for universities to  
13 have a demonstrated practical application to  
14 an easily understood problem in Louisiana  
15 because it gives us an opportunity to connect  
16 more profoundly.

17         There is growing national interest  
18 in our land loss story, and I know that many  
19 of you have seen the October issue of  
20 National Geographic. It had a 20-page story  
21 about Louisiana's vanishing coast and  
22 certainly the implications of what that means  
23 to the rest of the country were explored. I  
24 think these kinds of stories are invaluable  
25 to helping us to get our message out there

1 that we need help. We certainly can not do  
2 this alone. It's a very expensive  
3 proposition, and we have to move the  
4 Congress, we have to move the President, in  
5 whatever ways that we can find to move them,  
6 and you do that by moving public sentiment  
7 our way, and that's our goal and that's our  
8 initiative, what our initiative is trying to  
9 accomplish.

10       The natural media is now covering  
11 this crisis on their own. Tonight, for  
12 instance, the public television series "Nova"  
13 is airing a special on hurricanes that  
14 includes the risk to New Orleans and to our  
15 coastal areas.

16       Our America's Wetland Campaign is  
17 paying off with increased awareness of  
18 Louisiana's coastal erosion in the minds of  
19 Americans. And every little bit that we can  
20 do, every story like this that happens, helps  
21 to enlighten people across the country, and I  
22 think this is a very important thing.

23       I have the results of a national  
24 survey, the campaign recently commissioned,  
25 and the poll conducted in December shows the

1 theme of America's Wetland are resonating  
2 with America's people. More than 80 percent  
3 of those polled were concerned about the lost  
4 habitat for migratory birds and waterfowl.  
5 More than 80 percent said they were concerned  
6 about the potential loss of fisheries.  
7 Almost 80 percent were concerned about what a  
8 direct hit from a major hurricane would mean  
9 to the New Orleans area. More than  
10 two-thirds felt that protection of the  
11 country's offshore oil and gas supply is  
12 vital.

13         This poll assures us that the  
14 story that we are telling is one that will  
15 resonate with the national public and that  
16 the story we are telling is that what is  
17 being lost in Louisiana is important to the  
18 rest of the country, and we are demonstrating  
19 that importance.

20         Now we have to continuously and  
21 relentlessly continue to beat the drums. The  
22 American public is fickle and "out of sight  
23 out of mind" is kind of the reality of the  
24 times, and so you really have to repeat your  
25 message over and over and over in as many

1 venues as physically possible, and you have  
2 to get creative about it, and we have to  
3 develop what some people call "free media"  
4 but what we call "earned media" in my world.  
5 You earn it, because you go out there and you  
6 physically control the discussion at every  
7 opportunity that you possibly can in venues  
8 that will give you the most public exposure  
9 possible. We are going to set about doing as  
10 much of this earned media as we possibly can.

11 I have given my commitment to  
12 telling the rest of the country what is at  
13 risk and to explore every avenue to find the  
14 funds necessary to help us achieve our  
15 restoration goals.

16 Again, I want to thank Dr. Jenkins  
17 for his foresight in bringing together all of  
18 you today because we have got university  
19 resources, we have got so much talent in our  
20 universities, and I want to say thank you to  
21 all of you who have that interest and that  
22 ability to bring to bear some creative ideas  
23 and explore the proper ways that will produce  
24 positive results. I want you to get to know  
25 the people in the local parishes who can help

1 set the stage for real exploration of your  
2 ideas and create the partnerships that are  
3 absolutely necessary. We really need a lot  
4 of help, a lot of thoughtful scientific  
5 research, and a lot of practical application.  
6 If we can demonstrate that some projects are  
7 actually effective, then I think that will  
8 give us a great deal of standing in our  
9 efforts to sell the nation on what should be  
10 done and how to support us.

11           But thanks to all of you for  
12 showing the interest, taking the time to come  
13 today. You represent the best of Louisiana,  
14 and you're challenged with the greatest  
15 challenge this state probably has ever met,  
16 and we must resolve the problems. It's not a  
17 matter of if we can. It's a matter of when  
18 we can, and we have to do it.

19           We need your help and we need your  
20 voices all across the country in every venue  
21 that you possibly might touch, and give us  
22 your time, your talent, and together we can  
23 all solve our problems. Thank you so much.

24           (Applause.)

25       DR. PAUL COREIL:

1           We really appreciate those  
2 comments from Governor Blanco and her  
3 willingness to really take the time to be  
4 with us today and reinforce the objectives  
5 and the message that we have already  
6 presented to you this morning.

7           We have a wonderful program this  
8 afternoon and after lunch, but first, we do  
9 have a buffet lunch. I will give you a  
10 little bit of instruction. We are going to  
11 have two buffet lines in the foyer.

12           I really appreciate President  
13 Jenkins for helping us sponsor this luncheon  
14 for you today and the rest of the university  
15 presidents.

16           After we serve, quickly come back  
17 in here because we do have a presentation  
18 that we will be hearing from King Milling,  
19 the Chairman of the Governor's Advisory  
20 Commission on Coastal Restoration and  
21 Conservation, and he has been guiding that  
22 commission which President Jenkins and I have  
23 been members of for the last year or so, and  
24 we have accomplished quite a bit. We want to  
25 hear the words that he has to say to us today

1 of encouragement and support, and after we  
2 serve lunch, come sit back down. Mr. Milling  
3 will make a presentation, and then we will  
4 have a really dynamic panel of scientists  
5 that I think you are going to really enjoy  
6 hearing. Their message is pretty serious,  
7 but I think the quality of the research and  
8 the models that have been developed are quite  
9 impressive in terms of what kind of manpower  
10 and horsepower we have here at the  
11 universities to help us deal with these  
12 issues that we are dealing with today with  
13 coastal land loss.

14       We also have a panel of our  
15 coastal leaders, parish leaders across the  
16 coast, that will also present their  
17 perspectives this afternoon, and we are going  
18 to have a real hopeful candid and honest but  
19 friendly and respectful discussion about how  
20 can universities address these issues and  
21 help be partners with you in dealing with  
22 these problems and challenges.

23       So let's go ahead and break for  
24 lunch. We have two lunch lines, as I said,  
25 in the foyer. Try to walk through that

1 pretty quickly and come back and sit down and  
2 then we will continue with the presentation  
3 with Mr. Milling. Thank you.

4 (Lunch Break.)

5 DR. PAUL COREIL:

6 I think we set the stage very well  
7 in the opening comments by President Jenkins  
8 and by Governor Kathleen Blanco as to what we  
9 are hoping to accomplish today and the  
10 importance of your attendance and  
11 participation here today.

12 Complementing this entire effort  
13 today has been a long commitment by the  
14 Governor's Advisory Commission on Coastal  
15 Restoration and Conservation led by King  
16 Milling over the last year or more, and prior  
17 to that, another panel that was appointed by  
18 the Governor that King Milling also was chair  
19 of.

20 He has taken a personal interest  
21 in this, sacrificed a tremendous amount of  
22 his personal time and business time, and has  
23 been an advocate and a leader across the  
24 state to anyone who would listen, and the  
25 nation, as to what Louisiana has to do to

1 address the challenges along the coast and  
2 move towards a sustainable coast.

3           We asked King Milling to come to  
4 us today during lunch to share some of his  
5 thoughts. It has been a pleasure for me to  
6 get to know King. I have been working with  
7 the LSU AgCenter and Extension Services and  
8 Sea Grant for about 27 years, and the kind of  
9 support we are getting from leaders like King  
10 Milling is critical to Louisiana being  
11 successful. We have been looking for that  
12 support from the business and industry and  
13 corporate leadership in this state, and King  
14 has set the stage, set the example, and is  
15 the model that we look to hoping that  
16 everyone else rallies to the cause as he has.

17           It is my pleasure to introduce  
18 King Milling to you as our luncheon speaker.

19           (Applause).

20           MR. KING MILLING:

21           Thank you very much, Paul. That's  
22 very nice. It's somewhat over the top but  
23 absolutely delightful.

24           It is a great pleasure to be here  
25 today. If Louisiana is to conquer this

1 dragon we call coastal erosion, there must be  
2 total coordination and commitment of purpose  
3 among government, the private sector, and  
4 Louisiana's colleges and universities of all  
5 stripe. Added value from our universities is  
6 essential if we are to address the complex  
7 science and engineering problems and  
8 challenges facing Louisiana, as well as the  
9 incidental social, economic, health and  
10 welfare issues, which, if not presently  
11 apparent, shall I fear become readily  
12 apparent in the near future.

13       In all of this what you should  
14 know is that the consequences of a no-action  
15 scenario has been the foundation of  
16 Louisiana's work since 2001. If we in  
17 Louisiana are to have the strength of  
18 character and the strength and purpose  
19 required to persevere over an extended period  
20 of time facing unbelievably complex issues,  
21 we must have a full appreciation of those  
22 dire consequences.

23       The devastation which only begins  
24 to reveal itself in red on these plats around  
25 you could be nothing short of incredible, and

1 if left unintended, life as we know it will  
2 be radically changed as a result of  
3 tsunami-like events, Category 3, 4 or 5  
4 hurricanes, or through the continued gradual  
5 and insidious deterioration of our ecosystem.

6           In either event, the support  
7 systems necessary for life as we know it  
8 shall become less and less available, less  
9 and less affordable, and less and less  
10 dependable.

11           These are the consequences of no  
12 action. However you may wish to quantify or  
13 specify, through loss of life, loss of  
14 property, loss of commerce, they are and  
15 should always be unacceptable to us.

16           Moreover, by fully appreciating  
17 the magnitude of these consequences as they  
18 face us and face this state, it becomes clear  
19 that any arguments which may be raised by  
20 those opposing the state's efforts and any  
21 one of which might appear at first blush to  
22 be large enough to constitute effective  
23 roadblocks, each such argument becomes almost  
24 insignificant by comparison.

25           The problems facing Louisiana and

1 the work required to address them are not for  
2 the faint of heart. It took over 75 years to  
3 create our present condition. It will, under  
4 the best of circumstances, take many years of  
5 extraordinary effort to address it.

6         In the last three years Louisiana  
7 has focused on root causes and has sought  
8 innovative and realistic methods to  
9 reestablish a sustainable system. We have  
10 educated our citizens as to the severity of  
11 these problems not as an end unto itself but  
12 rather to help us achieve a single voice  
13 emanating from the Governor's office setting  
14 official state policy and direction.

15         Today Louisiana speaks with one  
16 voice, one which recognizes the challenges,  
17 one prepared to meet them head on over the  
18 long term, one that acknowledges that while  
19 success is not necessarily guaranteed,  
20 Louisiana's position must be at all times  
21 unwavering. Clearly the Governor passed that  
22 message to you today.

23         The story is evolving. We have  
24 deliverables in the form of LCA and the  
25 interim plan, both of which contemplate

1 sequential activities predicated upon the  
2 application of best science and engineering,  
3 centered upon accessing river resources and  
4 strategic barrier island restoration.

5         The interim plan has been approved  
6 verbally by the White House and will be the  
7 subject of the chief's report.

8         The state's efforts to educate  
9 national leaders backed by privately  
10 sponsored national advertisements, the  
11 America's Wetland campaign, and the national  
12 publications such as the National Geographic  
13 are beginning clearly to penetrate the  
14 national psychic. They didn't know we  
15 existed three years ago. I can tell you they  
16 know it now. And yet authorization and  
17 appropriation in its present form is not yet  
18 clear. Monetary constraints in the form of  
19 federal deficits and political infighting are  
20 indeed obstacles. I would rather think of  
21 them as challenges that we can overcome as we  
22 refine our message, answer legitimate  
23 questions, and consolidate support.

24         I would suggest to you that now is  
25 the time to redouble our efforts, not just to

1 meet the significant financial and managerial  
2 requirements, but to prepare this state and  
3 coastal parishes for change; for change is  
4 inevitable. Difficult decisions are on the  
5 horizon, and those decisions will in many  
6 instances be very stressful, mostly to you in  
7 this room.

8       As we redouble our effort, we must  
9 avoid the understandable tendency to succumb  
10 to handwringing and discussions of doom and  
11 gloom. Unfortunately they are  
12 counterproductive, not altogether helpful in  
13 the words of Secretary Rumsfeld. They tend  
14 to result in the demand for quick action and  
15 quick fixes with little or no strategic value  
16 -- designed to help the soul possibly but not  
17 necessarily to help the impending problem.

18       And, moreover, I think for those  
19 of us not in government, we must recognize  
20 that this state and the parishes represented  
21 here today must continually place these ever  
22 increasing demands for coastal restoration in  
23 practical context with the pressing everyday  
24 needs and realities of economic development,  
25 education, and social welfare.

1           Importantly, these competing  
2 demands must not be mutually inconsistent.  
3 And, thus, the balancing act is ongoing.  
4           Louisiana must be accountable. We  
5 must find the funds available to bear our  
6 share of restoration expense. And,  
7 unfortunately, if lessons are to be learned  
8 from the Everglades and the Chesapeake, we  
9 must be prepared to pay proportionately a  
10 greater share of those expenses as though  
11 these activities begun.

12           You heard one more time our  
13 governor support that effort. This indeed is  
14 a daunting task. It shall mean that every  
15 dollar dedicated to coastal restoration must  
16 be directed towards those priorities  
17 established in the LCA and the interim plan  
18 because money is, in fact, dear. That will  
19 require discipline, sacrifice, and  
20 accountability.

21           All of us should assist in helping  
22 to prioritize spending, to suggest new  
23 revenue generating resources, and the  
24 reallocations of existing tax dollars. In  
25 short, we should assist in the heavy lifting,

1 and we must reevaluate prior authorizations  
2 from existing revenue streams to determine  
3 their relevancy in relationship to those  
4 goals and objectives of LCA and the interim  
5 plan. If found to be lacking in appropriate  
6 science and engineering credentials or if we  
7 ascertain that the expenditures do not  
8 support those objectives, the funds should be  
9 redirected to activities consistent with that  
10 approved program.

11           The parishes represented here  
12 today will face demands equally as important  
13 as those facing the state as the ecosystem  
14 continually deteriorates around them. How  
15 will they address questions concerning  
16 insurance coverage or the lack thereof, the  
17 maintenance of municipal and parish  
18 infrastructure or the need for land  
19 development regulations and restrictions  
20 concerning density, height, construction  
21 stability, compatibility of activity, and  
22 environmental and agricultural activities?  
23 How does one impose construction moratoriums  
24 on developments which defy rational logic?  
25 And, finally, how does one prohibit activity

1 which, in fact, will do irreparable harm to  
2 the goals and objectives of coastal  
3 restoration?

4       These questions will bear heavy on  
5 each parish as lands are lost to flooding,  
6 homes and businesses are damaged, and  
7 fundamental questions surface concerning  
8 whether home sites, housing tracts or entire  
9 geographic areas can be saved or are worth  
10 saving.

11       These questions and problems and  
12 other problems will be faced by parish  
13 leaders up and down the Louisiana coast in  
14 the future, and undoubtedly decisions made in  
15 one parish will have significant  
16 repercussions far beyond each parish's  
17 boundaries.

18       It is a time for cohesive thought  
19 as the governor suggested. It is a time for  
20 the parishes to come together to work hand  
21 and glove with the state in supporting tough  
22 decisions. Louisiana has made a hard  
23 decision to move forward, has adopted a  
24 comprehensive plan of action in the hope that  
25 we can reestablish a sustainable system for

1 all of Louisiana. There will be sacrifices  
2 made, but if we don't take that course, there  
3 is no doubt we will lose this battle.

4       Not long after we began this  
5 journey in the summer of 2001, a senior and  
6 seasoned executive of the Corps of Engineers,  
7 after contemplating the size and scope of the  
8 issues facing Louisiana and what might be  
9 needed to develop a comprehensive program to  
10 restore the system, observed almost to  
11 himself "We go where no one has ever gone  
12 before." I have often thought of that  
13 comment as I have watched this state work  
14 with federal partners and create in two years  
15 what should normally take six to eight in  
16 order to attack a problem where time is of  
17 the essence, the sense of urgency is a  
18 critical component, and yet where patience,  
19 particularly as we work through the halls of  
20 Congress and the White House, is absolutely  
21 essential.

22       We stand on a new threshold. It  
23 is time for us to begin to realistically  
24 review the practical options available for us  
25 to give that unfettered support to this

1 effort. To do that, we must call upon every  
2 resource available within and outside of this  
3 state, and that brings us back to why we are  
4 here today.

5         We should be able to call upon our  
6 university systems to access their expertise  
7 as it relates to land conservation and  
8 management, sea level fluctuation, land  
9 elevation, and science and engineering  
10 bearing directly upon the execution and  
11 implementation of the plan itself.

12         I urge us to use these rare  
13 resources as tools which can benefit not just  
14 the region but the state and the nation as a  
15 whole. It has been offered, and shame on us  
16 if we don't use it. Thank you very much.

17         (Applause.)

18         DR. PAUL COREIL:

19         Thank you very much, Mr. Milling.  
20 We appreciate your comments and your ability  
21 to help us pull together some of the  
22 challenges we have at all levels, but  
23 particularly the theme of today of our  
24 university systems trying to reach out to  
25 local government and better address the

1 realities that we are hoping that will  
2 complement the comprehensive work that has  
3 been done and continues to be done and we all  
4 need to be part of.

5         We are going to have a short  
6 transition here of our panel to come up to  
7 the front and be prepared to give our first  
8 panel presentations. So while we are going  
9 to be doing that -- and there will be some  
10 scurrying going on of taking down some  
11 placards and putting up new ones -- I want to  
12 give you a little bit of a history of some of  
13 the people that were involved in getting our  
14 conference together today.

15         First it started with some  
16 discussions at the commission meetings that  
17 we had in that we thought we could complement  
18 our efforts for the restoration initiatives  
19 and the funding efforts with some of the  
20 issues we saw happening last year and over  
21 the last several years regarding changes  
22 along the coast that are occurring as a  
23 result of erosion, coastal land loss,  
24 subsidence that we know local governments are  
25 dealing with and that we may be able to

1 complement and help them with through a  
2 discussion like we are going to have today.  
3       Many people were involved in  
4 helping us put together the concept of how  
5 can we do this, how can we have a different  
6 kind of meeting and how can we engage our  
7 local leaders along the coast in a  
8 conversation that would be candid and be  
9 comprehensive enough to maybe agree to meet  
10 again, and this may be the beginning of a  
11 series of small group forums that would  
12 result from what we learned today.

13       President Jenkins by far was one  
14 of the leaders of challenging us to do this  
15 through his efforts as president of the LSU  
16 System and his priority setting with the  
17 Board of Supervisors, and we were aware of  
18 that, and he reiterated that in his comments  
19 to the Commission, and with he and I and Jim  
20 Coleman being the members from higher  
21 education, we felt there was more we could  
22 possibly contribute to the conversation and  
23 to the effort we heard through the Commission  
24 meetings, and we started talking about that  
25 early on. Don Davis, Mark Davis, Windell

1 Curole, Sidney Coffee, King Milling, Len  
2 Bahr, Rex Caffey, Ken Roberts, Mike Liffmann,  
3 Don Davis, and Chuck Wilson, who is now the  
4 new director of the LSU Sea Grant Program,  
5 with the retirement of Dr. Jack Van Lopik.  
6 Chuck is going to be very active as director  
7 of Sea Grant, and Dr. Van Lopik had his  
8 retirement reception this week, but also  
9 Berwick Duval, Cynthia Duet, Marnie Winter,  
10 and the PACE members, Parishes Against  
11 Coastal Erosion, they have expressed and  
12 exhibited dynamic leadership over many years  
13 in pulling together parishes' interest and  
14 rallying state and federal government  
15 policymakers to see their passion towards "We  
16 must do something together." So we really  
17 focused our attention on targeting our PACE  
18 partners along the coast today, and several  
19 of them are here today. They will be on the  
20 panel this afternoon.

21       What you see on the walls put up  
22 by the U.S. Geological Survey, National  
23 Wetlands Research Center, John Barras and  
24 Blair Hutchinson, we asked them to put up  
25 some of the real quality work that has been

1 done in GIS technology and satellite imagery  
2 and photography that has really helped us  
3 define what has happened and what is  
4 happening along the coast. These tools we  
5 have from the National Wetlands Research  
6 Center has been very effective in helping us  
7 forge a plan of where do we need to look at  
8 restoration projects and where the local  
9 governments need to look at where the most  
10 emerging issues are regarding some of the  
11 infrastructure issues that we are going to  
12 discuss today. So I thank John Barras and  
13 Blair Hutchinson for their work.

14       Also, we had a lot of video that  
15 we thought was well illustrative of some of  
16 the dynamic challenges and interest along the  
17 coast that you saw when you walked in here, a  
18 streaming video. Craig Gautreaux put that  
19 together for us with Rex Caffey's support as  
20 well, and I thought they did a real good job  
21 of giving us some of the more recent coastal  
22 interests and challenges that we faced with  
23 last year's hurricane evacuation, some of the  
24 water flooding problems we had with some of  
25 the tropical storms of recent, and how much

1 that has changed in the last 10, 15, 20 years  
2 from what we have seen in the past. It is  
3 hard to predict what we are going to see  
4 along the coast based on history and based on  
5 experience because of the changes. So I want  
6 to thank them as well for putting that  
7 streaming video together.

8 I thought the lunch was well done.  
9 I appreciate the work of Lod Cook and the  
10 staff here, and we are right on time.

11 We are going to go ahead and  
12 transition to our panel and ask them to come  
13 up and put their placards up so you will know  
14 who they are.

15 The first panel we have is -- and  
16 you all can start coming up right now because  
17 we want to transition to that right now. The  
18 first panel we have is Panel 1: "Confronting  
19 the Scientific Realities of Coastal Land  
20 Loss." There are numerous scientists in this  
21 state that could have presented today. So by  
22 all means, this is just a sample of some of  
23 the research and models that have been  
24 developed that help us define the realities  
25 of coastal challenges that we are facing

1 today, so we want to make it clear that many  
2 of these scientists here today are  
3 representing their colleagues across all  
4 universities that are doing outstanding work,  
5 and many of them are here today in the  
6 audience, but we had respect for your time  
7 and we don't have a lot of time to take up  
8 today to present the concepts and some of the  
9 issues we wanted to present, so we may  
10 actually see other teams of scientists on  
11 similar panels at similar forums as we agree  
12 to continue to discuss these issues as we  
13 join together to try to solve these problems  
14 or address these problems. So the panel we  
15 have today we hope reflect very well their  
16 colleagues across the universities, and the  
17 quality work that is being done that will  
18 help us and has helped us and will continue  
19 to help us define what are we confronting,  
20 why are we confronting this, and possibly as  
21 you watch these presentations, your homework  
22 is to think what are the implications of  
23 these presentations for you where you live,  
24 if you are a coastal resident or a coastal  
25 leader, and be thinking about some of the

1 questions, comments, concerns or  
2 complementary issues that you can bring forth  
3 after the presentations that could help us in  
4 our candid discussion that will be led by  
5 Mr. Berwick Duval in the audience  
6 participation part of this show, and that is  
7 a very important part. In fact, it's the  
8 most important part.

9         So I'm going to introduce the  
10 first panelist, and I will introduce each  
11 panelist prior to their presentation.

12         Dr. Robert Twilley is director of  
13 our Wetlands Biogeochemistry Institute within  
14 the School of Coast and Environment here at  
15 LSU. Robert has been heavily involved for  
16 many years as a scientist on coastal ecology  
17 and coastal restoration issues, and his  
18 presentation is titled "A Century of Coastal  
19 Degradation and Our Current Approach to  
20 Restoration."

21         DR. ROBERT TWILLEY:

22         Thanks, Paul. Since the theme  
23 today is challenges, I have got two. One is  
24 Paul said I had to be dynamic, and the second  
25 challenge is I've got to get through this in

1 10 minutes. So here we go. For those who  
2 know me know exactly the nature of that  
3 second challenge.

4       Basically what I want to do is set  
5 the stage today and -- you know, when you  
6 talk about challenges and vulnerability, you  
7 need to put that in a context of time, and  
8 you will hear the word "urgency," you will  
9 hear the word "no action," and those are very  
10 important concepts that I would like to put  
11 in reference today related to coastal  
12 restoration.

13       Here is a first point of reference  
14 related to my 10-minute presentation here,  
15 and that is a map of 1895, and I want to keep  
16 this as a reference point. In around 1900,  
17 there were 3.5 million acres of wetlands in  
18 coastal Louisiana. And the issue, of course,  
19 today is that we are looking at this in a  
20 time scale a hundred years later where we  
21 projected using a map, as you see here, land  
22 losses by 2050. So the time relative to  
23 changes related to responses related to our  
24 restoration program and what you deal with on  
25 a daily basis is actually the content of what

1 I want to present, and I'm going to use  
2 throughout this talk an essay that I think  
3 was published in the New Yorker in 1989, an  
4 author that I think really captured over 20  
5 years ago, you know, the real essence of what  
6 we are dealing with here, by John McPhee, an  
7 essay called "The Control of Nature," which  
8 actually became a book.

9         In the last 100 years Louisiana as  
10 a whole has decreased by a million acres, and  
11 he writes -- and this is a quote --  
12 "Plaquemines Parish is coming to pieces like  
13 old rubbing cloth. A hundred years hence  
14 likely there will be no Plaquemines Parish  
15 and no Terrebonne Parish."

16         And the concept of change and  
17 degradation, as I show in this diagram here  
18 and you have seen me show this on several  
19 occasions, is in the context of not only a  
20 degraded system related to land area and in  
21 many cases what we use as a metric, as the  
22 urgency of our problem, is in the context of  
23 millions of acres of land, but what you  
24 realize from the content related to  
25 challenges and consequences and

1 vulnerabilities are the goods and services  
2 that this land used to provide, and the  
3 problem in wetland science and in many  
4 coastal resources is that we don't appreciate  
5 those goods and services until they  
6 disappear, and then, all of a sudden, you  
7 have to replace those with cost on your own  
8 or your insurance, and all of these risks go  
9 up, and we capture that again because we use  
10 the loss of land, but it is really the goods  
11 and services that these wetlands provide that  
12 is why we are here today. What we have just  
13 described is that the degradation rate was a  
14 hundred million acres in the last hundred  
15 years, and the thing is is that all of these  
16 were related to public goods and services  
17 that were provided to us through the federal  
18 government with long-term unintended  
19 consequences. These changes or what we  
20 describe as degradation, for instance, here  
21 lay in the flood control, was in response to  
22 the 1927 flood which was there to provide  
23 very important services to our communities  
24 along the coast, which resulted in a levee  
25 system that disconnected the river from a

1 delta, and that was a very important part of  
2 the change that has occurred in the last 100  
3 years.

4         Second, other federal projects,  
5 again, with the purpose to protect and serve  
6 for long-term unintended consequences was  
7 investment in oil and gas exploration, a huge  
8 important economic asset to this nation and  
9 actually something that is very important  
10 related to our economic stability.

11         Again, we look at the dates that  
12 I'm putting up here. All of these are  
13 occurring around the turn of the century and  
14 extending into the mid part of the century,  
15 in the 1950's and 1970's, in which they were  
16 all federal projects changing the landscape  
17 and changing the way the natural process of  
18 the system works. Navigation. A huge public  
19 investment that had a huge economic and  
20 important significance to both Louisiana and  
21 the nation with a very important component of  
22 our changing landscape; again, with long-term  
23 unintended consequences.

24         Again, look at the time of each of  
25 these, right around the turn of the century,

1 agriculture, the Swamp Land Act of 1850, and  
2 by 1960 we had huge changes in our upland  
3 watershed. Nitrate fertilizer applied to  
4 that watershed related to the hypoxia  
5 consequences that we have along our coast.  
6 All of these are changes that have occurred  
7 related to these projects that were, again,  
8 to serve the public good.

9         Now we are here in this condition  
10 of degradation because of those changes  
11 related to a coastline that we are now  
12 talking in the context of rehabilitation.  
13 It's not the degradation. We are not going  
14 to sit here and discuss relative to the  
15 problems and the issues of where we are  
16 today. We are looking toward the future and  
17 as scientists and engineers in the public  
18 sector of what we can do in the context of  
19 rehabilitation and bring this system back.

20         The point I want to make on this  
21 diagram that you're looking at is that  
22 remember the reference point, that circle  
23 that you see up there, is in 1900 3.5 million  
24 acres. Restoration would say we can bring it  
25 back to that. We can't. We have to have a

1 reality of what we are talking is not  
2 restoration, but it is rehabilitation and is  
3 rehabilitation of the coast that is very  
4 important.

5         Let me give you the context of  
6 what the options are related to rebuilding  
7 and restoring our coastal system. One is we  
8 have to put it in the context of how the  
9 natural system works, and in this diagram --  
10 I don't have a pointer up here. I will use  
11 this mouse. I put this diagram up here that  
12 shows the natural delta cycle, and the colors  
13 that you see along this cycle are actually  
14 significant related to influence of the  
15 delta. The blue is a more marine influence,  
16 and as the delta grows, it has more of a  
17 freshwater influence. As you can see, the  
18 concept that we have of how the delta works  
19 is that one delta lobe disappeared, another  
20 delta lobe replaced it, and we end up with a  
21 balance that actually sustained our coast as  
22 far as its natural wetland area.

23         The point I want to make here is  
24 again it's not just land area that changes in  
25 the context of time. It's the quality of

1 that land. Maybe quality isn't the right  
2 term, but it's the change in the type of  
3 landscape from marine dominated to freshwater  
4 dominated back to marine.

5         So the challenge that we are going  
6 to have is that we are going to have to make  
7 some tough questions as we build land back  
8 along this coast that it may change the  
9 nature of the landscape related to its  
10 freshwater or saltwater characteristics  
11 today.

12         So we have to put our own  
13 individual interest related to the types of  
14 habitats we want in a certain region related  
15 to the ability to rebuild land along the  
16 entire delta landscape. The problem is is  
17 that our rebuilding capacity of the land is  
18 decreased. Our rate of land loss has  
19 increased. So here we are in this blue line  
20 in a condition where historically we had a  
21 stable landscape but the blue line now shows  
22 a decrease over time in the recent last 100  
23 years related to our total wetland land area.  
24 The problem now is what do we do and how can  
25 we rebuild this coast, and we have four

1 options.

2           Number one is to build a  
3 rehabilitation program and build measures out  
4 along our coast that would increase wetland  
5 acreage over time.

6           Number two, build a system that we  
7 can at least stabilize the land as we have it  
8 today, which is our second option.

9           Third is try to reduce the rate of  
10 land loss, and you will see each of these in  
11 my color code result in not only land area  
12 but you will notice the color of these little  
13 circles here are going to influence the type  
14 of landscape that we have, and so we are  
15 moving from a freshwater dominated to a  
16 marine dominated.

17           Number 4 is why we are here today,  
18 and that is the result of which no action  
19 occurs at all, and the loss of landscape over  
20 time under a no-action scenario is one that  
21 builds and increases consequences of  
22 vulnerability.

23           As John McPhee described again  
24 that historically our natural system has the  
25 ability to replace what land was lost, and

1 rebuilding of this land gave us a net  
2 positive effect.

3         Now, here are the consequences  
4 that I want to describe and that I have been  
5 talking to you about and I showed you in that  
6 previous diagram. Let's put some real  
7 numbers on quantity of land and the content  
8 of time.

9         What I'm showing you here are  
10 decadal. Each of these bars represent 10  
11 years. Since 1900, the white line is a  
12 reference point related to 3.5 million acres.  
13 You will notice in this diagram it's going to  
14 stop at the year 2000, which is our present  
15 condition where we have lost 1.2 million  
16 acres over the last 100 years. I stated that  
17 incorrectly earlier in the talk. 1.2 million  
18 acres. This is our present condition.

19         Now, the challenge is, in a  
20 rehabilitation program, what can we do? The  
21 first scenario I'm showing you is if, in  
22 fact, we have a 20 year delay in starting our  
23 restoration program and if we can build a  
24 system that will maintain no more wetland  
25 loss, this is what we will have in the next

1 50 years. What you will see is a decrease  
2 from 3.5 down to 2 million acres. That is a  
3 big if. What if we can only reduce the loss  
4 rate by one half its present? You will see  
5 the yellow line that shows you that amount of  
6 land after 50 years of restoration.

7         The fourth line shows you the  
8 amount of land area at the end of 50 years.  
9 It is the land that will represent what we  
10 have if there is no action. That red line is  
11 about half of what we had in the year 1900.

12         The key point I want to make here  
13 is there are two elements, two huge  
14 uncertainties, related to what we can do  
15 related to saving our coastal resource.  
16 Number one, how long is it going to be before  
17 we initiate a program? If it's 10 years and  
18 20 years, your deficit increases at the rate  
19 that I have here of 17 square miles per year.  
20 Number two, exactly what kind of funding are  
21 we going to have to actually change the  
22 response to this coastal system? If it's  
23 maintained, you know, that's one thing. If  
24 it is decreasing by one half the rate, that's  
25 another, but these are two important

1 scenarios, two important issues, related to  
2 what we are going to have in 50 years related  
3 to our coastal landscape.

4         Here is a scenario where 50 years  
5 it takes before we get a program up and  
6 running, and under no-action scenarios, if we  
7 don't have enough to stop the loss of  
8 wetlands, you can see that 50 years after the  
9 rehabilitation program starts, we are down to  
10 around a little above one million acre or a  
11 third of our wetland area.

12         The scenarios I showed you are  
13 based on uncertainties related to wetland  
14 loss in the future, but the point I want to  
15 make again is that the deficit and the  
16 uncertainties and the challenges we are faced  
17 are going to increase as a consequence of how  
18 long it takes before we get started; number  
19 two, our ability to change the trajectory of  
20 wetland loss.

21         And as everyone is asking, do we  
22 have the ability to do this? My last two  
23 slides, as I know I'm going over my 10  
24 minutes, is that if you see this diagram,  
25 which again are the four objectives, the

1 point I want to make here is again we are  
2 embarked on a federal project. Now it is a  
3 federal project to rebuild the landscape that  
4 related to the federal projects that have  
5 been invested before, and the key here is  
6 related to those curves I'm showing you as  
7 far as a trajectory by which the response in  
8 the upper left panel shows you various  
9 measures that the federal projects would  
10 build along our coast that would give you, as  
11 indicated in the yellow line, a reduction of  
12 one half the present loss rate. This panel  
13 shows you what we think it will take to  
14 reverse the loss rate and increase the rate  
15 of land area, and these are huge  
16 uncertainties, and my point here is that the  
17 third part of this scenario for what we are  
18 going to have in the future is how well is  
19 our science and engineering accurate related  
20 to the assumptions we are making of what does  
21 it take to reverse the response of this  
22 coastal landscape. We are working under  
23 paradigms of how this system works, and if we  
24 are wrong, you know, then the assumptions we  
25 are making related to these measures as you

1 see up here related to these various projects  
2 can actually push the system in a direction  
3 that we are assuming that we can accomplish.

4 I will state here that we reverse  
5 the process. We can not restore it. We can  
6 only rehabilitate it, and I think the intent,  
7 as you see in John McPhee, is that we will  
8 work as hard as we can to accomplish it.

9 My last comments in a conclusion,  
10 we have lost one-third of our delta  
11 landscape, the timeliness of which  
12 rehabilitation process is critical to the  
13 degree of vulnerability and coastal  
14 challenges, as I showed you previously. How  
15 long before we start the process? That's  
16 very important. A hundred thousand acres per  
17 decade based on the 17 square miles per year  
18 rate of loss, and what will be the response?  
19 How accurate are we in science and technology  
20 to predict the degree of rehabilitation? And  
21 our forecasting tools, this is where we hope  
22 to improve in the future.

23 Thank you very much.

24 DR. PAUL COREIL:

25 We are going to continue with our

1 panel. We will go right through the  
2 presentation so we will have more time for  
3 discussion.

4           Our next presenter is Dr. Ivor van  
5 Heerden, who is the director for the Center  
6 for the Study of Public Health Impacts of  
7 Hurricanes here at LSU. Dr. van Heerden's  
8 presentation is titled "Using Technology to  
9 Illustrate the Realities of Hurricane  
10 Vulnerability."

11       DR. VAN HEERDEN:

12           Thanks, Paul. One of the  
13 realities of Louisiana is that the coastal  
14 land loss that we are experiencing is  
15 exacerbating and enhancing the impacts of  
16 tropical storms. I think everybody  
17 recognized that Hurricane Ivan, if it had  
18 come into Louisiana, would have been very  
19 devastating.

20           As a consequence of a program  
21 involving a number of universities and  
22 campuses, including the Vet School, the LSU  
23 Medical School in New Orleans, we developed  
24 some tools to try and look at the realities  
25 of a hurricane impact, and this is not a

1 gloom and doom story. This is to say we have  
2 tools that we can utilize to better  
3 understand what the impacts could be and also  
4 to sell the need for Louisiana's coast to be  
5 restored.

6         This is a diagram of the major  
7 hurricanes, Category 3 and above, in the last  
8 50 years, and if you go back further, you  
9 will see in the last hundred years we have  
10 had 12 major hurricanes impact Louisiana.  
11 That's on average of about once every eight  
12 years. The reality is is that Louisiana is  
13 prone to major hurricane impacts.

14         This is a computer animation  
15 generated by our team using the LSU  
16 supercomputer. What would have happened  
17 basically if Hurricane Ivan had come in over  
18 Fourchon and then passed west of Lake  
19 Pontchartrain. The little black arrows here  
20 are the winds, and this gives you a scale of  
21 about a hundred miles an hour. This is the  
22 water level, the surge above sea level. As  
23 you will see, the eye is approaching the  
24 coast, and you will see the winds coming in,  
25 and we now see before it even makes landfall

1 the building up of the surge against the  
2 artificial levees that protects us from river  
3 floods, and one of the things we are learning  
4 is that these artificial levees, while they  
5 are very beneficial for river floods,  
6 actually enhances storm surges.

7       You will notice in terms of New  
8 Orleans there we are starting to flood the  
9 Bonne Carre Spillway. There's not a levee  
10 along the gulf, and drawdowns are occurring  
11 in these areas. In fact, the drawdown in  
12 some of these navigation canals is 11 feet.  
13 So any marine interest in there will have  
14 real problems with docking a vessel in terms  
15 of protecting it from the surge. While it  
16 enhances, you will see the storm building up  
17 so that we have almost 24 feet of water here  
18 in Plaquemines and St. Bernard, and then the  
19 water crosses the levee and starts flooding  
20 the westbank by going right over the river.  
21 So people in this area who perhaps thought  
22 they were safe at that time would go.

23       You will notice that New Orleans  
24 now has a lot of water. The water enters  
25 from this corner at the Industrial Canal, as

1 well as close to the airport. Before it  
2 floods into New Orleans, it floods in highly  
3 industrialized areas. It's a very high  
4 probability that those waters will be very  
5 contaminated. The surge pushes all the way  
6 up into Interstate 12, so literally nobody in  
7 this part of the state escapes it.

8         This is what would have happened  
9 -- this is the reality if Ivan had come into  
10 Louisiana September of last year.

11         Now on top of that there is  
12 flooding associated with rainfall. This is  
13 an example of an event associated with a  
14 major hurricane in 1940. If you consider any  
15 of our bowl cities, Houma, New Orleans, any  
16 of our cities surrounded by levees, you can  
17 imagine what 30 inches of rainfall would do,  
18 especially if the pumps were not operable.

19         Now, this is a prediction from  
20 some early work by the Corps of Engineers.  
21 It's a land loss by 2040. I really want to  
22 direct you to this area where Barataria Bay  
23 used to be. What you see is the only land  
24 contained within the hurricane levee. This  
25 is a wonderful funnel for the surge to come

1 in and really flood a large part of  
2 Louisiana. No matter where you look, we have  
3 these funnel shapes. So the potential  
4 impacts of a certain storm increases every  
5 single year. The reality is a Category 3, 4  
6 and 5 hurricane striking the greater New  
7 Orleans area or any other major inhabited  
8 area off the coast would be a disaster of  
9 cataclysmic proportions. Damages and  
10 associated reconstruction will exceed a  
11 hundred billion dollars. This is not numbers  
12 we sucked out of our thumbs. This is what we  
13 believe to be real numbers.

14       Just looking at New Orleans, if  
15 Ivan had come through in September, the city  
16 would have had 14 to 17 feet of standing  
17 water, assuming the levees didn't fail. The  
18 whole area would be shut down. Over 300,000  
19 people we now know would have been stranded.

20 There is this potential of petrochemical and  
21 hazardous material releases, not only into  
22 the waters entering the city but within the  
23 city. Most of the fuel storage facilities in  
24 New Orleans are above ground. They are not  
25 bolted down. Obviously major problems with

1 shelter, economic. Over a million people  
2 would be homeless. We would have to create  
3 tented refugee camps, probably in the Florida  
4 parishes. This here is a number we are still  
5 working on, but the American Red Cross have  
6 estimated that up to 100,000 people would  
7 lose their lives, and our initial models is  
8 indicating that that number is not far off.

9         So this is a serious reality. In  
10 addition, there is the potential of releases  
11 of chemicals into the air, and this is a  
12 model that looks at some potential releases,  
13 and what you see is that the curving nature  
14 of the hurricane means that those releases  
15 cover a very large area. So even if you are  
16 not in the impact zone, even if you are in  
17 north Louisiana, you could feel those  
18 impacts.

19         And some of the medical stuff --  
20 and I will go over this very quickly, but  
21 it's extremely alarming. Number one, we are  
22 going to have to have a major effort to get  
23 the survivors out of the flooded areas. How  
24 do you rescue 300,000 people? We are going  
25 to have problems with diseases. Some

1 spreading very rapidly because of  
2 contaminated water. Some have death rates  
3 over 50 percent. Mosquito control, vaccines  
4 for various communicable diseases, infectious  
5 diseases. The list goes on and on, and it  
6 gets scarier and scarier.

7         Just in case those of you from  
8 western Louisiana think that you're safe,  
9 this is what would have happened if Hurricane  
10 Lili had come in as a Category 4. You see  
11 the flooding extends almost all the way to  
12 Lafayette. I will run it again very quickly.  
13 You can see the eye coming in, and this is  
14 what would have happened. We are very  
15 fortunate that that storm didn't impact.

16         So the conclusion then is that  
17 coastal Louisiana is very vulnerable to  
18 catastrophic storm surge impacts. The values  
19 of some of the studies coming out of LSU  
20 universities is that we can use these  
21 realities in future planning. We can look at  
22 the models, and some have already been used  
23 very heavily by emergency managers, and then  
24 there is the whole thing of what emergency  
25 managers would call mitigation or the

1 rehabilitation. Just two ideas. One is --  
2 and this has been brought up before -- a  
3 passive structure across the Rigolets along  
4 the Interstate 10 bridge to reduce the  
5 cross-sectional area of those flood waters,  
6 those surge waters, entering Lake  
7 Pontchartrain.

8       Another idea is if we could put 50  
9 percent of the Mississippi into the Breton  
10 Sound area. This would obviously mean the  
11 shutdown of MRGO, but we would create up to  
12 10,000 acres a year at the high, and these  
13 sediments would then evict into adjacent  
14 marshes and hopefully rejuvenate those,  
15 again, creating a platform to protect us from  
16 these surges. One would have to look at  
17 navigation changes, such as a new channel  
18 down into the Mississippi bottom.

19       So this is not doom and gloom.  
20 These are new tools we are developing at  
21 Louisiana universities, and they are there  
22 for the parishes and others to utilize as  
23 they were. Thank you.

24       (Applause.)

25       DR. PAUL COREIL:

1           Our next panelist is Mr. Tim  
2 Osborn with the National Oceanic and  
3 Atmospheric Administration. Tim is going to  
4 make a presentation titled "The Changing Face  
5 and Elevations of Coastal Louisiana."

6       MR. TIM OSBORN:

7           I would like to thank very much  
8 Louisiana State University for putting on  
9 this very important prestige meeting. I  
10 would also like to thank the university also  
11 for my graduate training and also in being  
12 part of the Louisiana Sea Grant Program for  
13 many, many years as I went to LSU.

14          NOAA is the nation's oldest  
15 scientific agency. Since 1807 we have been  
16 chartered for many tasks, such as mapping our  
17 coastal shorelines and waters, measuring the  
18 tides, and setting and maintaining the  
19 reference network that surveyors use for  
20 determining position and elevations of the  
21 United States. Words like "charter your  
22 course," "surveying," "the benchmark program"  
23 are all sayings that we have been asked and  
24 tasked to actually do for almost 200 years  
25 now, newsletters using names like "Tides" in

1 their publications, are the things that we  
2 have been doing in terms of measuring the  
3 rise and fall of water as the earth revolves.  
4 No place like Louisiana actually has a closer  
5 relationship or bond with the water. As you  
6 have been seeing and hearing, southern and  
7 coastal Louisiana in many ways owes its  
8 existence or growth of the coast to the  
9 water, the Mississippi, through history in  
10 bringing silt downriver and flooding cross  
11 these large coastal areas and building up  
12 areas as we know pretty much as the coastal  
13 parishes today.

14       No other state in this nation is  
15 also likely more threatened by water than  
16 Louisiana, and we live with the challenge  
17 each day in many ways. It's one of the core  
18 reasons we are meeting here on this campus.

19       We are not fighting a challenge of  
20 south Louisiana that is measured in square  
21 miles or lost wetlands or measured in  
22 football fields of coastal areas lost every  
23 so many minutes of the day year after year.  
24 The real battle and the one that I think we  
25 are here to talk about in many ways is

1 meeting a challenge that you can take an  
2 action and how we can respond to it. In  
3 Louisiana, and the presentation I have, the  
4 fight we face is really measured in inches.  
5 Inches of elevation across a huge coastal  
6 zone that is home to almost 50 percent of the  
7 state's population today. It's in this  
8 measure of the fight that we see land  
9 elevations that are changing each year, and  
10 the battle is one of south Louisiana moving  
11 downward and converging at the same  
12 elevations of the Gulf and coastal waters in  
13 our bays and bayous.

14       We have seen four hurricanes and  
15 three tropical storms, a volcano, an  
16 earthquake in California, a second earthquake  
17 that sparked a horrific tsunami, killing over  
18 200,000 people, and we have lived all of that  
19 in how long? Does anyone have a guess? In  
20 six months. The first hurricane was six  
21 months ago, August. The next hurricane  
22 season starts June 1st. So the time lines  
23 and the level of activities and the level of  
24 events that we see not only within this  
25 nation but in the world isn't being measured

1 in a scale of years. It's being measured in  
2 months.

3           Also, one of the things I would  
4 like to bring out to you in terms of NOAA as  
5 one of the scientific agencies, it's the  
6 oldest in the country, is also our prediction  
7 of measurement in broadcasting the weather.  
8 Steve Reinhardt here with the National  
9 Weather Service is joining me today, and  
10 actually can help address some of those  
11 issues as well.

12           In working along the gulf coast  
13 through all four hurricanes -- and, in fact,  
14 this is one of the pictures here of Gulf  
15 Breeze the day after Hurricane Ivan hit.  
16 This has given us a new focus on the changing  
17 landscape and growing interactions with water  
18 with Louisiana's living today and seeing in  
19 the future. Any one of the hurricanes that  
20 we saw in the last five or six months would  
21 have been devastating to the state. How do  
22 we know it? Because something like Ivan was  
23 devastating to Pensacola. There is no  
24 measure. There is no real conception of the  
25 kind of devastation until you are actually

1 there seeing the food lines, seeing the armed  
2 guards, seeing the curfews at six o'clock at  
3 night, seeing this entire road along Gulf  
4 Breeze essentially wiped out. These photos  
5 show the impact of Hurricane Ivan. This is  
6 Pensacola Naval Air Station. This is a  
7 three-story tall brick building on the Naval  
8 Air Station in which the lieutenant commander  
9 of the dock for Pensacola said that the surge  
10 made it to the building, but what took out  
11 that upper right quadrant of that brick  
12 building was the storm waves itself.

13 Escambia Bay is also one of those  
14 places that we saw I-10 and the Causeway  
15 taken out. This is also in comparison to a  
16 photo that actually many of you in this room  
17 have seen, actually lived. I think actually  
18 State Senator Reggie Dupre actually  
19 experienced this. This is Montegut. This is  
20 during a tropical storm, a minimal tropical  
21 storm. This is one of the flood protection  
22 levees that was basically overcome during  
23 that storm. This is I-10 causeway. This is  
24 a long ways inland, and this is a storm that  
25 took that out with a surge that really was

1 phenomenal to see. One of the problems and  
2 one of the challenges we had in working on  
3 these storms is the fact that we get the call  
4 sometimes for our field crews to go and  
5 actually find and recover the bodies of the  
6 victims of these storms. These are the kind  
7 of events that after you live and work  
8 through them, you don't forget, and it brings  
9 the point here of how poignant and how  
10 significant these kind of events can be.

11         This is Leeville Bridge. This is  
12 after Tropical Storm Matthew. This is a  
13 tropical storm that barely made it to  
14 tropical storm before it hit the coast, and  
15 actually it was one of your nickname backyard  
16 storms the fact that it actually was created  
17 and moved as a storm that started in the Gulf  
18 of Mexico.

19         The earlier references to marks  
20 and surveyor stands is a witness to the  
21 changes of south Louisiana. Here you see  
22 some examples of benchmarks today that were  
23 set a number of years ago and now can be  
24 found far out in the marshes near Grand Isle  
25 in areas inundated by tides from nearby bays

1 on an island, like the bottom right one.  
2 This is Fifi Island right near Grand Isle,  
3 where most of Fifi Island is gone, but the  
4 benchmark survived, which I gave great credit  
5 to the surveyors that actually set that mark.

6         We also have another one near Port  
7 Fourchon that today is two inches underwater  
8 and one which was actually dredged up by a  
9 shrimp trawl and actually sent to Louisiana  
10 DNR as part of their Gear Compensation Fund.  
11 There is never a dull moment here.

12         In measuring land elevations and  
13 tides and water levels of south Louisiana,  
14 NOAA has seen a relative mean sea level rise  
15 of about one inch ever 30 months in south  
16 Louisiana over almost 60 years of daily  
17 recording of tides and the yearly work to  
18 maintain that network for its vertical  
19 accuracy. This is just one means. There are  
20 many means that are recording what land  
21 elevations and water levels are. This is  
22 just one example, one tool, that we use that  
23 you can actually go and reference yourself.

24         This sea level rise prompted  
25 National Geographic Survey, which is part of

1 NOAA, to essentially fund and create and  
2 develop right here on this campus the  
3 Louisiana Spatial Reference Center. We have  
4 been working for almost four years now in  
5 looking at the elevations of south Louisiana  
6 and to determine the rates of movement that  
7 have been experienced by the various coastal  
8 parishes that we look at today and are here  
9 at this meeting. Hopefully soon we will have  
10 a new set of elevations to provide to the  
11 state for the coast to use to support  
12 everything from flood protection to coastal  
13 restoration, coastal ports, new highways, new  
14 schools, courthouses, housing developments,  
15 and hurricane evacuation routes.

16       As a resource, we find right here  
17 the Spatial Center and LSU is likely one of  
18 the most important or more important  
19 investments you can make here as a state, as  
20 a university, and as the coastal parishes and  
21 state and federal agencies are involved in  
22 the programs and projects involving the  
23 coast.

24       This is with great respect to all  
25 young programs and institutes that are here.

1 I say this really to take you back to the  
2 earlier reference to the battle that we are  
3 really facing and how it is being measured in  
4 inches. If you look at another resource, you  
5 can access from LSU's website here, you can  
6 actually see LIDAR contours, elevation  
7 profiles for some of the coastal parishes,  
8 some of the people that are actually sitting  
9 here, where you can actually see some of the  
10 elevations that you are living at today right  
11 now, not talking about the future movements,  
12 but about the elevations that you have today.  
13 The inhabited areas of Plaquemines Parish  
14 within the levees being below sea level in  
15 many areas. Jefferson Parish. The red up to  
16 the north is all below sea level. LaFourche  
17 Parish, inside the south LaFourche Levee  
18 District levees, all of those coastal  
19 communities are now living in existence well  
20 below sea level and dependent upon their  
21 existence for the flood protection levees  
22 that are protecting them today.  
23       Some of the other examples, St.  
24 Bernard Parish is living with about 80  
25 percent of its population behind flood

1 protection levees today with an elevation  
2 mean at one foot or less. Plaquemines Parish  
3 we just discussed. Many of the areas at this  
4 time, almost all the population is behind  
5 flood protection. Jefferson Parish. Very  
6 good people that we have been working with  
7 very closely for a long time. Probably 90 to  
8 95 percent of its population is living behind  
9 flood protection, elevations at one foot or  
10 less. St. Charles Parish. Eighty percent of  
11 the parish is wetlands. When they finish  
12 their two levee projects that they are  
13 constructing right now, 95 percent of their  
14 population will be behind flood protection  
15 levees today. LaFourche Parish. I just  
16 showed you here you can see the dependence  
17 and the communities needing and using flood  
18 protection to maintain their existence today.

19       It's also interesting to remember  
20 and see photos like you see outside on the  
21 door here places like Leeville essentially  
22 not too many years ago, in the 1920's.  
23 That's not that long where you see pictures  
24 of Leeville, people sitting in the middle of  
25 cotton fields and citrus groves. Those are

1 all testaments and history that is very  
2 informative to use and to have to meet those  
3 challenges that we see today.  
4       People in this audience live this  
5 reality every day, and I respect and admire  
6 every one of you for your commitment to face  
7 these challenges. Accuracy is everything.  
8 Centimeters and millimeters are the measuring  
9 stick we have to use in this coastal  
10 challenge. Relying on the benchmarks that I  
11 just showed you some examples of does not  
12 serve this state nor any of the coastal  
13 parishes. NOAA wrote this in a report to  
14 Congress about three years ago. Since then  
15 the first year of funding and the continued  
16 funding that we have provided to the Spatial  
17 Center has gone to create a statewide network  
18 of GPS reference stations called CORES,  
19 Continuously Operating Reference Stations, to  
20 support the state in surveying, engineering,  
21 restoration, and flood protection work and  
22 all other infrastructure research efforts  
23 with a new generation of position, for  
24 satellites, for GPS faced positioning. We  
25 don't own CORES. They are your CORES. It's

1 your spatial center, and this is a network  
2 actually being maintained right here by the  
3 campus at LSU.

4         It's clearly fortuitous, though, I  
5 will actually say that it's a master stroke  
6 of President Jenkins in the fact that his new  
7 chancellor that he just hired is from NASA,  
8 and that there is very few people that I even  
9 know of would appreciate what satellites can  
10 do for this country or for the world, so I  
11 congratulate you on that, but it is also a  
12 way of finding a more reliable and accurate  
13 way to support our programs, all of our  
14 programs here in the room, the parishes and  
15 the state, with better and accurate  
16 positioning. The key here is elevations,  
17 knowing it and having the ability to reliably  
18 put it into your programs. Are elevations  
19 low today? Yes. They are very much so. We  
20 must live and maintain and increase the  
21 structures and support the movement of the  
22 state and the surveying and the engineering  
23 and the restoration of our resources  
24 literally parish by parish. Every one of you  
25 right now is faced with a challenge of going

1 home and making sure that your constituents,  
2 your residents, your neighbors, your  
3 communities or family are going to bed each  
4 night without the fear of flooding. Are the  
5 natural resources in the coastal zone being  
6 changed and lost? Yes, they are. And the  
7 importance of this loss is being seen each  
8 day as we see the environment change before  
9 us. These changes are our growth of open  
10 water conditions that make us more vulnerable  
11 to hurricanes and even minor coastal storms  
12 and surge, the convergence of land elevations  
13 to sea level and the stress of managing storm  
14 water drainage and the movement downward of  
15 critical structures such as evacuation routes  
16 and flood protection levees.

17 All of these are challenges  
18 measured in inches and even less than that,  
19 and each one of them can have immense impact  
20 to the state and almost half its population.

21 No one group -- and I mean this  
22 sincerely because it's a very important  
23 point. No one group, no one program, can  
24 meet this challenge alone, only all of us  
25 working together and with the resources we

1 find here at this institution and across the  
2 state.

3           The last issue I want to mention  
4 to you in living through four hurricanes is  
5 the fact that we have learned lessons from  
6 each one of these hurricanes. One of our  
7 field parties out on the boat found this  
8 floating in the bay one day right after Ivan.  
9 I'm assured by an 11-year-old that it's going  
10 to go through a spa day, new clothes, and  
11 then it's going to be sent back to an  
12 elementary school in Gulf Breeze where there  
13 is a bunch of children that don't have any  
14 toys in their homes to actually go to  
15 nowadays after the hurricane.

16           It is our commitment and it's a  
17 reminder that I have before it goes back to  
18 Pensacola that all the technology and all the  
19 graphs and all the numbers and all the  
20 numerics that we have are just tools, and  
21 that we know that you, you are the ultimate  
22 goal for us to serve in trying to help  
23 protect and pursue and make the programs and  
24 projects and efforts that you are trying to  
25 undertake as successful as possible.

1 I see this as a meeting that the  
2 university has been bold enough and brave  
3 enough to undertake, but I also see this as a  
4 challenge the university is stepping up to to  
5 meet the new realities, and I want to, again,  
6 thank Paul, thank the president, and thank  
7 the university at large for this opportunity  
8 as well. Thank you.

9 (Applause.)

10 DR. PAUL COREIL:

11 Our next presenter is Mr. DeWitt  
12 Braud. DeWitt is director of the Remote  
13 Sensing Laboratory in the Department of  
14 Geography and Anthropology here at Louisiana  
15 State University, and the title of DeWitt's  
16 presentation is "Geographic Information  
17 Systems: A Tool for Addressing Coastal  
18 Challenges."

19 MR. DEWITT BRAUD:

20 Thanks, Paul. Actually I guess it  
21 hasn't been recorded in some of the records  
22 in the university yet, but not long ago I  
23 moved to the Coastal Studies Institute, so I  
24 would like to mention that I am with the  
25 Coastal Studies Institute now.

1           What I would like to illustrate to  
2 you is the power of Geographic Information  
3 Systems, GIS, for visualization or analysis  
4 and for application particularly with regard  
5 to coastal studies.

6           What you are looking at here is a  
7 subsidence map generated with the GIS in the  
8 Venice, Louisiana, area. That's the  
9 Mississippi River there, and these are very  
10 substantial subsidence rates in that area.  
11 What we are going to do is look at a  
12 satellite image of that same area from 1993,  
13 and we are going to advance this forward to  
14 2002. Now, if you look at the maps around  
15 the room provided by John Barras, those are  
16 substantial wonderful maps of land loss in  
17 the state, but when you zoom in, it gets even  
18 more dramatic. If you look in this area here  
19 when we advance to 2002, you will see  
20 substantial land loss over just a 10 year  
21 period. If we move to another region of the  
22 state, in Terrebonne Parish, this is a  
23 satellite image from 1985, we are going to  
24 advance that to 2002, and you will see some  
25 land loss in this area here. So this is real

1 and it's substantial. The satellite imagery

2 really helps us visualize that.

3         This is another satellite image.

4 What we do with satellite imagery is convert

5 it to land/water masks which help us analyze

6 land loss. We take an image like this and we

7 create from it a land/water mask. From that

8 mask, we are able to delineate shoreline, and

9 from the shoreline we are able to actually

10 extract that, and we want to do that. We

11 want to do that to give us the ability to

12 measure distances and perimeters and areas

13 and things of that nature. Also, creating

14 these masks help us look at changes in large

15 areas and help us analyze better the coastal

16 land loss.

17         This is a mask created from 1978.

18 When I say mask, it's just a land/water

19 image. If we advance this now to 2000, look

20 in these areas in here and you will see some

21 substantial loss in those areas. Now, what

22 is going on there is not a retreat of the

23 shoreline. It's a fragmentation. It's

24 turning into an area that is like a sponge,

25 and so we call this broken marsh. So this is

1 indicative of subsidence. It's indicative of  
2 sea level rise, not just a retreat of the  
3 shoreline. We also advance that to 2050,  
4 that is a projection, and you see even more  
5 substantial loss in this particular area.

6         This is an elevation map of the  
7 coast of Louisiana, and the brighter areas  
8 here are higher elevations. Now, what we are  
9 going to do is put a satellite image of that  
10 over the elevation map, and then we are going  
11 to flood the elevations over the satellite  
12 image to simulate a one meter combined sea  
13 level rise and subsidence. This is what the  
14 coast would look like if that happens. A  
15 dramatic different coast for this state  
16 giving a sea level rise and subsidence of  
17 just one meter, which is about as high as  
18 this table right here. There has been a lot  
19 of analysis of land loss. We are looking now  
20 at lost land and comparing areas that have  
21 been lost, degraded marsh, to areas that we  
22 have maintained and we are finding  
23 significant differences, some possibility to  
24 give us a prediction tool.

25         Ivor talked about hurricanes.

1 You're looking here at a GIS image of  
2 hurricanes in the north Atlantic over the  
3 past 100 years, and these are lines, and all  
4 of these lines fill up the north Atlantic.  
5 That yellow line there happens to be  
6 Hurricane Andrew. If we zoom in here to  
7 Louisiana, these are all the hurricanes that  
8 hit Louisiana in the past 100 years. Now, we  
9 can use this as a historical tool, but we can  
10 also use it as a tool to look at current  
11 situations. This could be a current  
12 hurricane and its projected path, and using  
13 GIS we are able to determine all the towns  
14 affected that are in the path, the  
15 population, current population of those  
16 towns, the housing units, and many more  
17 things. This is just a simple example.

18       As you all know and are aware,  
19 Louisiana has an extensive oil and gas  
20 infrastructure. This is a GIS map showing  
21 that infrastructure; pipelines, offshore  
22 platforms, derrick structures, oil and gas  
23 wells, and so forth. It's extensive.

24       What's important here is that, as  
25 Ivor mentioned, as we lose land, surges from

1 hurricanes get worse, and this is a model  
2 showing a Category 3 storm used in the 1950  
3 shoreline that you see here in gray, and this  
4 is a surge with the higher surge areas being  
5 indicated in bright oranges and reds. Now,  
6 that's the 1950 shoreline. If we used the  
7 same model, nothing has changed but the  
8 shoreline, and we advance to a 1990  
9 shoreline, look at what happens to the surge.  
10 It gets bigger and more inland using a  
11 shoreline where we have lost land, and that's  
12 the real shoreline, not a model of a  
13 shoreline. Well, that higher surge and more  
14 inland surge puts this oil and gas  
15 infrastructure at a much greater risk shown  
16 by the darker blue colors here as being the  
17 higher surge, and not only does it put the  
18 oil and gas infrastructure at risk but, of  
19 course, it puts the towns at risk, the  
20 schools, the churches, the hospitals, and the  
21 roads as well.

22       We are working now with much  
23 better elevation data as mentioned by Tim.  
24 This is Airborne Laser Elevation, what we  
25 call LIDAR. This is a LIDAR image here

1 compared to a USGS 7.5 minute elevation map,  
2 and if we zoom in, you will see the LIDAR has  
3 phenomenal detail compared to the old maps  
4 that we have been using. LIDAR is going to  
5 give us tremendous capability. One is for  
6 greater visualization through these surfaces.  
7 Another is it's going to revolutionize our  
8 flood zone maps. It's going to change them  
9 because we've got better elevations, so we  
10 are going to get better flood zone  
11 delineation and we will be able to better  
12 delineate the dwellings and the people and,  
13 of course, the cost of this in flood zone  
14 regions.

15       This is the satellite image of the  
16 New Orleans region. We are going to zoom in  
17 to New Orleans, and another thing these  
18 elevations allow us to do is to -- we can  
19 take the satellite image and what we call  
20 drape it over elevation and tilt it up, and I  
21 think most of you have heard of the bowl  
22 effect of New Orleans. There it is. This is  
23 greatly exaggerated, but it illustrates  
24 clearly how New Orleans is surrounded by  
25 water, and the water is at a higher elevation

1 than the city. In fact, this is all below  
2 sea level.

3         These are just a few applications  
4 for coastal type activities, and there are  
5 many more that we don't have time to  
6 illustrate to you, but I do need to mention  
7 this, that a lot of the data that we have  
8 been talking about here is accessible at the  
9 Atlas website at LSU that you can download  
10 the data, but you should know -- and you can  
11 use it with your laptop GIS or your desktop  
12 GIS systems, but you should know that there  
13 is a revolution going on in GIS right now,  
14 and that is that you can use GIS online  
15 without having to download data, without  
16 having to install a GIS on your computer.  
17 You can use the data and the GIS technology  
18 online, and it's relatively simple to do.

19         This is an online map and  
20 application with DEQ where they have plotted  
21 mercury sites using their online GIS. This  
22 is one with DOTD where they are showing water  
23 wells and road conditions and traffic  
24 information. This is one with Natural  
25 Resources showing the oil and gas activities

1 in the state. That's called Sunrise. This  
2 is one at LSU in the Coastal Studies  
3 Institute, the WAVCIS System, which reports  
4 realtime wind and wave patterns along the  
5 coast. These are all accessible to the  
6 public and to you.

7       This is the latest on the block  
8 called Louisiana Map. It's a geospatial  
9 portal to governmental services. It's just  
10 been started. It's going to be built on.  
11 Louisianamap.gov is the way to access that.

12       This site here has links to all  
13 the other sites that I just mentioned. If  
14 you go here, you can get to everything else.

15       I just want to mention here real  
16 quickly that GIS is an enormously versatile  
17 tool. It has got unlimited potential.  
18 Cities are using it for improving services.  
19 It's being used in decision making, voting  
20 districts as an example, planning for  
21 schools, emergency response and oil spills  
22 and all kinds of other emergency response,  
23 transportation planning and analysis,  
24 identifying patterns of crime, and here is an  
25 example where we are showing a population

1 shift in Terrebonne Parish between 1990 and  
2 2000 using the latest census, and this isn't  
3 confirmed. We would have to make sure this  
4 is correct, but there appears to be a  
5 population shift to the north in Terrebonne  
6 Parish in the last 10 years, and no GIS would  
7 be complete without helping fishermen. I'm  
8 sure a lot of you are fishermen out there,  
9 and we have an online GIS at Louisiana Map  
10 where you can locate boat launches and  
11 marinas all over the state. That's free to  
12 use, and it even has pictures on it.

13 UNIDENTIFIED SPEAKER:

14 Where's the fish?

15 MR. DEWITT BRAUD:

16 That's coming. Hopefully we are  
17 getting the point across in just 10 minutes.  
18 GIS is essential for planning, analysis,  
19 management and decision making relative to  
20 coastal lands. Those of us working in the  
21 coastal areas use it constantly. It's a  
22 powerful and immensely versatile tool with  
23 unlimited geospatial applications. Several  
24 parishes and localities, some of you out  
25 there right now currently have very

1 sophisticated GIS capability. Some of you  
2 may not, and we have worked with some of you.  
3 You should know that there are free online  
4 resources that I have already mentioned and  
5 that LSU offers GIS training, spatial data  
6 sharing, facilities, technology, outreach,  
7 and houses the Louisiana Geographic  
8 Information Center at this web address here,  
9 and all of this, of course, is just the tip  
10 of the iceberg. Thank you very much.

11 (Applause.)

12 DR. PAUL COREIL:

13 We have a final presentation under  
14 the panel confronting the scientific  
15 realities of coastal land loss, Dr. Rex  
16 Caffey. Rex is our specialist in coastal and  
17 wetland resources at LSU AgCenter and Sea  
18 Grant, and the title of his presentation is  
19 "The Evolution of Marine Extension and  
20 Socioeconomic Research."

21 DR. REX CAFFEY:

22 Thank you, Paul. I was asked to  
23 round out this panel by talking about two  
24 areas that I think are very closely related,  
25 one is very old and one is somewhat new,

1 marine extension, and this new disciplinary  
2 of application, socioeconomic research for  
3 coastal research, coastal issues.

4         The reason they are similar is  
5 they both deal with people, and if you think  
6 about the coastal zone of Louisiana, the  
7 original stakeholders are the commercial  
8 fishermen, no doubt, and that's who we have  
9 been working with over the years. This is a  
10 graphic of their productivity from 1950 to  
11 2000. If you put a curve to this, what you  
12 see is that there may have been a peak  
13 perhaps somewhere around late 1980s, early  
14 1990s. It's also indicative of what we have  
15 been doing. It's sort of a time line of  
16 where Marine Extension has been. You heard  
17 in the opening comments this morning that the  
18 Louisiana Sea Grant was established in 1968,  
19 and our Marine Extension Program is a  
20 partnership with the AgCenter and Sea Grant  
21 to have state specialists and in-parish  
22 agents to work primarily with commercial  
23 fishermen. That's what we did the first 25  
24 years of our existence. What were we doing?  
25 Well, we were enhancing existing fisheries,

1 exploring ways to get into new fisheries. So  
2 primarily it was about commercial fisheries,  
3 but in the last few years, the last 15 years,  
4 we have been in a new era. One of the things  
5 that has driven this diversification of our  
6 programming is the fact that we have seen  
7 about a 40 percent reduction in the  
8 commercial fishing fleet. In other words, we  
9 have seen about a 40 percent reduction in our  
10 base constituency.

11         Why is this happening? You heard  
12 a lot about land loss today. I can assure  
13 you that land loss is a concern, but that's  
14 not what is happening here. This is  
15 globalization. This is free trade. This is  
16 imports. It's the same thing that has  
17 happened in agriculture, manufacturing, and  
18 pretty much any industry in the United  
19 States. We are having to face that  
20 competition. If we don't have a competitive  
21 advantage, we are going to see this, and  
22 that's not to say that habitat concerns are  
23 not an issue. Consider this curve by  
24 Browder. He developed this in '85 and again  
25 in '89 with others, and basically he took

1 some existing land loss data and some  
2 simulators and projected land loss data and  
3 he established a ratio from land to water.  
4 What he showed was that at some theoretical  
5 maximum, he predicted somewhere around 2000,  
6 the amount of edge-habitat was going to reach  
7 a maximum in Louisiana, and by the year 2050  
8 would be in a precipitous decline.

9         So while fisheries decline or the  
10 decline of our constituent base in fisheries  
11 may not be related now to this, this doesn't  
12 bode well for the future. The question is  
13 can a system sustain itself if it's consuming  
14 it's on mass? Or to use an economic analogy.  
15 If you were to have a bank account and  
16 started no longer living off interest but  
17 actually consuming the principal, could you  
18 maintain that for very long? To extend this  
19 financial analogy, the investment in our  
20 natural capital has been these diversions,  
21 these reintroductions of Mississippi River  
22 water to reinforce that natural capital,  
23 which is our coastal wetlands, and let's be  
24 clear. These were advocated by, promoted by,  
25 and sought by commercial fishermen because

1 they saw the long-term dividends that these  
2 would produce to coastal fisheries. The  
3 short term, as you all know, has been very  
4 problematic. We are asked in the Marine  
5 Extension Project, our agents are asked  
6 constantly, do these things negatively affect  
7 fisheries? And the answer is yes and no and  
8 maybe. It depends. It's all of the above  
9 depending on species, time of year, flow  
10 rates, management, and a variety of other  
11 short-term factors. The long-term is clear,  
12 though. You only have to look at the history  
13 of our estuarine productivity to know or the  
14 history of a project like Caernarvon to know  
15 that these systems are net beneficial to  
16 coastal fisheries.

17       So the bigger question is what are  
18 they doing to restore and maintain coastal  
19 land? And unfortunately what I have learned  
20 is they are doing, under the current  
21 management regime, very little.

22       So the question is can we use  
23 these projects to sustain coastal Louisiana?  
24 If you read that gigantic 1,500 page LCA  
25 study that came out last year, one thing that

1 you know is that throughout that study they  
2 are making this one point. The  
3 sustainability of our coastal zone is river  
4 dependent. The biggest tool in our  
5 restoration toolbox is that river. Let's  
6 look at Caernarvon, look at Davis Pond. Over  
7 the 15 years at Caernarvon and the few years  
8 that Davis Pond has been on line, they have  
9 averaged less than 15 percent of their  
10 capacity, of their designed maximum capacity,  
11 and what our agents like to do when they talk  
12 about this issue is point out that there are  
13 a lot of reasons, engineering concerns,  
14 additional studies needed for pollution  
15 effects, distribution and flow, potential for  
16 eutrophication of hypoxia, but the main  
17 challenge, the main limitation here, is  
18 people, socioeconomic concerns. And although  
19 the Supreme Court threw out those oyster  
20 lawsuits, I don't think the coast is  
21 necessarily clear for restoration. We are  
22 going to continue to fight this, especially  
23 when we talk about replumbing in a major way  
24 the lower half of coastal Louisiana.  
25 So we say that the restoration of

1 our coastal wetlands and the sustainability  
2 by Extensions, sustainability of coastal  
3 Louisiana, is primarily a socioeconomic  
4 issue, but unfortunately for too long we've  
5 seen this as a biophysical crisis, and so we  
6 have had a biophysical response, but in the  
7 last five years I'm glad to see some of our  
8 counterparts in the biophysical sciences have  
9 begun to recognize that we have to put dollar  
10 values on these things to make a logical  
11 national argument. So you see calls for  
12 economic impacts for things like Port  
13 Fourchon and lower river and hurricane  
14 vulnerability of New Orleans, and this is a  
15 clue or a trend that we picked up on from the  
16 Florida Everglades.

17       When they got the Comprehensive  
18 Everglades Restoration Program, CERP, finally  
19 passed in 2000, it was not just predicated on  
20 ecological concerns, but on economic issues,  
21 water primarily.

22       So what about the Everglades? We  
23 recently completed a comparative analysis,  
24 coastal Louisiana and the Florida Everglades,  
25 and what we found is that we compared very

1 favorably on a number of resource levels.  
2 Unfortunately, it's not just about economic  
3 and ecological resources. What we concluded  
4 is something you probably already knew. It's  
5 more about political influence, it's about  
6 name recognition, it's about cost sharing.  
7 If nothing else, it's about good timing.  
8         Consider what happened when CERP  
9 was funded in 2000. We had an administration  
10 that was a little bit different mindset when  
11 it comes to large scale ecosystem restoration  
12 projects. We had a budget surplus. We were  
13 at peace. We are dealing with a group that  
14 had a 50 percent cost share. Compare that to  
15 just last year. Different administration,  
16 huge budget deficit, we are at war, and we  
17 only have right now about a 15 percent cost  
18 share history. So one of the things we  
19 conclude, and you heard it already this  
20 morning, is how do we get our ante up? How  
21 do we get our match up for coastal  
22 restoration in a major way? And, of course,  
23 petroleum royalty payments are the only way  
24 to do that.  
25         If you look at the migration of

1 oil and gas production from inland to  
2 coastal, coastal waters to offshore, what you  
3 see is a history of declining revenues, state  
4 revenues, and right now the six billion or so  
5 that the feds receive in federal OCS  
6 revenues, of that we receive less than one  
7 percent. If that production were in state  
8 waters or on our coast, coastal properties,  
9 the match would be 50 percent. This is the  
10 issue. What is our current economic reality?  
11 Coast 2050 Report said -- in 1998  
12 it was published -- we need an estimated \$14  
13 billion not to restore a thing, just to hold  
14 the line. Just to stop the bleeding where we  
15 are today. What do we have? CWPPRA, as good  
16 as it has been for small scale projects or  
17 medium scale projects, it's still only 10  
18 percent of that amount. So this kind of  
19 harkens back to that question earlier, "Can  
20 we sustain coastal Louisiana?" And I would  
21 submit to you, under our current budget  
22 constraint, we can not. It doesn't mean we  
23 are not going to continue to pursue large  
24 scale funding. Of course, we are. But what  
25 is our current economic balance? What do we

1 have to work with? And so you will see I  
2 have underlined all because there are parts  
3 of coastal Louisiana that we can sustain, and  
4 identifying which parts we can sustain is not  
5 just an ecological and environmental  
6 exercise. It's an economic one.

7         We need to apply economics as a  
8 discipline to this issue more and more. We  
9 need to say "How are we allocating our scarce  
10 funding resources, our scarce university  
11 resources, to address this coastal land loss  
12 issue?" And the good news is this is not a  
13 novel application. If you look back to  
14 something like CWPPRA and its legislative  
15 mandate, you will see we have a mandate for  
16 economic efficiency.

17         Coastal wetlands restoration  
18 projects in Louisiana will be selected based  
19 on cost efficacy or cost effectiveness, and  
20 this is not only true for CWPPRA but for WRDA  
21 and any large scale ecosystem restoration  
22 initiative the last 50 years. But here's the  
23 question. Are we doing this? How important  
24 is cost efficacy when we select projects?  
25 This is a question that we are starting to

1 address at the new center at LSU called the  
2 Center For Natural Resource, Economics and  
3 Policy. This is a cadre of Extension and  
4 Research professionals, mostly natural  
5 resource and environmental economists, but  
6 also some legal scholars from the departments  
7 on campus and off campus, state agencies, Sea  
8 Grant Legal Program, and one of the things we  
9 are starting to do is look at this issue of  
10 cost efficacy. Are we getting the bang for  
11 our restoration dollar, the bang for our  
12 buck? Another issue is value. What is the  
13 value of an acre of coastal Louisiana  
14 wetlands?

15         We completed a study of Elmer's  
16 Island last year, and one of the emergent  
17 things that we didn't expect to find that was  
18 kind of interesting is that that value  
19 changes dramatically depending on the context  
20 in which you asked the question. If it's  
21 restoration, we are willing as a state at  
22 least to propose spending many, many  
23 millions, but for recreation and for other  
24 uses, the value is comparatively low.

25         Resource economists have always

1 been about fisheries and allocation and  
2 conservation and management of those  
3 fisheries, and we continue to do that type of  
4 work, but as we start to really put those  
5 dollar values, those dollar signs on coastal  
6 Louisiana, we are going to need more  
7 economists to address linkages and economic  
8 impacts and trends associated with coastal  
9 land loss, and we will need our legal  
10 scholars and our policy scholars to address  
11 things like private property issues, public  
12 access, and the list goes on.

13         So the main point is that we have  
14 in the AgCenter and Sea Grant and I think as  
15 a university as a whole a mandate for a  
16 two-way communication between Research and  
17 Extension. We are starting to martial the  
18 forces, the limited forces I might add, for  
19 resource, economics, and policy under CNREP,  
20 but as good as our sights might ultimately be  
21 and is now, it's useless if we can't  
22 communicate it. So that harkens back to this  
23 new era of Marine Extension. We have worked  
24 very closely with these guys in the past.  
25 Many of them are here today. We are going to

1 continue to do that. We will continue to  
2 move beyond the traditional constituencies of  
3 fisheries, science and seafood into things  
4 like ecosystem and wetland restoration,  
5 coastal and community economic development,  
6 recreation and tourism, and many things you  
7 have heard already today about hurricanes,  
8 natural hazards, GIS, climate change.

9         Finally, this two-way relationship  
10 has to be enhanced with an engaged  
11 communication with coastal communities, and  
12 that's really the purpose of this meeting  
13 today.

14         With that said, I will conclude.

15         (Applause.)

16         DR. PAUL COREIL:

17         I know we all share an  
18 appreciation for the panel and the work they  
19 put in putting these talks together. Let's  
20 give them a hand for the great work that they  
21 have done. I did see that we had two state  
22 legislators here, Senator Reggie Dupre is  
23 here, and he's part of our commission, and I  
24 think Representative Wilton Pierre is here  
25 and he is also on the commission. They have

1 been here all day and they are going to stay  
2 throughout the day. We appreciate that.

3         Are there any other legislators  
4 here that we missed? We appreciate you all  
5 coming, but you all have been there all along  
6 and have been part of the commission as well.

7         Now we are going to get into the  
8 part where we need feedback from you. We  
9 have asked Mr. Berwick Duval, who is also a  
10 commission member, the Governor's Advisory  
11 Commission on Coastal Restoration and  
12 Conservation.

13         Berwick will be our moderator.  
14 Berwick is a resident of Terrebonne Parish  
15 and has expressed keen interest as a  
16 volunteer and a leader along the coast in  
17 helping us address these issues, and we are  
18 really pleased that he has agreed to moderate  
19 the panel and the interaction of our audience  
20 here today and some of the things you have  
21 heard today and some of the questions you may  
22 have written down while you listened to their  
23 talks. I will turn it over to Berwick.

24         MR. BERWICK DUVAL:

25         Good afternoon. I'm sure glad it

1 wasn't gloom and doom. I'm feeling real good  
2 about myself right now, but seriously, I  
3 think Governor Blanco and King -- where are  
4 you, King? -- put it very well. The fight  
5 for funding in Washington is ongoing. We  
6 have made significant progress, and we are  
7 going to win that battle, and we are going to  
8 get the funding and we are going to address  
9 this problem, but in the interim, we know  
10 that our city and parish officials on the  
11 coast are living with the problem now. Every  
12 time I go home from one of the meetings, I  
13 get calls from my people telling me, you  
14 know, "What the heck are you doing out there?  
15 We are having these problems right now," and  
16 my hat is off to Dr. Jenkins and Dr. Coreil  
17 for putting this on because they feel that  
18 they had a moral imperative that the  
19 university address your concerns and what can  
20 the university do to help you right now. We  
21 are not giving up on the battle, but we know  
22 you need help now and what can they do to  
23 help you. In other words, "I'm from the  
24 government and I'm here to help you."  
25       So with that, these are the ground

1 rules. By the way, this is a university and  
2 it's class and so they gave us ground rules.  
3 These are they that we have to abide by. I  
4 know Reggie Dupre is here, so that's pretty  
5 much out of the window anyhow.

6 I'm going to pick on Charlotte  
7 Randolph first. She's my neighboring parish  
8 president who bends my ear after each  
9 commission meeting.

10 Charlotte, after the presentation  
11 by these distinguished gentlemen, what is on  
12 your mind about what can the university do to  
13 help LaFourche Parish?

14 MS. CHARLOTTE RANDOLPH:

15 With all due respect to King, I  
16 would like to say that there is going to be a  
17 lot of frustration today. I will preface it  
18 with that. I passed in my living room on  
19 Saturday and glanced at the TV and it was on  
20 the Weather Channel, and I saw Bob Twilley,  
21 and I sat down and I said, "I guess I better  
22 pay attention. Bob Twilley is on." I  
23 couldn't tell you who is in the Super Bowl  
24 right now, but I could tell you who Bob  
25 Twilley is. I am telling you how our lives

1 are going right now.

2           Our frustration, again, is that we  
3 need some very, very short-term projects. I  
4 have not heard anything from the scientific  
5 panel or the academic world about anything  
6 that we can do now. One more time we are  
7 hearing from people about what will happen 20  
8 years from now. I sit among my colleagues  
9 here, and that's the frustration. We are  
10 looking for very short-term projects, and we  
11 are not hearing that now.

12           Maybe some of these people would  
13 like to address that that there is something  
14 on the horizon.

15       MR. BERWICK DUVAL:

16           Dr. Twilley, I think she picked  
17 you out on that one. She has called you out.

18       DR. ROBERT TWILLEY:

19           The presentation that I made is  
20 that we really have to put this whole program  
21 in perspective of time and changes and what  
22 the expectations are, and a lot of the  
23 frustration is because a lot of us who talk  
24 about this problem raise the bar of  
25 expectation every time we give these

1 presentations, and what has happened, though,  
2 is -- I can just tell you that I'm here,  
3 Denise is here. There's a lot of people in  
4 this program that has been involved in the  
5 science and engineering community. I've seen  
6 a complete revolution related to I think the  
7 contribution of science into the problem and  
8 what we want to do in the future.

9       Let me give you an example. We  
10 have this thing called adaptive management,  
11 and you are talking about short term. We are  
12 now thinking related to this concept of  
13 short-term triage and long-term  
14 sustainability, and there are new projects  
15 right now on the table that are relative to  
16 sediment use and mining the sediment out of  
17 the river, displaying it in certain areas of  
18 the coast related to its short-term impact,  
19 and these long-term projects, such freshwater  
20 diversion, which we all agree are 10 year  
21 horizons, right, but we are going to need  
22 those to sustain what we do in the short  
23 term, and so this sort of dual approach of  
24 short-term needs and immediate response, I  
25 think we have seen changes in the way we have

1 approached the problems.

2           The problem is I can't get up here  
3 and show you exactly the funding or the  
4 blueprint by which those projects are going  
5 to go on the ground in the next year, and  
6 that's your frustration. And when we spend  
7 large sums of funding that's going to be  
8 required to change the system, that's just  
9 the nature of the beast. All I can tell you  
10 right now is that we really have developed, I  
11 think, these blueprints and changes in  
12 paradigms and the way we think about this  
13 whole problem that I find are very  
14 encouraging. Look, it gets down to funding.  
15 The nature of the expectation you have  
16 related to how fast we are going to change  
17 this system given the degradation we have  
18 right now with the kind of money that's on  
19 the table I'm going to tell you flat out  
20 doesn't exist.

21           To build the geomorphic features,  
22 to build the land back the way you want it as  
23 far as expectations is expensive. If you  
24 look at the billions of dollars that went  
25 into federal projects to get us where we are

1 today and the small amount we are asking to  
2 reverse a huge landscape back into some kind  
3 of accreting net positive process or even  
4 sustaining it is huge.

5       So you are right, you are not  
6 seeing any results that meet your  
7 expectations, and a lot of it is going to be  
8 challenges related to is the funding  
9 available commiserate with the problems and  
10 the solutions that we put on the table, and  
11 until we see that, I think we really have a  
12 challenge.

13       MR. BERWICK DUVAL:

14       And that brings up a question I  
15 want to put out on the floor. Considering  
16 that answer, as long-winded as it may have  
17 been, okay, you are a parish president, you  
18 are a parish administrator. We know we live  
19 at risk of hurricane. That's just something  
20 we have to deal with. We know we have  
21 evacuation problems, law enforcement  
22 problems. How can the university interact  
23 with the parishes to develop a comprehensive  
24 evacuation plan? That's just a thought, the  
25 socioeconomic conditions that Rex was talking

1 about. And I don't know. Maybe that's being  
2 done. Any parish people out there have any  
3 thoughts on that? How the university could  
4 help your parish deal with evacuation or in  
5 the event, Dr. van Heerden, we have an  
6 epidemic during a hurricane of measles?

7 Any thoughts? Any parish people  
8 out there? Yes, sir?

9 MR. AARON BROUSSARD:

10 My name is Aaron Broussard. I'm  
11 the parish president of Jefferson Parish.  
12 Jefferson Parish is doing several studies,  
13 and I'm curious as to whether or not the  
14 universities are available to help us with  
15 that. We are doing an independent study on a  
16 way to improve our evacuation plan. I know  
17 the state is looking at an overall evacuation  
18 plan, but we are also looking at internally  
19 what we should be doing. We are also looking  
20 at a study about our zoning, how we can use  
21 our police powers to address coastal erosion  
22 and making sure that we are exercising and  
23 maximizing our police powers to the highest  
24 degree in regards to allowable uses, in  
25 regards to permitting process, in regards to

1 mitigation that may be required when people  
2 come and trench through our parish, whether  
3 it be for oil, exploration or delivery, et  
4 cetera.

5         So what I'm curious about is is  
6 the university opening the door for us to  
7 partner with you? Is that what you are  
8 encouraging us to do, take the people that  
9 are studying these various components and we  
10 come to the university and gather from you  
11 what you are eligible to give us?

12       MR. BERWICK DUVAL:

13         Let me ask the panel that. I  
14 think it's an excellent question, a two-part  
15 question.

16         First, on evacuation. Obviously  
17 depending on the direction from which a storm  
18 is coming, all the parishes are somewhat  
19 combined in the evacuation. For the last  
20 time everybody was coming through Houma to  
21 get to Lafayette and I couldn't evacuate.

22         So is that something that the  
23 university is holding a branch out? Dr. van  
24 Heerden?

25       DR. IVOR VAN HEERDEN:

1           We do have somebody within our  
2 Public Health Center, Dr. Brian Rochon, who  
3 is a transport engineer, and he is working  
4 with DOTD. He has different modeling  
5 capabilities to look at evacuation, and he  
6 has made a number of recommendations to DOTD  
7 as a response to his research about improving  
8 the contra lanes and stuff like that.

9           So, yes, we do have folk who are  
10 involved and can get involved.

11       MR. BERWICK DUVAL:

12       Tim?

13       MR. TIM OSBORN:

14       I wanted to also bring up because  
15 Aaron brought up an excellent issue was the  
16 amount or type of resources available from  
17 here to the coastal parishes. The issue that  
18 has really been plaguing a lot of people is  
19 the uncertainty of what the evacuation routes  
20 had in the way of capability to be able to  
21 function during a storm or levees in terms of  
22 actually truly holding back a storm surge. A  
23 lot of the work we have been doing with the  
24 university here I think has been very key.  
25 December saw the first meeting of the Levee

1 Board's Association of Louisiana in New  
2 Orleans in which the Corps of Engineers is  
3 working with us with the universities was  
4 able to really stand up and candidly say that  
5 most of their levee projects, flood  
6 protection projects in south Louisiana, had  
7 been designed, constructed, and maintained  
8 without any consideration to subsidence or  
9 sea level rise. So if you have a 40 year old  
10 levee surrounding say the East Jefferson  
11 Levee District and it has been affected by  
12 land motion for, you know, that many decades,  
13 then you can imagine -- you know, obviously  
14 Mr. Broussard, a lot of his parish  
15 administration, are coming forward I think  
16 very correctly by saying that probably these  
17 elevations of these critical infrastructures  
18 just aren't there. And so in terms of a  
19 resource, one of the things that we have had  
20 a lot of problems and that a lot of parishes  
21 have experienced is the doubt, where  
22 differing groups, federal agency, Corps,  
23 where the parish, where a state agency like  
24 DOTD will come to the table to talk about a  
25 project and each has a different view of what

1 those elevations really are of the structure,  
2 if it's a levee project or if it's a highway  
3 evacuation route.

4           This is the resource that the  
5 university can help provide that unify a set  
6 of information where no one is getting  
7 together arguing about what the elevation  
8 really is, but saying now that we all agree  
9 and we all have one common resource giving us  
10 that information, then we can use our  
11 discussions fruitfully to say "What do we  
12 do?" And that's very important.

13       MR. BERWICK DUVAL:

14           Let me follow up with Mr.  
15 Broussard. Would it be appropriate then for  
16 the university system to have another one of  
17 these meetings with the transportation people  
18 from each parish and see if they could help  
19 with I assume the State Police, your  
20 sheriff's people, and help develop a  
21 comprehensive plan?

22       MR. AARON BROUSSARD:

23           I think maybe at the outcome, one  
24 of the outcomes of this meeting, is that once  
25 our parish presidents have spoken and once we

1 have had our candid conversation, easily I  
2 think a dialogue could be created that would  
3 be maybe more specific to the now. I think  
4 what Charlotte was saying is we have to  
5 develop an agenda of the now at the local  
6 level. We recognize the federal initiatives,  
7 we recognize the state initiatives. What can  
8 the parishes be doing right now to address  
9 the portion of this dilemma that we are  
10 dealing with? Is it zoning studies? Is it  
11 elevation studies? Is it evacuation  
12 upgrades? What is the list of things that we  
13 could be doing? And of the things that we  
14 could be doing now, then I think it would be  
15 very germane to have another session like  
16 this with the parish governments that are the  
17 most impacted about the now. I think that  
18 would be a good suggestion.

19 MR. BERWICK DUVAL:

20 And the second point he raises is  
21 zoning. I know Terrebonne Parish, Mr. Levron  
22 and Mr. Schwab, would you like to say  
23 something on that?

24 MR. DON SCHWAB:

25 Don Schwab, president of

1 Terrebonne Parish. My only concern and the  
2 question to either the panel or if anyone  
3 here is from DOTD is that I know after the  
4 hurricane President Broussard and I think  
5 Mayor Nagin had a meeting with people in  
6 Baton Rouge about evacuation routes. I know  
7 Terrebonne Parish was not called, and I don't  
8 think LaFourche was called either. I think  
9 we need to be involved in those decisions  
10 because I will tell you, Ladies and  
11 Gentlemen, for Ivan, when they evacuated New  
12 Orleans on I-49 west, we were in a death trap  
13 in LaFourche and Terrebonne Parish. We had  
14 no way to get out. If it wouldn't have been  
15 for Old Highway 90 through Gibson, some of  
16 the people couldn't get out of Houma.

17 MR. BERWICK DUVAL:

18 I think what we are hearing is if  
19 the university is offering, that would be a  
20 great follow-up seminar or talk is about a  
21 coordinated evacuation.

22 MR. TIM OSBORN:

23 I obviously can't speak for DOTD,  
24 but Mr. Schwab brings up a tremendously  
25 important point. In the earlier presentation

1 I gave is the fact that everybody is in the  
2 same position. DOTD was strained minorly by  
3 something that just -- I mean, we are talking  
4 about six months with all of these events all  
5 at one time, and DOTD basically was having  
6 almost literally cascade failure of their  
7 transportation system with the evacuation  
8 from Ivan, you know, the fear that another  
9 storm was coming to come winging at them.

10 I could not possibly imagine that  
11 DOTD would not welcome a chance to be part of  
12 a comprehensive effort looking at what kind  
13 of issues will be facing everybody as these  
14 kind of events happen in the future, and,  
15 again, June 1st is the start of the next  
16 hurricane season.

17 MR. BERWICK DUVAL:

18 And just on a personal note, my  
19 mother was just recently placed in a nursing  
20 home, and I didn't know that they closed the  
21 nursing homes down for Ivan and then you have  
22 to deal with evacuating the loved ones from  
23 nursing homes. That was a new one to me.  
24 I'm sure a lot of other people may have known  
25 that. That's, again, when you are talking

1 about evacuation, those are things that I'm  
2 sure the parishes could use some help on.

3 Yes, sir, Dr. DeWitt?

4 DR. DEWITT BRAUD:

5 One thing I know that DOTD is  
6 doing is aggressively mapping areas of  
7 evacuation routes that get flooded during  
8 some of these storms, because even though it  
9 may be an evacuation route, it's no good if  
10 it's flooded and it's impassable, so they are  
11 aggressively mapping those using GIS right  
12 now.

13 MR. BERWICK DUVAL:

14 Let's talk about the other issue.  
15 Mr. Broussard brought up zoning. That is a  
16 very politically sensitive issue, which you  
17 know a lot of the parish presidents may not  
18 want to talk about, but what about it? What  
19 does the university have to offer the  
20 parishes on that? Dr. van Heerden?

21 DR. IVOR VAN HEERDEN:

22 Well, I think we have the tools  
23 that can help you understand risk, and risk  
24 is one way to bring in a zoning code. I  
25 fully understand that zoning is not very

1 popular, but I think if you can indicate to  
2 folk that this is a very risky area and that  
3 your likelihood of getting a 30 year mortgage  
4 is low, whatever, will enable you to come up  
5 with some of the zoning. We have the tools  
6 between the GIS, this new LIDAR data, and  
7 some of these storm surge models.

8 I just want to address one thing  
9 about what could we do now. I put up an idea  
10 there. It's an old idea, operation block at  
11 the Rigolets. In my view, that's something  
12 that perhaps all the parishes that surround  
13 Lake Pontchartrain could get together and  
14 jointly fund. We have the tools to determine  
15 the morphology, when it will even work. We  
16 have to be cognizant of the fact that this is  
17 an estuary and one needs to design anything  
18 so that you don't impact the ingress and  
19 egress of organisms with the various tides.

20 Potentially this is something the  
21 parishes could get together and jointly fund  
22 and not wait for the larger federal --

23 MR. BERWICK DUVAL:

24 Let me explain that. That's a  
25 block at the Rigolets, a hydrologic block, or

1 what type of block are we talking about?

2 DR. IVOR VAN HEERDEN:

3 The initial idea would be just a  
4 passive structure so there's no gates. It's  
5 just to reduce the cross-sectional area, but  
6 we do have the technology in Louisiana to  
7 build floodgates, so that is what was needed.  
8 Anybody who goes to Europe, you go to London,  
9 you could go look at the big gates on the  
10 Dutch-German coast. If you look at something  
11 like that and if it was just simply sheet  
12 piling, you know, that's possibly a cost that  
13 the parishes could bear themselves and that  
14 way circumvent the long time it takes to go  
15 through the federal process.

16 MR. BERWICK DUVAL:

17 Yes, sir?

18 MR. AARON BROUSSARD:

19 I would just like to respond that  
20 the Regional Planning Commission, they had an  
21 environmental committee meeting recently to  
22 discuss that proposal and to begin the  
23 exploration of the cost of funding that  
24 initiative, but all the parishes that  
25 surround Lake Pontchartrain did, in fact,

1 meet, after your presentation ironically, to  
2 begin to discuss in earnest ways that we could  
3 approach that resolution for that area. I  
4 appreciate your comment.

5 MR. BERWICK DUVAL:

6 Senator Goodwin?

7 SENATOR GOODWIN:

8 First of all, on evacuations. I  
9 agree with Mr. Schwab. The parishes and  
10 communities affected the most did not seem to  
11 be included when the decision time was made  
12 on policy. I talked to the governor right  
13 after Ivan, and I said, "Governor, did you  
14 learn anything on the evacuation attempt?"  
15 She said, "Yes, I did, two things. Number  
16 one, that most of the citizens of Louisiana  
17 do not know the old traditional routes we had  
18 before we had interstate highways and four  
19 lane highways," and I can give you an example  
20 of that. I have a constituent from Lockport,  
21 Louisiana, that told me he left two hours  
22 after his mother and he beat her to Morgan  
23 City because he did not pass on four lane 90.  
24 He passed on the old Highway 182 or LA 20,  
25 which is the old route we had before we had

1 four lane highways. We need to teach our  
2 citizens to go back to the old ways sometimes  
3 when you are trying to get out.

4       Secondly, she said that she  
5 learned that intersections create gridlock,  
6 and that's where one thing LSU could help us.  
7 We are looking at having a north-south  
8 corridor built from the Houma-Thibodaux area  
9 to Interstate 10 and some people are trying  
10 to push this. I think it's a crazy notion of  
11 building a highway halfway between the  
12 Sunshine and the Wallace Gramercy Bridge.  
13 The straightest route to the Interstate 10 is  
14 over the Mississippi River. That's what we  
15 have to do in south central Louisiana. We  
16 may need to bring in some common sense into  
17 this thing. The Wallace Gramercy Bridge is  
18 the least utilized bridge in the United  
19 States of America over the Mississippi River.  
20 Average daily count is 5,000 cars or less.  
21 That is the way we need to get across the  
22 river. Not going in the middle of a sugar  
23 cane field on the westbank of St. James  
24 Parish.

25       Secondly, I'm very, very pleased

1 that finally the message seems to be getting  
2 out. I have heard Windell Curole, Ted  
3 Falgout, Mr. Smith tell me for years that  
4 hurricane protection and coastal restoration  
5 are tied together like a hand and glove, and  
6 now I'm seeing it brought up with the  
7 panelists, and we are very, very pleased to  
8 see that, and as far as elevations, let's  
9 remember one of the main evacuation corridors  
10 for this state is Interstate 55. You all  
11 know the elevations of Interstate 55 when you  
12 get off at the Manchac overpass on the north  
13 shore? Six or seven feet above sea level.  
14 You saw what could have happened, 20 foot of  
15 water. Somebody would have died. That's a  
16 major issue we need to address.

17       As far as the tie in between the  
18 two, several months ago, about 10 or 11  
19 months ago, on the Governor's Coastal  
20 Commission I had some members which were  
21 starting to bring up concerns that we need to  
22 prioritize LCA and maybe forget about other  
23 issues such as hurricane protection, and I  
24 told them, "Please, don't ask me to pick  
25 between my twin problems" because the

1 short-term answer is going to be that coastal  
2 restoration is going to wait because we need  
3 hurricane protection for the very survival of  
4 our area. Morganza to the Gulf Project is  
5 the largest being considered in the United  
6 States right now in the WRDA bill, and so we  
7 need both. Let's not forego flood protection  
8 for that.

9       The last thing I want to mention  
10 is if you all go to [houmatoday.com](http://houmatoday.com) on the  
11 website starting Sunday, and I think today is  
12 the final version, they are doing a series on  
13 Allajeau Charles. That's a perfect example  
14 of a modern day community native Americans  
15 which are going to have to make the decision  
16 to relocate because mother nature will force  
17 the issue, and it's already forcing the issue  
18 because we are down to about 65 families on  
19 this small isolated community, and we are  
20 trying to make some very, very big decisions  
21 on it. That is the modern day example of  
22 what is going on.

23       MR. BERWICK DUVAL:

24       Yes, sir.

25       MR. RAM RAMCHARDRAN:

1 Robert Ramchardran, St. Charles  
2 Parish. Not only we have to worry about  
3 mother nature hurricane coming, we have to  
4 second guess what Aaron Broussard and Ray  
5 Nagin are going to do. So when we declare  
6 evacuation at 10:00 or 11:00 o'clock the  
7 previous night, we want to see how the  
8 existing arteries are going to clog. Stick  
9 our population on the highway for 10 or 12  
10 hours. We just want to keep a few steps  
11 ahead of those big boys. That is a fact of  
12 life. That is exactly what we do.

13 If the Jefferson-Orleans Parish  
14 declare evacuation mandatory, what will  
15 happen to our population, how do we get them  
16 out safely? We keep one pace ahead.

17 Dr. Jenkins, excellent job you  
18 have done trying to put the people together.

19 Two or three things. Number one,  
20 I am involved with the NACO, National  
21 Association of Counties. I was the chairman  
22 of the steering company for manuals, energy  
23 and policies. We did a lousy job all these  
24 75 years to educate the rest of the country  
25 of our population, so I invited people to

1 come and speak at our NACO conference. I  
2 couldn't get a speaker from Louisiana to come  
3 and talk about our population. It's  
4 appalling.

5       Second, I have heard some of these  
6 issues, I've seen some of these slides. I  
7 feel very passionately why are we keeping  
8 quiet? Hats off to you, Gentlemen. At least  
9 you brought the people together, faced the  
10 reality today. I'm not here to make  
11 speeches. The point is simple things we  
12 don't do. Elevation. Tim Osborn was  
13 mentioning. Why we don't use the latest  
14 technology and get a handle on elevation?  
15 Before we thought we are safe with Category  
16 3. Now we are not safe even with a Category  
17 1, because St. Charles Parish has sunk three  
18 feet. (Inaudible). Three feet difference.  
19 4.97 elevation down to 1.96. So we put the  
20 satellite station, and that one, our council  
21 passed that. Now we use the satellite  
22 measurement. It's compulsory. Starting 2005  
23 all drawings, maps, and legal transfer of  
24 titles is based on (inaudible). Not all of  
25 the parishes do the same. Manditorily, at

1 least in the coastal regions, why don't we do  
2 that?

3           Number 2. I heard all of it. All  
4 the problems, economic impact, elevation  
5 impact. What do we do? We build all the  
6 levees, protect all the people. How long are  
7 we going to do it? One of the pictures of  
8 the City of New Orleans you see the bowl. So  
9 what? Twenty years we have a huge levee.  
10 Can we afford to continue keeping up our  
11 mindset, building the levees, protecting the  
12 coastal communities? Is that the best way to  
13 do it? Or should we learn from others, like  
14 the Dutch. Call it quits. Build a wall from  
15 Lake Charles all the way up to the mouth of  
16 the river, the most economical way we can do  
17 it, and protect that population and say we  
18 are going to do our best to protect the  
19 people and the activities beyond.

20           Remember, Gentlemen, everything is  
21 economics. \$150 billion is transferred on  
22 that Industrial Canal. You're kidding  
23 yourself if you allow the west bank of the  
24 Mississippi to wash away. \$150 billion down  
25 the drain. That itself should bring in at

1 least \$4 or \$5 billion to build what we want  
2 to do.

3 By the way, I am also a member of  
4 the Policy Advisory Committee for Interior  
5 Sector 301, OSC, Offshore Continental Shelf  
6 Policy. I sit there. Not a single person  
7 promoting Louisiana. I am present at all the  
8 counties in the country. I make all my  
9 noise. You guys getting all of this \$8  
10 billion from Gulf of Mexico. How much are  
11 you giving to the parishes? None. So I  
12 fight for my parish. Not my parish. All the  
13 counties including Alaska. Why is it we are  
14 not able to use the model they have?  
15 Excellent model. MMS, Mineral Management  
16 Service. If you want to build anything on  
17 the Gulf of Mexico, they prepare it five  
18 years ahead of time. All the experts, all  
19 the oceanographers, the geologists, they  
20 prepare their act together five years ahead  
21 of time before the building takes place in  
22 New Orleans. Why not we do the same thing?  
23 Protect the coastal environment.

24 By the way, I love college  
25 professors. Many of them trained me in

1 different disciplines, but one basic thing is  
2 my department -- I just was mentioning to  
3 somebody here -- geology, oceanography,  
4 botany, every department head is keen in  
5 getting their funding done. If there is a  
6 coastal erosion, first of all, UNO versus  
7 Tulane versus LSU, that goes on for funding.  
8 Once you get over that, we don't have a  
9 unified voice, where the problem is, how to  
10 address this.

11         Dr. Jenkins, can you put together  
12 a coordinated committee to see some policy  
13 expert advice, take it to a department head,  
14 just like MMS does, and they take it to the  
15 secretary and promote it politically in  
16 Congress? Same way if you can create the  
17 advisory panel of all the experts and  
18 consolidate one line of thinking, pass it on  
19 to the secretary, whoever the secretary is.  
20 That's the policy of Louisiana. This is the  
21 funding source.

22         MR. BERWICK DUVAL:

23         We have several volleys here.  
24 Gentlemen, you've got several volleys. One  
25 being the unified voice, which King always

1 talks about, and a scientific one unified  
2 voice.  
3 Dr. Twilley, I know you are doing  
4 some work on a science and technology  
5 committee. If you could give us an update on  
6 that.

7 DR. ROBERT TWILLEY:

8 I think there is a couple of  
9 things that have happened in the last couple  
10 of weeks related to OCS that is very  
11 important, and that is the White House  
12 announced the Ocean Commission, and really,  
13 the source of funding for that was OCS funds.  
14 There is an acknowledgment at the national  
15 agenda related to the problems associated  
16 with the ocean. They have looked at it as a  
17 source of funds, and I think that it's a  
18 window of opportunity that we need to really  
19 take advantage of.

20 Relative to a single voice or a  
21 coordinated effort, I couldn't agree with you  
22 more. It's the biggest challenge when you  
23 look nationally across other large  
24 restoration programs, Everglades, Chesapeake  
25 Bay out in California. As I say, when the

1 chum hits the water, you know, when we do get  
2 the funding and when we start to initiate and  
3 start to generate a single voice that's  
4 coordinated and it has a very distinct --  
5 it's empowering, it has a voice of reason,  
6 and it builds consensus among the various  
7 agencies and universities related to what  
8 needs to be done and the science and  
9 engineering that we want to accomplish. We  
10 have started to do that with the development  
11 of the science office, and we are hoping that  
12 that will be accomplished. It's going to be  
13 a hard task, but we have initiated that. We  
14 hope to have an advertisement for a science  
15 director in the near future. We hope to have  
16 a new science director on board in the next  
17 six months, and this could be a whole new  
18 avenue of maybe trying to engage the kind of  
19 voice that you just described related to how  
20 we move forward representing the science  
21 community.

22 MR. BERWICK DUVAL:

23 Anyone else in the audience?

24 MR. BILL CEFALU:

25 Bill Cefalu, St. Mary Parish.

1 Again, I would like to compliment Dr.  
2 Jenkins. I have always thought that the  
3 higher levels of government should know more  
4 and have more, and we have a GIS system in  
5 St. Mary Parish and then I found out that the  
6 state -- of course, this is a few years back  
7 -- had nothing. So I'm really impressed to  
8 see what you have, and you need to keep that  
9 up. We expect the higher levels of  
10 government -- they should have more money and  
11 do more for us, but I want to talk about the  
12 dollars and cents of things, and it's  
13 something that I think all of us are trying  
14 to do.

15       The PACE organization has been  
16 trying for some time to organize all the  
17 coastal states in the United States who will  
18 all benefit from the WRDA bill to receive  
19 dollars according to certain formulas. We  
20 always get back to economics, and that's  
21 where it's at. It's in Washington, D.C.  
22 They have all the money, and we are not going  
23 anywhere without money, and we can discuss  
24 all the local things we want to, but we need  
25 to go get the money.

1           What we need help with I think  
2 that the colleges can do and the  
3 administration -- the governor is gone and I  
4 plan on sending her an email -- that she  
5 needs to call or send some message to all the  
6 governors in all the states -- and there's  
7 even states I think aren't on the coast that  
8 are going to get monies, because we have been  
9 working in Washington and trying to get all  
10 the votes we can to get the bill passed, and  
11 it seems that you have to make those deals to  
12 make it happen. Some states that have oil  
13 and gas exploration, which are not on the  
14 coast, will still benefit. To get the votes,  
15 we need participation. We are having  
16 problems with adjacent states who have  
17 counties on the gulf coast that aren't  
18 joining the PACE organization. I guess  
19 parishes was a bad name to start with. We  
20 should have said parishes and counties. We  
21 need some assistance. If the colleges could  
22 talk to the other colleges in these counties  
23 in other states to get them involved. We  
24 need to start with the governor going to the  
25 governors. We need to get the colleges going

1 to the colleges, and I think if they would  
2 all understand the plight and understand too  
3 that they are going to get monies also, we  
4 may get a bigger force working for us in  
5 Washington to get that WRDA bill passed and  
6 to see some realization of economics.

7 I understand the local problems,  
8 and I think the state is doing a good job,  
9 and we now have a lot more tools. I know we  
10 can access all of this GIS and everything. I  
11 don't know if we can model it and use it on  
12 our local laptops, but if we could, that  
13 would be nice too.

14 We have to go after the dollars.  
15 We can talk all we want. If we don't get the  
16 money, we are not going anywhere. We need  
17 that assistance for all the PACE or -- if you  
18 want to change the name -- counties to get  
19 involved so we can get the politics straight  
20 to let more people know what the plight is so  
21 we can get the monies, and hopefully that  
22 will help us in Washington even more with the  
23 votes, and the NACO convention this year is  
24 in Hawaii. I think all of you all ought to  
25 come. See if we can get the state to pay for

1 it. I understand that deficit too.

2 Thank you very much.

3 MR. BERWICK DUVAL:

4 What about the idea of cross-

5 pollenization with out-of-state universities?

6 Any thoughts?

7 DR. ROBERT TWILLEY:

8 I can give you one example.

9 Again, Denise is here. CREST was formulated

10 related to a partnership and memorandum of

11 understanding among the universities here in

12 the state to develop coastal restoration

13 technologies. It's two years in existence.

14 It's funded by NOAA, and it has been part of

15 building that kind of partnership. There is

16 membership on that executive committee from

17 the University of Southern Mississippi. It

18 brings Mississippi to the table related to

19 partnering with us these science and

20 technology programs, and Denise, you can talk

21 to her. She's chair of the Technical

22 Committee. Bob Kasner is now the executive

23 director of the executive board among the

24 CREST organization. We also have various

25 professional organizations that we interact

1 with, the Gulf Estuary and Research Society.  
2 Right now a meeting is going on at Tulane  
3 called the Gulf Coast Observation System.  
4 It's an observation system for building and  
5 monitoring programs. Each individual  
6 university is bringing their program to the  
7 table. We have representatives down there  
8 that are participating building a business  
9 plan and building a governance so that we can  
10 build more effective monitoring programs in  
11 the gulf coast. There are partnerships. I  
12 think it is incumbent on us to continue those  
13 and put them in the context of our science  
14 needs of the parish government.

15 MR. BERWICK DUVAL:

16 Cullen, I think you had something,  
17 but before he says that, one of the issues  
18 that is crossing my mind is a disconnect  
19 between the parishes and the universities,  
20 which is what this seminar I think is to  
21 bridge. We didn't know that, what you just  
22 told us. That's a good thing to know. I  
23 think the parishes may could use that  
24 politically if they are involved in the  
25 process, and I think that's what this is for.

1 DR. ROBERT TWILLEY:

2 All forecasting, all of the needs  
3 that we have related to our environmental  
4 problems, is predicated on good observations.  
5 Everyone in this room knows information is  
6 power related to the vision for the future,  
7 and it's underfunded, good observation  
8 systems in coastal environments, and  
9 particularly underfunded here where the  
10 largest national problem exists, and that has  
11 got to be because we are just not doing  
12 something right.

13 I worked on the Chesapeake Bay  
14 and, you know, a little leaf of hydril shows  
15 up in the Chesapeake Bay and they have got a  
16 multimillion dollar program out there taking  
17 care of it. It really is where this voice,  
18 as everyone has been talking about, is very  
19 important.

20 DR. IVOR VAN HEERDEN:

21 Can I make a comment?

22 MR. BERWICK DUVAL:

23 Sure. Go ahead.

24 DR. IVOR VAN HEERDEN:

25 Last year Congress passed a law

1 which set up funding for wind engineering.  
2 If you look at the amount of federal dollars  
3 that goes into wind engineering, it includes  
4 hurricanes, it's about \$5 million a year. If  
5 you look at earthquakes, it's almost \$200  
6 million. We worked with the American  
7 Institute of Civil Engineers and got it all  
8 passed, but there is no funding.

9         So that's where the parishes and  
10 other political leaders could help to put  
11 funds into those federal programs because, in  
12 turn, then those funds will come down to us  
13 and we can utilize them.

14         In terms of the storm surge, we  
15 have teamed up with the University of Texas,  
16 University of North Carolina, Notre Dame,  
17 even though they are not on the coast,  
18 Oklahoma, and Mississippi State, and the  
19 State of Mississippi is now asking us to get  
20 operational in their state. I think a lot of  
21 other states are looking at things that we  
22 developed and how can they use them, and in  
23 that way, they learn more about our problems.

24         MR. BERWICK DUVAL:

25         Any other comments?

1 MR. CULLEN CUROLE:

2 I'm hearing components of what I  
3 think might be the answer, but I will go  
4 ahead and ask it a little bit more directly.

5 I, first of all, appreciate the  
6 academic community coming to the parishes and  
7 asking what our needs are. We recognized  
8 that local governments that have to be  
9 involved in this issue. Funding is not all  
10 going to come from the state and/or federal  
11 government. But kind of specifically, are we  
12 here today -- and we have heard ideas of  
13 studies, evacuation routes, comprehensive  
14 flood protection, those kind of -- when you  
15 get down to the local level, we call it  
16 drainage issues. There are lots of things  
17 that local government have to deal with that  
18 are absolutely connected to this. It's nice  
19 to hear that everybody is recognizing that.  
20 Are we here today to partner? What I mean by  
21 that is do you all have sources of funding  
22 that we can help match with some of these  
23 studies or are we here today soliciting ideas  
24 with which you are asking us to foot the bill  
25 for new and additional studies?

1 MR. BERWICK DUVAL:

2 It's a show-me-the-money question.

3 I will take a stab at it, and I appreciate

4 help from the panel. I think that everything

5 is open today, and the main point of today

6 was to share a dialogue to see what the

7 university could do with its existing funding

8 and what it can do for you now, not to ask

9 you for money, but I'm sure if you're here

10 offering money, they would take it. As I

11 believe this gentleman said, we may have a

12 war break out as to which university gets it.

13 Any responses?

14 MR. TIM OSBORN:

15 I want to go back and give an

16 example as part of an answer to what Mr. Ram

17 was talking about earlier. One of the things

18 I think that most coastal parishes really do

19 face is what investment can I make that

20 actually helps myself in terms of the

21 parishes, the problems, and the future

22 challenges. Mr. Ram and St. Charles Parish

23 government, as well as the council,

24 essentially asked that question in a very

25 proactive way. And as you can tell from

1 Mr. Ram, there is no lack of energy in  
2 St. Charles Parish in addressing these issues  
3 at all.

4           One of the things they had a  
5 concern about is when is storm surge going to  
6 take out our roads? What do we need to  
7 address that? What they did is they said we  
8 need to know in realtime in our emergency  
9 operation center those water levels as they  
10 are coming up during the storm in realtime.  
11 What they did was invested with us and put  
12 two new realtime tidal water level stations  
13 and weather stations by Lake Salvador, Bayou  
14 Gauche, and over by Lake Pontchartrain and by  
15 Labranche wetlands.

16           The other issue they needed was  
17 how come our elevations, when we get  
18 surveyors coming out and doing a project,  
19 like building a school and other things like  
20 that, we will get multiple surveyors telling  
21 us that our elevations are three different  
22 heights depending upon who you have asked,  
23 and how can we build a school much less run a  
24 parish? That's why they invested with the  
25 university to put in place and fund for the

1 parish the CORES stations that are going into  
2 St. Charles Parish to operate and then go  
3 ahead and serve as a reference point that  
4 they are going to use for all of their parish  
5 projects, and then the last thing they did is  
6 they set our data is just all shot. We don't  
7 need to have multiple datum from multiple  
8 agencies, so they passed a parish ordinance  
9 adopting BD88 as the overriding datum to use  
10 for all future work.

11 All of those go right to the  
12 investment protecting the parish from its  
13 inhabitant, but every time that CORES station  
14 is used by anybody in the country, as a  
15 matter of fact, there is an investment by the  
16 parish to a university that is actually  
17 coming back and having tremendous benefits  
18 being given out to the rest of the state to  
19 the other coastal parishes and with  
20 cooperation from the university itself.

21 There is an example in which I  
22 think what Cullen is looking for, as well as  
23 the other parishes, is how can we make an  
24 investment that actually improves the way  
25 that we can provide our parish and help it

1 grow but at the same time do it wisely with a  
2 very well versed and expert institution say  
3 such as this?

4 MR. BERWICK DUVAL:

5 I have time for one question. I  
6 promised it to Denise. She paid me earlier  
7 for the last question.

8 MS. REED:

9 My name is Denise Reed. I'm with  
10 the University of New Orleans. I actually  
11 wanted to answer Cullens' question about why  
12 we are here today in terms of developing  
13 partnerships. I don't think many of us here  
14 from the university community are here to  
15 solicit projects or funds from the parishes.  
16 We want to find out what your needs are so  
17 that we can move forward in the future.  
18 There are many cases where we are doing  
19 studies that are funded by federal agencies  
20 where we have to do them somewhere. We need  
21 places where we can go work where the  
22 information will be used. Finding out what  
23 needs you have can help us do those studies  
24 anyway but do them in areas where they can  
25 have a particular value added for you because

1 we know what problems you are facing, and  
2 increasingly, particularly on the federal  
3 side where monies are available for studies  
4 on coastal issues and coastal challenges,  
5 many federal agencies, particularly NOAA I'm  
6 thinking of, really ask universities to come  
7 to the table with partners because they  
8 increasingly want to be sure that the funds  
9 that they send to universities for research  
10 is a direct application.

11       So what I really hope comes out of  
12 today once we have heard some of the kinds of  
13 things that we can do as universities and  
14 some of the kinds of problems that you have  
15 is that we increase this communication on  
16 particular issues that maybe we follow up on,  
17 but just generally our networking ability so  
18 that we can be seeking you out when we see  
19 funding opportunities. Not to ask you for  
20 the money, but to help us write the proposal  
21 and to partner in making sure we come up with  
22 some good results. I think that's really why  
23 we are here today from the university  
24 community.

25       MR. BERWICK DUVAL:

1 I'm going to end up with Paul and  
2 King. We are out of time. We will call it a  
3 day on this session at least.

4 DR. PAUL COREIL:

5 Denise couldn't have answered it  
6 any better because that's exactly what I was  
7 going to say. In the LSU Agricultural  
8 Center, that's exactly how we communicate  
9 with our stakeholders, which have primarily  
10 been land owners that deal with agricultural,  
11 natural resources, forestry, and many other  
12 challenges. If we know the needs of our  
13 clientele and our stakeholders, which are you  
14 today, there are funding sources that we can  
15 identify and compete for, and in many cases  
16 help you get some of the answers to the  
17 projects you need, but we have to know what  
18 you need. If we don't know, then we may be  
19 applying for grant money and doing good  
20 projects, but they may not be as timely for  
21 the needs of Louisiana. There is a lot of  
22 money in Congress that is appropriated for  
23 research, and our scientists can compete for  
24 these monies, but we need to identify more  
25 what is the applied use of that to real world

1 problems, and that's what we have been doing  
2 for many years, and that's what LSU has done  
3 as well, but the AgCenter really focuses  
4 primarily on applied research, and I think  
5 what we are doing today is saying the rest of  
6 the universities, the rest of the campuses,  
7 are willing to do that as well, but we need  
8 to know where can we connect and partner and  
9 then we can compete for these funds that are  
10 already appropriated and available that we  
11 must compete for but yet meet the needs of  
12 local government.

13 MR. KING MILLING:

14 Let me do a reality check I think  
15 on this issue of a single voice, and as  
16 usual, I don't tell the story as happily as  
17 people like to hear it. If we were given a  
18 different set of cards to play with, I  
19 suspect we would do it, but the issue of a  
20 single voice in Louisiana concerning coastal  
21 erosion really began in August of 2001, just  
22 a little over three and a half years ago. It  
23 is difficult for us to understand how little  
24 knowledge there was about this whole area  
25 until that time and until we began -- and I'm

1 talking about the state and many individuals  
2 who are working in here and everyone else --  
3 began the process of developing a story that  
4 was, in fact, one that the country had to  
5 begin to listen to.

6         The Everglades has been a name  
7 that has been known in this country for a  
8 hundred years. Florida's struggle against  
9 the Everglades has been a fight for something  
10 in excess of 10 to 20 years. The Chesapeake  
11 Bay has been fighting their battle for 30  
12 years, and of course, as we know they are  
13 only 30 miles away from Washington, D.C., and  
14 that does help.

15         I will tell you, and I think I can  
16 say this without any hesitation, that we are  
17 speaking with a single voice, not so much in  
18 terms of what Louisiana will do but clearly  
19 in terms of what this problem is all about.

20         We have heard today from the  
21 governor as to how the issues are beginning  
22 to be resonated throughout Washington. We  
23 have had a bill in front of Congress in terms  
24 of WRDA. It went down in defeat. It had  
25 nothing to do with the state of Louisiana.

1 It had to do with an internal battle as to  
2 what this government wants to do with the  
3 Corps of Engineers.  
4       If that issue hadn't been on the  
5 table, we would have passed the bill. We  
6 would have the money. I will tell you. Just  
7 the faith that we have gotten that far in  
8 three and a half years is a remarkable,  
9 remarkable statement. We have got a chief's  
10 report that is going to come out at the end  
11 of this month that the chief is going to sign  
12 off on talking about a billion and nine  
13 hundred million dollars that we spent. That  
14 report will probably ultimately end up in a  
15 bill. Where it will go, I don't know, but  
16 the politics of that in Washington and how  
17 these bills play off, have nothing to do with  
18 us. Anybody who we have brought down here,  
19 and there have been senators and members of  
20 the House of Representatives and the White  
21 House and all the rest of it, we bring them  
22 down here, we go through a dog and pony show,  
23 we put them on a plane, we take them  
24 offshore. They are mindboggled by the  
25 problem. No concept as to what is going on

1 in this state, but they are beginning to  
2 know. It's beginning to set in, and I say  
3 that only again because I understand the  
4 frustration. If we could play the cards over  
5 again, we would have started this process 15  
6 years earlier. We didn't. We literally  
7 started it in August of 2001, and thank the  
8 Lord we have a governor like we have because  
9 she has pounded the table every day. That's  
10 the voice. That's the voice. That's the  
11 voice in terms of what we want to do in  
12 Washington, that's the voice in terms of what  
13 this state ought to want to do, because if it  
14 is determined by Washington that there is a  
15 split in the desire of this state to do what  
16 we say we want to do, we will be crucified,  
17 and that is clear every time you talk to  
18 anybody in D.C.

19       It is the need for a single voice,  
20 a need to keep our focus on this problem,  
21 albeit that doesn't mean it's an exclusion.  
22 We have got levee issues, we have got  
23 flooding issues, but there has got to be a  
24 need to keep that voice steady.

25       Let me make one other comment to

1 you because I think it is important. I'm  
2 going to raise an issue with you. I want to  
3 throw a very bad series of words out to you  
4 that I think ultimately you as parish  
5 managers are going to have to start  
6 considering. Land use management. How you  
7 deal with the land in your parish. This  
8 state has not done that well. It is highly  
9 politicized, but I will tell you there are  
10 other states dealing with these issues that  
11 have looked into it and have tried to address  
12 it in the face of the same problems and  
13 consternation that you have and your  
14 constituents have. Because at the end of the  
15 day if you don't have the capacity to begin  
16 to deal with individual tracts and individual  
17 areas within your parish, you will not have  
18 the capacity to deal with this issue. That's  
19 just a reality. I realize it's a difficult  
20 issue to talk about, but it is one which,  
21 quite frankly, you ought to begin to put on  
22 the radar screen. I will also tell you if  
23 you do, there is some legal issues that you  
24 have to do.

25 Finally, one other comment. This

1 issue of the bridge in front of the Rigolets,  
2 that was the subject of a lawsuit in 1984 I  
3 think in the Federal Court. Colonel Sands,  
4 who was the district manager of the Corps. in  
5 New Orleans, presented that plan to the court  
6 in New Orleans. Obviously we were not where  
7 we are today. It was deemed to be  
8 environmentally inappropriate because no one  
9 got up to testify either for or against, and  
10 it was thrown out of court. It is an issue  
11 clearly that should be surfaced again in  
12 today's light based upon what we know and  
13 what we hopefully can deal with.

14         Sorry to talk so long.

15         MR. BERWICK DUVAL:

16         Thank you, King. Personally I  
17 want to thank everyone for attending this  
18 session, especially the parish officials. I  
19 know that you all are busy. I know that  
20 you're very frustrated with this, but it is  
21 good to see you here, and how about a round  
22 of applause for the presenters? What a  
23 wonder job you have done.

24         And, Dr. Jenkins, the final word  
25 belongs to you.

1 DR. WILLIAMS JENKINS:

2 Well, it's just an announcement.

3 I just learned there's a chemical spill on

4 Nicholson Drive very close to the stadium. I

5 know you're going to stay to the very end

6 anyway, but if any of you were headed out

7 that way, that road will be closed for at

8 least four to six hours.

9 (Short break taken.)

10 MR. DON DAVIS:

11 Ladies and gentlemen, it's my

12 pleasure to chair the second panel entitled

13 "Confronting the Current Realities of Coastal

14 Communities."

15 Aaron Broussard made it very clear

16 that dialogue is now. Those of us in the

17 university communities welcome the

18 opportunity for the 12 panelist to present

19 their views.

20 That being said, there is a few

21 rules of engagement. First, each of you have

22 been given a scenario where very little or no

23 additional funding is made available for

24 coastal restoration. What are the primary

25 social, economic and environmental threats

1 posed to your individual parishes?

2           Second, given this same scenario,  
3 the university community can best help your  
4 parish by -- fill in the blank.

5           Fortunately everyone on this panel  
6 has had to chair a meeting. All of you  
7 understand Robert's rules of order. You will  
8 be given five minutes. I have been selected  
9 to do this because I'm the senior citizen.

10           At one minute, I will simply say  
11 one minute. At 20 seconds, I will ask you to  
12 please summarize. At five minutes, I will  
13 have to fuss you. At five minutes and twenty  
14 seconds, I will have to be rude. All of you  
15 are from south Louisiana. You all know that  
16 the worst thing that can happen to you is  
17 your mother find out that you have been rude,  
18 and my 88-year-old mother will fuss me. So,  
19 please, let's keep on mark. We want to give  
20 everybody an opportunity.

21           In the interest of fairness, we  
22 are going to change the order of procedure.  
23 If you look at the agenda, the presentations  
24 have been organized west to east, but two  
25 individuals have to go and chair their own

1 meetings. So our first panelist will be

2 Mr. Tim Matte, Mayor of Morgan City.

3 MR. TIM MATTE:

4 Thank you. It's a pleasure to be

5 here and to address such a distinguished

6 group on such a very important topic.

7 Now, I do need to let you know

8 that I guess as of yesterday I have been

9 mayor for two weeks. But to be fair, I also

10 let you know that I did serve as mayor prior

11 to that for eight years. We have term limits

12 in Morgan City, so I had to sit out for four

13 years, and it has been my pleasure during

14 that time period to work on this particular

15 issue. I was asked and eagerly volunteered

16 to serve on the coalition to restore coastal

17 Louisiana, and through that, I have learned

18 quite a bit about this issue and it's

19 important not only to my community and my

20 area but the state as a whole.

21 Morgan City and St. Mary Parish

22 may be somewhat unique in this whole mix of

23 areas because of the influence of the

24 Atchafalaya River and because of the delta

25 building that is actually taking place. I

1 can tell you that we don't see on a  
2 day-to-day basis the effects of coastal land  
3 loss. It's not something that I can look out  
4 my back door or my back window and see, but  
5 like all of us in south Louisiana, we are  
6 fishermen, we love to enjoy the outdoors, and  
7 I don't have to go very far to see the  
8 reality of what is taking place.

9 I really enjoyed the slides that  
10 were presented earlier today, particularly  
11 the ones that showed land loss from 1993 to  
12 2000. Time passes by so fast, but we can  
13 really remember what we were doing in 1993.  
14 That's not that long ago. Sometimes you look  
15 at a photo or that satellite image of 1950 to  
16 the year 2000, it seems like, well, that's  
17 fifty years, that's a long time. 1993 was  
18 not that long ago. In fact, that was when I  
19 took office the first time as mayor right  
20 after Hurricane Andrew.

21 One of the things that when I look  
22 at the impacts of what is going on here with  
23 coastal land loss, you can't ignore,  
24 particularly in a place like Morgan City, you  
25 can't ignore the impact of hurricanes on your

1 community. In my conversations with Dr. van  
2 Heerden over these time periods, we talked  
3 about Hurricane Andrew and talked about some  
4 of the impacts that the marshes in the delta  
5 that was south of Morgan City, what impact it  
6 had on our community and what benefit it had  
7 to our community and perhaps reducing some of  
8 the impacts of a hurricane. It brings home  
9 how critical these land losses can be to  
10 leaving us susceptible to storm damage.

11           In Morgan City, while I'm saying  
12 it's not a problem that I see directly when I  
13 look out my window, our neighbors to the  
14 immediate east of us in Terrebonne Parish,  
15 that's a window. That's one of those  
16 funnels, if you will, that a storm could come  
17 right up and do significant damage to us  
18 without any marsh there to help absorb that  
19 energy and to absorb the thrust of those  
20 surges and so forth. We have a nice 20 foot  
21 wall in front of, you know, seawall, down  
22 Morgan City along the riverfront, which gives  
23 you this sense of security. We have got this  
24 22 foot of protection there. Yet all of our  
25 back levees are only at the highest eight

1 foot. I have got big sandbags in front, but  
2 my back door and my back windows are very  
3 susceptible to damage.

4           In looking at, you know, from the  
5 community and where we stand today and why  
6 this is an important issue to us, you know,  
7 we have to consider the threat to loss of  
8 property and loss of life due to storm  
9 damage.

10           The other thing is the economics.  
11 I wonder about this and it's just an idea  
12 that I don't know that you can really  
13 document. As mayor of Morgan City, one of  
14 the things we all, like every other  
15 community, we have our crime problems, and we  
16 do things in crime prevention, patrols, extra  
17 patrols, police patrols. How much crime does  
18 that save you? It's hard to document. It's  
19 actually impossible to document. You don't  
20 know what that is. Well, I wonder about  
21 coastal land loss in St. Mary Parish. What  
22 does it mean to our economy? Are there  
23 business people around the country who look  
24 at south Louisiana and say, "You know, I  
25 would like to do business down there, but you

1 know, you've got this whole coastal land loss  
2 situation going on, you know, what are my  
3 insurance rates going to be in the future,  
4 what other impacts are they going to have on  
5 our local economy, and maybe that's not the  
6 place that I need to locate." That is a  
7 concern for me.

8       When it comes to dealing with the  
9 environmental threats, one of the issues that  
10 really hit home with me -- we talked about  
11 Hurricane Ivan earlier. I will try to wrap  
12 this up very quickly. What I understand  
13 right now is in Morgan City we have a lot of  
14 dive companies in Morgan City. They are very  
15 busy right now. They are fixing pipelines  
16 and other underwater substructure that has  
17 been damaged, and production out of the Gulf  
18 of Mexico has been reduced as a result of  
19 those damages. That's the stuff that was  
20 underwater. All of that pipeline  
21 infrastructure that we have that comes  
22 through St. Mary Parish and all of our  
23 coastal areas that's exposed, what happens if  
24 Ivan -- if it can take out that span in  
25 Escambia Bay, what would it do to that

1 pipeline infrastructure and what are the  
2 environmental impacts of all of those?  
3         Down in Morgan City we need help.  
4 We need attention. We need the science that  
5 the universities can present because it's our  
6 livelihood and it's our day-to-day lives.

7         Thanks for being attentive, and I  
8 hope to be able to answer questions shortly.

9         MR. DON DAVIS:

10         Our second presenter, who also has  
11 to go back and chair a session, is Charlotte  
12 Randolph representing LaFourche Parish.

13         Ms. Randolph.

14         MS. CHARLOTTE RANDOLPH:

15         Thank you, Ladies and Gentlemen,  
16 for all you have done, all of what each one  
17 of you has done individually and collectively  
18 in this national fight to save our coast.

19 All of you were very instrumental in the  
20 formulation of the LCA, and we appreciate  
21 that.

22         You asked for an assessment of the  
23 impact of the people on coastal erosion.  
24 Ironically, this edition of the LCA paints  
25 the whole picture. The first page shows a

1 picture of my ancestors' graves floating away  
2 in the Gulf of Mexico. I grew in Leeville, a  
3 once bustling community of farmers and  
4 fishermen in LaFourche Parish. Today two  
5 families remain. That's one line that has  
6 been drawn. Late last year a Black Hawk  
7 helicopter swooped into Port Fourchon  
8 carrying Governor Blanco, Senator Landrieu,  
9 and other officials. When someone likened  
10 their arrival to a scene from MASH, Governor  
11 Blanco responded by saying that this was  
12 indeed a disaster scene needing emergency  
13 assistance.

14       My colleagues and I representing  
15 parishes along the southern part of this  
16 state have appeared before you and others  
17 frustrated and impatient and desperate for  
18 action. Parishes Against Coastal Erosion, we  
19 have implored the federal government to help  
20 us. We have heard from all candidates in the  
21 recent election that this is the number one  
22 priority. Yet day to day, minute by minute,  
23 our time is running out.

24       When I get my hair done the  
25 question asked of me most often is what is

1 going to happen to us? What is the fine line  
2 between preparing people of potential  
3 disaster and scaring them into action?

4         After today's presentation, do we  
5 prepare for retreat while awaiting the  
6 funding or do we actually begin small scaled  
7 projects just to make certain that we are  
8 protected in this next hurricane season and  
9 the next one to come.

10         When it comes time to tell the  
11 people who will be left out of the system,  
12 this fortress that we are building, who will  
13 tell them and what do we tell them? Who will  
14 buy the property that has no value? The  
15 levee system in south LaFourche was difficult  
16 to achieve. Appointed commissioners and paid  
17 personnel lived with death threats 15 or 20  
18 years ago. They were accused of stealing  
19 land, the land left to them by their parents  
20 and grandparents. In 2000 we tasted  
21 saltwater in LaFourche Parish. Our water  
22 plant is 45 miles from the Mississippi River  
23 and 45 miles from the Gulf. It provides  
24 drinking water for up to 300,000 residents in  
25 that region. That year people with high

1 blood pressure were warned not to drink the  
2 water. One manufacturing business, which  
3 employs over a hundred people, shut down for  
4 seven days. Without a water source,  
5 communities can't survive. We installed a  
6 water control structure, and now we have  
7 pledged \$2 million to a lock system to  
8 further control the rising waters and the  
9 salinity in the area. The \$2 million is the  
10 parish's share. It will cost \$13 million to  
11 build a lock.

12       As a comparison, we are now  
13 borrowing \$15 million to fix our roads. What  
14 can we accomplish in LaFourche if the  
15 situation were different? Just as rising  
16 taxes make businesses consider a change in  
17 location, so does ever rising waters.  
18 Economic development and sustainment is our  
19 mantra. Repeating something over and over  
20 again is good for the soul, but what we need  
21 is action.

22       I spent yesterday trying to devise  
23 a plan which we somehow would have to fund to  
24 protect North American Shipyard and the  
25 surrounding residential areas. It may cost

1 one million, two million. I don't know. But  
2 with the very weak Tropical Storm Matthew,  
3 this shipyard sustained over one million  
4 dollars in damage. When the Intracoastal  
5 Canal overtopped, it threatened the top  
6 taxpayer in LaFourche Parish. They are also  
7 the third and fifth with other companies.  
8 Should we protect them? Of course. Where do  
9 we get the money? The state doesn't have it  
10 and the federal government won't give it  
11 back. The shipyard has built an icebreaker.  
12 Think of that in south Louisiana. Where  
13 creative innovative, ingenious, resourceful,  
14 and enduring, and we are being forced out by  
15 land loss. A shrimp fisherman recently took  
16 on the world and won, but how much have they  
17 won? What is their future if the estuary  
18 that they rely upon disappears?

19       Our loss is a concern for so many  
20 reasons. A few years ago no one outside the  
21 very coastal parish was concerned about this  
22 problem. Last year in Washington, New  
23 Orleans Councilman Oliver Thomas swept his  
24 hand across a crowded meeting room and said  
25 to Senator Pete Domenici, "You have to

1 protect these people to protect us. We are  
2 all in this together now." Again, in Super  
3 Bowl parlance, we are looking at a situation  
4 that we are all in this together but  
5 regrettable our team is not winning. We have  
6 got some great players on this team, the  
7 scientists that we have today, the  
8 universities, all of the people who have  
9 worked so hard in all of these committees,  
10 but the time is running out, and the problem  
11 with time running out is so is the land and  
12 so is our hope for the future.

13         What do we do with drainage  
14 projects? That's one concern that parish  
15 presidents have. How much do we spend on  
16 drainage when we are looking at tomorrow and  
17 not knowing where the water is going to be?  
18 It's all a major concern and all something  
19 that must be taken into consideration.

20         I think it's important, and again,  
21 I apologize to Mr. Milling because I'm always  
22 the one who is the most frustrated, but at  
23 the same time, I think it's important to  
24 remind people that we are in a dire situation  
25 now and we need some help now.

1 Thank you.

2 (Applause.)

3 MR. DON DAVIS:

4 Thank you very much. Our next

5 presenter comes from the westernmost parish,

6 Tina Horn representing Cameron Parish.

7 MS. TINA HORN:

8 I went ahead and did a Power Point

9 because I figured -- and those of you that

10 don't know, the mayor of Lake Charles, Randy

11 Roach, will be after me, and he's the king of

12 Power Point, and I figured I would not come

13 up without one.

14 These are some of the things that

15 we enjoy in Cameron Parish, and I'm sure that

16 all the coastal parishes enjoy the same.

17 These are some of the problems that all the

18 coastal parishes have; subsidence, excess

19 water levels, high salinity, shoreline

20 erosion, lake bank erosion, channel erosion,

21 interior marsh erosion, and loss of sediment.

22 Our Cheniere ridges in Cameron

23 Parish, we won't build any more of these.

24 What we have is what we have, and there won't

25 be any more. So we must protect these

1 historical ridges. They were built from some  
2 of the sediment from the Mississippi, and we  
3 don't have that inflow any more.

4         We do accept navigation as being  
5 of national significance, but I'm wondering  
6 if the nation accepts our channel banks and  
7 shorelines as being of some significance  
8 because those interior marshes are sure  
9 taking a beating from the saltwater  
10 intrusion.

11         All of you have seen this before,  
12 how our fisheries grow in those interior  
13 marshes and how they must be protected. I'm  
14 hoping that this message goes out to those  
15 congressmen in Washington who enjoy eating  
16 the crabs and shrimp and fish like I do.

17         The interior marshes not only are  
18 glowing fisheries. They are also where our  
19 waterfowl is. All the congressional people  
20 that come down here for their duck hunts,  
21 they need to be reminded that without these  
22 marshes, there are not going to be any  
23 waterfowl, not to mention all the wildlife  
24 that live in the marshes.

25         Our shorelines have to be

1 protected. There is a lot of money being  
2 mentioned in the LCA study that is going to  
3 be going to the eastern part of the state,  
4 and don't get me wrong, I do sympathize with  
5 the eastern part of the state. I feel like  
6 they are on the downhill side of a problem,  
7 and I'm hoping that they can come up to where  
8 they can at least say what they have, but  
9 right now we have got a situation that we are  
10 losing coastline. This is in a few month's  
11 time where you can see the damage that we  
12 have lost, and this is at least 60 feet.

13       These are workable solutions. We  
14 have done a lot of these things in Cameron  
15 Parish, and I must say I don't know of one  
16 CWPPRA project that has failed in our parish.  
17 We have done a lot of mitigation projects  
18 also, but these are projects -- and I just  
19 wanted to list them here for maybe someone in  
20 the audience that may not know what we do to  
21 help our marshes and our shorelines.

22       I did want to point out -- this is  
23 a little sarcastic, but we do want you to  
24 remember us. We are here. We do have the  
25 same problems as the rest of the coastal

1 parishes. They may not cost as much to fix,  
2 but we do want to still be here just like you  
3 do, and I think that in King's speech, he is  
4 a realist about how things are and how things  
5 need to be, but when you are born and raised  
6 in a community and you have been there all of  
7 your life, your families have been there all  
8 of their lives, your culture is there, you  
9 can't give up on that community. Your  
10 biggest priority is to protect that community  
11 and to fight for your community, and I don't  
12 see that changing. I do see the coastal  
13 parishes coming together to fight for  
14 whatever money that we can get from Congress  
15 because it is duly owed to us.

16       Some of the things that the  
17 university can help us with is we need  
18 updates on the shoreline and bank erosions.  
19 Our shoreline studies are not accurate. We  
20 have some drainage issues that need to be  
21 addressed in our parish. We need better FEMA  
22 maps. Our FEMA maps have got to be the first  
23 ones that were ever put out. There is no  
24 sections on them, no roads on them, or no  
25 nothing. You've just got to kind of point to

1 where you think you are. We need an  
2 infrastructure study of the damages caused by  
3 oil and gas. We need a study for a possible  
4 tunnel to cross the Calcasieu Ship Channel.  
5 In the very near future, we will have three  
6 LNG offloading facilities north of the  
7 Cameron Ferry, and we are going to need some  
8 way to get across the ship channel. When  
9 those LNG boats come up, they shut down the  
10 whole channel. That ferry will not be able  
11 to cross at all in a couple of years. I  
12 appreciate you.

13 MR. DON DAVIS:

14 Our next presenter is the mayor of  
15 Lake Charles who does not have a Power Point  
16 presentation. I would like to introduce to  
17 you Randy Roach, who also sits on the  
18 Governor's commission.

19 MR. RANDY ROACH:

20 I guess my reputation for Power  
21 Point precedes me, and I'm sorry to  
22 disappoint, but I felt like I would do better  
23 not bringing a Power Point this afternoon.  
24 In fact, I'm going to do something that is  
25 probably a little dangerous. I'm going to

1 depart from my prepared comments, and I'm  
2 going to kind of speak from some notes that I  
3 made as I was listening to some of the  
4 presenters earlier in the prior session, and  
5 also to hopefully address the second item  
6 that you have here given the scenario "The  
7 university community can best help my parish  
8 by" and fill in the blank. I would suggest  
9 to you what I would like to address and how  
10 perhaps the university community could best  
11 help all of the coastal parishes of  
12 Louisiana, and let me give you a just a quick  
13 introduction as to the nature of the comments  
14 that I want to make.

15 I had an opportunity as a  
16 representative of the Louisiana Municipal  
17 Association to attend a meeting of the  
18 National League of Cities and Environmental &  
19 Energy Subcommittee in Mobile, Alabama, about  
20 a year ago, and the purpose of my visit  
21 before this energy subcommittee was to  
22 basically make the case as to why it was so  
23 important for the National League of Cities  
24 to support Louisiana and its effort to lobby  
25 Congress, to get the WRDA bill passed, and to

1 get our funding set up to do these projects  
2 that we have been talking about for all of  
3 those years, and we went in with the Power  
4 Point presentation. This was the one that  
5 Sidney Coffee and her group had put together,  
6 and it was well done, and I say that because  
7 the reaction I got from this committee  
8 shocked me, and I was thinking, as I was  
9 going home, "What did I not say?" And I kept  
10 thinking, "Well, I said everything that  
11 Sidney told me to say," but the reaction I  
12 got from that committee I was not prepared  
13 for. It was one of "Why are you developing  
14 land if the problem is that bad? Why are you  
15 continuing to allow people to build in the  
16 coastal zone?" They saw the America's  
17 Wetland logo and they saw Shell Oil Company,  
18 and I had a couple of questions, and I saw a  
19 lady whisper to, one of the committee  
20 members, whisper to the other one, "This is  
21 just some of that more propaganda from those  
22 big oil companies," and that kind of thing,  
23 and the reaction I got from the committee --  
24 of course, these were people that were from  
25 other areas of the country. There was nobody

1 that lived in any of the coastal region of  
2 the country, the southeast region of the  
3 country around the Gulf of Mexico or anything  
4 like that. I got a unique appreciation for  
5 what our Congressional delegation is faced  
6 with and why perhaps it has taken as long as  
7 it has to get this to register on the  
8 national radar, but when you think about the  
9 problem that we are facing, you think about  
10 the issues that we are faced with, I think  
11 you have to think of it in context -- and Tim  
12 just mentioned, I think just touched on it,  
13 and that is the fact that we have people who  
14 live and work in the coastal zone and that  
15 that is probably one of the biggest  
16 challenges is how do we continue to maintain  
17 the development and maintain the communities  
18 and continue to have a place where we can  
19 live and work and we can have the investment  
20 and we can protect the investment that exists  
21 along coastal Louisiana today. That to me is  
22 perhaps one of the biggest challenges, and I  
23 know that as members of the university  
24 community, you have done a lot of studies. I  
25 see the maps. You have GIS maps. You have

1 GIS capabilities, and you do all types of  
2 studies, but I would like to suggest to you  
3 that perhaps one of the things that the  
4 university community needs to address is how  
5 are we going to allow the people of the  
6 coastal region of Louisiana to continue to  
7 live and to continue to develop and to  
8 continue to make their home in the coastal  
9 region of Louisiana? We have some very  
10 practical problems that we deal with on a  
11 daily basis at the local government level.  
12 We have to build roads, we have to provide  
13 drainage, we have to do land use planning,  
14 and all of those things, King mentioned it  
15 just a moment ago, and we go to seminars and  
16 we have people that go attend seminars that  
17 are sponsored by federal agencies, but I have  
18 never heard of a seminar by a federal agency  
19 or even some of the other organizations that  
20 put on these seminars that have even  
21 considered the unique challenges that we have  
22 in coastal Louisiana, and I would like to  
23 suggest to you that perhaps one of the  
24 fertile areas as far as studies and reports  
25 and things are concerned that would help us

1 in local government do what we need to do,  
2 and that is protect our citizens and help  
3 growth and development and economic  
4 development, those types of things, is for  
5 you to help us look at the Southern Building  
6 Code. I can tell you nobody has looked at  
7 the Southern Building Code, at least to my  
8 knowledge, from the context of the challenges  
9 that we are facing in coastal Louisiana.  
10 Nobody has looked at land use planning  
11 regulations from the standpoint of how do you  
12 land use plan in coastal Louisiana. What do  
13 you do with the storm water regs that we are  
14 having to deal with and having to adopt and  
15 having to develop our ordinances, et cetera,  
16 to comply with the EPA regulations? How is  
17 that going to be adapted to the coastal  
18 region of Louisiana? Some of you may say  
19 that you have considered that and that you  
20 have studied that and you have got some  
21 recommendations, but I would suggest to you  
22 that we, in the coastal zone, we need to be a  
23 part of that and we need to be made aware of  
24 that, and certainly that is something that I  
25 think that you could do as members of the

1 university community that would really help  
2 us in partnership.  
3       What King is doing, what the state  
4 is doing as far as making the case in  
5 Congress as far as the passage of the WRDA  
6 bill and the \$14 billion, that is very  
7 important, and I want to support that, and I  
8 want to do everything I can to help them be  
9 successful, but in the mean time, until we  
10 get this money and until we get this federal  
11 legislation passed, there is some very  
12 practical things that we need to be doing and  
13 considering as far as the coastal region is  
14 concerned, and that's where I think perhaps  
15 you could be a tremendous help to all of us  
16 in the coastal region. We need your help in  
17 a very practical way to do the things that we  
18 do on a daily basis, and that's help people  
19 live and work in the coastal zone. Thank  
20 you.

21       MR. DON DAVIS:

22       I don't know if Randy Roach will  
23 ever run for political office, but he hit it  
24 five minutes dead center.

25       Our next individual is Hubert

1 Faulk from Vermilion Parish. Mr. Faulk is  
2 not here. The speaker will be Mike Bertrand.

3 MR. MIKE BERTRAND:

4 Thank you. Being from Vermilion  
5 Parish, I just wanted to kind of give you a  
6 little bit of background for those of you who  
7 may not know much about us. We are a sister  
8 parish to Cameron Parish, and a lot of the  
9 same problems that Tina talked about, we also  
10 have. We are a very large rural parish and  
11 land area. Over 50 percent of that land area  
12 is in the coastal zone. Even more of that is  
13 in the A zones on FEMA maps. We have one  
14 small non-incorporated community near the  
15 gulf, that being Pecan Island, which has a  
16 little less than 200 people. We do not have  
17 a lot of industrial growth or commercial  
18 growth on the gulf coast, but our parish  
19 services a lot of oil and gas industry from  
20 Vermilion Parish.

21 As with Cameron Parish, we have a  
22 historical Cheniere ridge and barrier islands  
23 that need to be maintained. In southwest  
24 Louisiana we have a situation where we are  
25 not like in the eastern part of the state, we

1 still do have some good coastal area, but if  
2 that is lost, it would be really quick in  
3 becoming just like the eastern portions of  
4 the state.

5           Many years ago the Vermilion  
6 Parish Police Jury created an active Coastal  
7 Restoration Advisory Committee. Many of you  
8 know Judge Edwards and Mark Shirley are  
9 members of that commission, and they have  
10 been very active in getting CWPPRA projects  
11 for Vermilion Parish, and they continue to be  
12 active in trying to get projects for us.

13           Without any additional funding, we  
14 would be mostly impacted in the agriculture,  
15 wildlife and fisheries, and the oil field  
16 services would be impacted tremendously.

17           Vermilion Parish is in need of  
18 hurricane protection levees just like most of  
19 the other parishes. What the community that  
20 we are here today for can help us with are  
21 studies just like Tina talked about,  
22 infrastructure, transportation, coastal  
23 restoration projects that can give us some  
24 stop loss at this point to try to help us to  
25 maintain Vermilion Parish and to be a part of

1 the state of Louisiana. Thank you.

2 MR. DON DAVIS:

3 Will Langlinais? Substituting for

4 Will Langlinais? Not appearing.

5 Tim Matte is done.

6 Al Levron representing Terrebonne

7 Parish.

8 MR. AL LEVRON:

9 Thank you. On behalf of our

10 parish president, Don Schwab, I will be

11 making the presentation today. Of course, as

12 all of you know, Terrebonne Parish is really

13 at ground zero as it relates to land loss.

14 We have got a serious problem.

15 In that regard, a large portion of

16 Terrebonne Parish residents live within the

17 coastal zone. As the land mass erodes and

18 subsides, the parish will be forced to

19 restrict growth and infrastructure

20 development in these areas due to the extreme

21 risk and high cost of maintenance.

22 The university system can assist

23 the parishes by helping us develop no growth

24 and retreat strategies, such as determining

25 procedures for decommissioning infrastructure

1 and to provide public education about  
2 individual risk management, such as the need  
3 to develop individual disaster plans. On the  
4 one hand, people are looking to the  
5 government for help, but at some point,  
6 people, in our opinion, have to look toward  
7 helping themselves.

8           Item Number 2. Given the  
9 scenarios that the parish will be forced to  
10 retreat from infrastructure in certain areas  
11 over time, the legal liability to the  
12 governing authority is unclear. Obviously if  
13 we decide that a state road or a parish road  
14 can't be maintained because of the high cost,  
15 there is some issues there. We believe the  
16 university can help us by developing a legal  
17 analysis and drafting legislation that would  
18 provide immunity to the parish and the state  
19 for any claim associated with such  
20 justifiable retreat.

21           It has been shown that the  
22 estuarine production over time declines in  
23 areas that experience severe and accelerated  
24 land loss, which adversely affects the  
25 viability of the fishing industry important

1 to Terrebonne Parish. Universities can help  
2 by continuing studying the rate of decline  
3 and the development of management practice  
4 that would maximize the sustainable of the  
5 near-shore fishery. Possible management  
6 strategies may include limiting the number of  
7 resident and commercial fishing licenses.

8           In the event the state and federal  
9 government can not meet the needs of the  
10 local government as it relates to hurricane  
11 protection and land loss management, more  
12 emphasis will be placed on local financing of  
13 projects that will provide important  
14 protection to life and property. The  
15 university can help us in this regard by  
16 helping us study the financial capabilities  
17 of local government and to provide for  
18 innovative financing methods to meet this  
19 challenge.

20           We heard earlier concerning the  
21 thousands of miles of petroleum pipelines  
22 buried in the sediments. As the land erodes,  
23 the pipelines will become more vulnerable and  
24 resulting in environmental damage. The  
25 university could help us by providing ongoing

1 risk assessment of this imminent threat and  
2 to quantify the extent of the problem. Such  
3 areas that they could look at would be to  
4 determine the respective risks of the various  
5 depths of pipelines, the material types, and  
6 the nature of the products in these  
7 pipelines.

8         A very important area, many locals  
9 believe that the conveyance of Mississippi  
10 River sediments poses the best opportunity  
11 for restoration of the highly eroded areas of  
12 Terrebonne Parish. The university system  
13 could help us by providing expedited  
14 evaluation and elimination of the remaining  
15 scientific uncertainties associated with this  
16 restoration technique.

17         Of course, we have issues of water  
18 quality in Terrebonne Parish, saltwater  
19 intrusion. The parish has relied on  
20 freshwater from the Intracoastal for years.  
21 We are now looking to move our freshwater  
22 source away from there, and we much more  
23 dependent for outside sources of freshwater.  
24 Also, fecal coliform pollution is very  
25 prevalent in the lower areas of the parish.

1 The university can help us in areas of  
2 enhancing technologies which affect fecal  
3 coliform reduction.

4       The movement of the coastal family  
5 unit into an urban setting potentially  
6 presents a myriad of problems to the mental  
7 health community. A certain portion of the  
8 population has limited education and job  
9 skills. They are tied to the environment.  
10 Many don't have health insurance and function  
11 well below the poverty line. The issue of  
12 suitable housing becomes a critical concern  
13 to community leaders. This dramatic change  
14 in lifestyle will undoubtedly lead to social  
15 problems, including alcohol and drug abuse,  
16 as well as increased crime rates. The  
17 university could help by researching the  
18 literature to identify similar case studies  
19 of movement of populations. They could also  
20 help by facilitating public meetings to  
21 provide community outreach and material to  
22 aid in the inevitable relocation away from  
23 the coastal zone. Thank you very much.

24       MR. DON DAVIS:

25       It's clear we have a real

1 challenge. David Camardelle could not be  
2 here, so I'm going to read into the record  
3 his remarks.

4           Dear President Jenkins, Grand Isle  
5 and Jefferson Parish have reached a critical  
6 point in history. Once there were over 60  
7 miles of healthy marsh protected by a chain  
8 of barrier islands between business centers  
9 of Jefferson Parish and the Gulf of Mexico.  
10 Today much of that area is open water. Our  
11 barrier islands, such Grand Isle, are  
12 threatened and in some cases lost, thereby  
13 accelerating the erosion of our shorelines.  
14 The capability of coastal wetlands to reduce  
15 storm surge in the Gulf has historically been  
16 a protected barrier that we in south  
17 Louisiana depend upon. Retaining and  
18 restoring that protected buffer of coastal  
19 wetland and barrier islands is essential to  
20 our economy and coastal communities.

21           In addition to hurricane  
22 protection, the value of these wetlands in  
23 protecting an oil and gas infrastructure,  
24 port facilities and navigation waterways is  
25 immeasurable. For many years our parish and

1 its residents have supported projects that  
2 have been built in the interest of national  
3 commerce.

4           The Mississippi Gulf Intracoastal  
5 Waterway, Barataria Waterway and Bayou  
6 Segnette Waterways are all federally  
7 maintained channels that traverse Jefferson  
8 Parish. Additionally, a maze of oil and gas  
9 access canals have been constructed from  
10 these inland channels accelerating the  
11 intrusion of saltwater and the erosion of the  
12 marsh fringe.

13           The prosperity of Jefferson  
14 Parish, its communities, and the entire New  
15 Orleans metropolitan area can be directly  
16 attributed to the Mississippi River and the  
17 other navigable waterways. As a gateway to  
18 America, it is thrived as a shipping and  
19 commercial center contributing to the  
20 industrialization of the United States from  
21 the early days to the present.

22           In the early 1900's our nation  
23 embarked upon a movement to control the  
24 river. We did so for the right reasons, and  
25 we were successful in creating a port and

1 waterway system second to none in the world,  
2 but with that success came problems that must  
3 be resolved.

4 Bayou Barataria, once the  
5 rendezvous of the famous pirate Jean and  
6 Pierre Lafitte, offered access to the Gulf  
7 without stemming the current of the  
8 Mississippi.

9 In the 1940's when the oil and gas  
10 industry was beginning to expand, the nation  
11 turned to Bayou Barataria to access to the  
12 Gulf. The meandering bayou was transformed  
13 into a short shot to the Gulf. That  
14 federally navigational channel is one of the  
15 reasons that Barataria Basin has the highest  
16 rate of coastal land loss in Louisiana.

17 We are not here to place blame for  
18 the challenges facing Louisiana.  
19 Jeffersonians and Louisianians would be the  
20 first to support the nation's energy demands  
21 for domestic oil and gas, but with that comes  
22 the responsibility of repairing the damage  
23 and preserving Louisiana's natural history  
24 for future generations. We can not do it  
25 alone. We have come here to provide you with

1 local perspectives on a national crisis and  
2 urge you to dedicate the resources required  
3 to reserve the loss of coastal Louisiana's  
4 wetlands that is pulling our nation's  
5 infrastructure and the future of our  
6 communities in peril. It must be done now as  
7 we are literally washing away. Sincerely,  
8 David Camardelle, mayor, town of Grand Isle.

9       Our next presenter comes to us  
10 indeed from Jefferson Parish. I give you Tim  
11 Kerner.

12       MR. TIM KERNER:

13       Good evening, Ladies and  
14 Gentlemen. I'm not going to stand here and  
15 say I'm representing all of Jefferson Parish  
16 because we have the parish president,  
17 Mr. Aaron Broussard, here which is doing a  
18 wonderful job, and he has started this group,  
19 Parishes Against Coastal Erosion, and I just  
20 can't give him enough credit for realizing  
21 the trouble we are in due to coastal erosion  
22 and his foresight to start this group so we  
23 can have a stronger voice in Washington. I  
24 want to thank him for doing that.

25       Also, we had some talk about

1 commercial fishing. I was a commercial  
2 fisherman in 1980, and at that time I used to  
3 get on my boat and I would go up the pass  
4 towards the Gulf of Mexico, and I would put  
5 the radar on and just follow the land, and  
6 then when I would get out in the Gulf of  
7 Mexico, I would take a left towards Grand  
8 Bayou and put the radar on again and put it a  
9 half a mile from the shore and go towards  
10 Empire Canal and Tiger Pass and back and  
11 forth, and you were able to make a living  
12 there.

13         The other day I took a helicopter  
14 trip to go visit with David Camardelle and  
15 there's no land going out on the pass toward  
16 the Gulf of Mexico and also along Four Bayou,  
17 Grand Bayou and towards Tiger Pass. There's  
18 nothing. All I saw was channel markers. It  
19 is scary, and that is the reason why during  
20 hurricane situations or strong south winds in  
21 my area of Lafitte, Louisiana, we are loading  
22 sandbags.

23         Two years ago in a two-week period  
24 we threw over 150,000 sandbags, and I know I  
25 had my hand on about 140,000 of them. It is

1 hard work and it is very serious.

2 I wrote down a few things because

3 I didn't get a chance to talk to anybody and

4 I didn't really know the topics. I called

5 last night and they actually emailed me the

6 topics and I left before I got a chance to

7 look at them, so I'm not going to be able to

8 talk on the topics too much, but I will say

9 that being from Louisiana, a little southern

10 part of Louisiana south of Jefferson Parish,

11 well part of Jefferson Parish, on the coast,

12 I didn't realize what people was saying. I

13 couldn't comprehend 25 miles of loss of

14 wetlands in a year, an acre every 33 minutes.

15 I just couldn't comprehend it, and I lived on

16 the coast until I actually got in that

17 helicopter and saw what bad shape we are

18 really in, and when I look at what bad shape

19 my little community is in -- and let me just

20 say this before I go any further. It says

21 without additional funding, name some of your

22 major problems. Well, my problem would be is

23 that for 115 years my family has held elected

24 office in Jean Lafitte. My biggest problem

25 would be trying to find something for one of

1 my kids to do when they get older other than  
2 politics. I will tell you that it's not only  
3 the town of John Lafitte. It's all of  
4 southern Louisiana. It's over 220,000  
5 houses, over 180,000 businesses, over 200  
6 schools. In fact, it would affect the  
7 economy if we didn't do anything about it,  
8 tourism, commercial fishing, oil and gas.  
9 All of those things would suffer and  
10 Louisiana would suffer.

11 I'm just glad that we are all  
12 getting together now, everybody from around  
13 the state, all the elected officials, to try  
14 to save the heritage, the culture, and the  
15 land in our state so that our children and  
16 our grandchildren could enjoy fishing,  
17 hunting, working, and living in south  
18 Louisiana as we do.

19 So, thank you, and let's do all  
20 that we can, and the university, what they  
21 can actually do for my area and I think the  
22 rest of south Louisiana is to help improve  
23 the problems that we have and also set up  
24 something where everybody can lobby together,  
25 not only the governor, but every one of us

1 standing behind the governor of this state  
2 and what other states we can get to join with  
3 us to get federal money because that's the  
4 only thing that is going to help us, federal  
5 money for hurricane protection and coastal  
6 erosion. Thank you.

7 MR. DON DAVIS:

8 Our next presenter comes from  
9 Plaquemines Parish, Benny Rousselle.

10 MR. BENNY ROUSSELLE:

11 Thank you and thank LSU and  
12 President Jenkins for hosting this today. It  
13 is hard for me to sit here and tell you what  
14 the impacts would be to Plaquemines Parish  
15 because from the studies that you have done,  
16 you have studied Plaquemines Parish as much  
17 as you have studied anything it seems. From  
18 the presentations today it is obvious that  
19 the population of Plaquemines Parish is  
20 migrating to the north. The census shows  
21 that. The loss of what would happen if we do  
22 not get any funding to help the problem would  
23 be that we will have to move out of the area.

24 The insurance premiums that we are  
25 paying now, if you can buy insurance, are 54

1 to 60 percent higher than they are in the  
2 surrounding Jefferson Parish and other areas  
3 because we seem to be targeted as a  
4 vulnerable area.

5         We had Commissioner Wooley at our  
6 council meeting last week, and we asked for  
7 an investigation to see if there is some line  
8 being drawn in the sand that we do not know  
9 about as far as insurance premiums. Not to  
10 mention the cultural and heritage, the  
11 effects that it would have on our people.  
12 Most of our people live within the levee  
13 districts, and I can't tell you enough about  
14 the shrimpers and the fishermen. We know  
15 that from one of the slides that the decline  
16 has happened. Some of that is due to  
17 regulation by the legislature. Some of it is  
18 due to the environment I'm sure, but I think  
19 that we have a peak in the fisheries to where  
20 we will see a decline, and if we don't get  
21 any help, we will have to start shoring the  
22 back levees with cement, like we do with the  
23 Mississippi River. It's important to us to  
24 have some effect.

25         To the second question of what can

1 we do. I can't tell you how long I have been  
2 going to meetings. It has definitely been  
3 more than three years. It has been so many  
4 years that I get tired of going to meetings.  
5 They are all gloom and doom meetings about we  
6 are going to lose this, we are going to lose  
7 that, and that message resonates to a lot of  
8 people.

9       From hearing you today, you  
10 definitely developed enough information to  
11 scare the hell out of people. I think that  
12 it's important that somehow if LSU wants to  
13 be involved in bringing these things  
14 together, that we have to take all of these  
15 studies and put them together and try to  
16 implement them because the people in my  
17 district are tired of hearing about studies.

18       Just recently in the last couple  
19 of years I'm starting to hear a little bit  
20 about mining sediment out of the river  
21 through a pipeline to restore shorelines.  
22 For years we have been asking for this.  
23 Let's do some dredging. Right now we talk  
24 about no money. The Corps of Engineers  
25 spends millions of dollars every year to

1 dredge material out of MRGO, which I'm sure  
2 you will hear from Junior, and in the  
3 Mississippi River, and it's not being  
4 utilized like we think it could be.

5       Now, we are talking about billions  
6 of dollars. We believe that there are  
7 techniques out there that can be utilizing  
8 that material to start restoring the  
9 shoreline through pumping, through mining of  
10 pipes, and for a long time I heard from those  
11 that are more environmentally sensitive than  
12 I am, that we need to let the natural  
13 processes go. We need to push the water  
14 through the system and we need to start  
15 building the marsh. The problem with that is  
16 that if you do not reestablish the shoreline,  
17 in our opinion, that every time you  
18 accomplish something, when you have a draught  
19 period of time, you lose that benefit, so we  
20 spend these monies to flush the system down  
21 and hopefully grow some marsh, but without  
22 the restoration of the shoreline, I think we  
23 are wasting money. So if you can gear the  
24 techniques and the effort towards -- which  
25 everybody seems to agree that the Mississippi

1 River is our main tool in the toolbox. Let's  
2 start using it and let's quit studying and  
3 let's move forward and put some projects on  
4 the ground, and that's where my constituents  
5 have lost kind of faith in the process where  
6 they don't come to meetings any more. You  
7 can tell them we are going to have a coastal  
8 restoration meeting, and they will say "We  
9 have already heard all of that." Preaching  
10 to this group you have all heard it as well.  
11 I can't tell you how many people I recognize  
12 in here that have been to meetings and have  
13 sat through the same presentations and said  
14 "What are we going to do?" We know we need  
15 money, but what we need to do is we need to  
16 look at the money we are spending and utilize  
17 it in the most efficient way.

18         With that, I want to thank you  
19 again. I want to thank Aaron for putting the  
20 Parishes Against Coastal Erosion together,  
21 and I will be glad to answer any questions as  
22 well. Thank you.

23         MR. DON DAVIS:

24         Representing Orleans Parish is  
25 Yarrow Etheredge.

1 MS. YARROW ETHEREDGE:

2 Thank you very much and thank you  
3 for having me here. I'm representing Mayor  
4 Nagin, and I am the director of the mayor's  
5 office of Environmental Affairs. We run the  
6 Coastal Zone Management Program.

7 The challenges that we face in New  
8 Orleans range from micro to macro. On the  
9 very local level we have an awareness issue.  
10 People in New Orleans, I don't think they  
11 know the coast is near us. They may know  
12 sooner rather than later that it is  
13 approaching rather rapidly. I would like to  
14 thank Mark Schiefstein for keeping that issue  
15 in front of the public as often as he is able  
16 to in the Times-Picayune. I think that that  
17 has had a major effect of getting people  
18 aware of the issues.

19 Another factor in raising  
20 awareness has been probably sitting on I-10  
21 for 10 hours from New Orleans to Baton Rouge  
22 when they have to leave because of a threat  
23 of a hurricane that in the past wouldn't have  
24 been a problem at all. Evacuation is a major  
25 issue for New Orleans particularly because

1 there is a hundred thousand people in New  
2 Orleans who have no car and no way of getting  
3 out.

4       So I appreciate hearing from the  
5 other parishes that probably a coastal  
6 evacuation route is in order, and I think  
7 that that is a major role that the  
8 universities could play, their transportation  
9 departments working together with coastal  
10 restoration departments to come up with a  
11 comprehensive plan for evacuating the coast.

12       On another local level, we have  
13 the New Orleans East Land Bridge. It's  
14 really where most of our wetlands are, and  
15 it's being developed faster than ever, which  
16 doesn't really make sense, and I would like  
17 to thank King Milling to bringing that to the  
18 attention of the audience earlier that we are  
19 permitting away this land. We need to be  
20 thinking about zoning and other ways to limit  
21 development out there. The land bridge is  
22 really crucial to keeping New Orleans where  
23 it is and keeping the lake away from the  
24 Gulf. So that's something that in my office  
25 we face as a major challenge. The railroads

1 have been selling large tracts of land to  
2 private developers. That's something that we  
3 are looking at.

4       The third sort of regional issue  
5 is I'm sure Junior will elaborate on is the  
6 Mississippi River Gulf Outlet.  
7 Unfortunately, the levee on the Orleans  
8 Parish side of the monster is two to four  
9 feet lower than on the St. Bernard Parish  
10 side. That leaves us in a bit of a  
11 predicament.

12       Lastly, it is something that no  
13 one has touched on, which is global warming.  
14 New Orleans has been named the north American  
15 city most vulnerable to the effects of  
16 climate change by the International Panel on  
17 Climate Change. We have heard a lot today  
18 about sea level rise and coastal restoration  
19 plans have factored in about 8 to 14 inches  
20 of elevation to account for a sea level rise,  
21 but there are things that we can do to limit  
22 sea level rise. One of them is the governor  
23 -- actually the legislature in Louisiana in  
24 2003 passed a resolution to establish a  
25 Governor's commission on climate change, but

1 that has never been established, so we can  
2 encourage the governor to appoint that  
3 commission to help us to make that  
4 connection, and also I think that is vital  
5 role for the universities to play to look at  
6 that connection. The climate (inaudible) is  
7 coming up for a vote again in the national  
8 legislature probably as early as March, and  
9 it needs to be brought to the national  
10 attention and also to our state  
11 representatives that that issue has an effect  
12 on our effort for coastal restoration.

13         With that, I will pass it to  
14 Junior.

15         MR. DON DAVIS:

16         Our last presenter comes from the  
17 easternmost parish, St. Bernard, Henry  
18 Rodriguez, Jr. I was told it was all right  
19 to introduce him as Junior Rodriguez.

20         MR. JUNIOR RODRIGUEZ:

21         Thank you. Good afternoon,  
22 Brothers and Sisters. I refer to you as  
23 brothers and sisters because I kind of feel  
24 like I'm preaching to the choir. We have  
25 these meetings and we continually bring our

1 problems to each other, and that just seems  
2 as far as it goes.

3           Whenever I'm invited to a meeting  
4 of this sort, when I get up in the morning I  
5 sort of have a little feeling that maybe this  
6 is the day, this is the day that I will get  
7 something I want to hear that is going to be  
8 good for St. Bernard Parish. I refer to  
9 St. Bernard first because that is my parish,  
10 and I hoping it's good for all the coastal  
11 parishes. Usually I go back home and I'm  
12 frustrated. I think all you parish  
13 presidents and parish representatives out  
14 here today know the feeling. I think today  
15 is another one of those days that I'm going  
16 to go back home frustrated.

17           I appreciate having the  
18 opportunity to come here, and I appreciate  
19 listening to everyone, and I have heard some  
20 things here today which I will just elaborate  
21 on a little further later on, but I will give  
22 you a quick scenario about St. Bernard  
23 Parish. It's a very small parish, 480 square  
24 mile. Of that 480 square miles, I've got  
25 67,000 people that live behind 26 square

1 miles that is protected by levee. That's a  
2 ridge, not a very large ridge. Ninety-five  
3 percent of our area is water. We live on  
4 that 26 square miles. The rest of the area  
5 is inundated by water and tidal fluctuation  
6 at least two to three times every week. So  
7 we are in a very precarious situation, but to  
8 make matters worse, we were given a golden  
9 opportunity in 1963, or so they lied and told  
10 us about it, an economic boom, so they told  
11 us, called MRGO, Mississippi River Gulf  
12 Outlet. You know the saying if somebody  
13 wants to give you something, don't take it.  
14 Believe me, this was a gift. Like everything  
15 else, it has got to do with economics. Not  
16 the economics of St. Bernard Parish. The  
17 economics of the nation, the benefit of the  
18 nation they tell me and the benefit of  
19 Orleans Parish, and I can understand that  
20 because when it comes to what is best for  
21 Orleans and the nation, St. Bernard is on the  
22 bottom of the pole and we are subject to go.  
23 They proved that in 1927. We've got a  
24 history of being devastated for the city of  
25 New Orleans and the economy, but you know

1 what? One of these days -- it's not a matter  
2 of if. It's a matter of when -- New Orleans  
3 is going to be another Galveston because when  
4 St. Bernard goes and Plaquemines goes and  
5 Jefferson's coast lines recede, Orleans is  
6 going to be the one to flood, and they are  
7 not going to be able to get the water out.  
8 Then what are they going to do with the  
9 economics? But it's like everything else.  
10 What really concerned me here today is we've  
11 got a lot of experts now. We've got more  
12 experts than we've got problems. Benny  
13 brought up about studies. Well, Benny, I  
14 tell you what, I would like to have the  
15 studies that they put together. I could take  
16 the paper and probably close up the MRGO and  
17 have enough left for you to build some marsh  
18 on the outside of your properties, outside of  
19 your levee. If we had brought one bucket of  
20 sand every time we had a meeting about the  
21 MRGO, believe me, we could have closed this  
22 thing by now, but we didn't.  
23       But for me to come here today and  
24 to hear somebody tell me that they want to  
25 know my problems, I'm a little insulted, and

1 I feel a little bad because maybe I wasn't  
2 talking loud enough or somebody can't hear.  
3 If we haven't been telling you about our  
4 problems -- and I'm not just saying  
5 St. Bernard's problems. I'm looking at  
6 people in this room that every time there is  
7 a meeting that we go to concerning coastal  
8 erosion, coastal problems, they are there. I  
9 see the same old familiar faces there every  
10 time.

11           This scenario up here, we are a  
12 prime example. The MRGO devastated  
13 St. Bernard Parish. We could be considered a  
14 disaster area. We used to have freshwater,  
15 brackish water, saline marshes. We had over  
16 a hundred square miles of swamp, of cypress.  
17 Today we have nothing. You can count the  
18 cypress on your hand. That's what happens  
19 now. That's not a scenario. That's a fact  
20 when nothing happens.

21           Let me tell you what this boils  
22 down to. It boils down to money. It boils  
23 down to politics. If you come here and ask  
24 me to tell you to do some more studies, I  
25 can't support studies. If you tell me that

1 you want to do some studies to get us some  
2 money, I'll jump up and holler yeah. I have  
3 been fooled so many times, that don't happen.  
4 It's politics and money, and I can tell you  
5 this because I'm an independent, I'm not a  
6 republican or a democrat. Let me tell you  
7 something, boys. We just got through with a  
8 national election. I heard the republicans  
9 tell us how great they were going to be and  
10 what they were going to do, and I heard  
11 everyone that came to St. Bernard talk about  
12 what they were going to do for coastal  
13 erosion. Boys, you republicans need to go  
14 talk to the cowboy up there. You need to get  
15 some of this money back along the coast.  
16 Somebody has got to remind the cowboy that  
17 he's going to lose the back end of his horse.  
18 You need to get it up there. It's not the  
19 democrats. We need money. You get us the  
20 money, we'll get the job done. We don't need  
21 any more studies.

22 I appreciate the opportunity to  
23 talk to you.

24 MR. DON DAVIS:

25 I would like now to turn the

1 lectern over to Aaron Broussard. Aaron  
2 Broussard is the president of Jefferson  
3 Parish and acting president currently of  
4 PACE. For those of you who do not know, PACE  
5 is Parishes Against Coastal Erosion. We have  
6 now set aside a candid discussion by the  
7 moderators on what one might consider the  
8 current realities. Mr. Broussard.

9 MR. AARON BROUSSARD:

10 Thank you very much. This is a  
11 good opportunity for the academia to really  
12 interface with the elected officials that are  
13 on the front line of this. As King Milling  
14 said, this is a problem of enormous  
15 proportions, and really it is such of an  
16 enormous proportion and a huge expense and so  
17 complicated that this would be an easy  
18 problem to turn your back on if you didn't  
19 live in the middle of it or like these ladies  
20 and gentlemen up here at the podium, if you  
21 didn't have to govern it, but that's where we  
22 are, and I appreciate the opportunity for you  
23 to address this group at this time, and with  
24 that, questions from the floor will be taken  
25 and you can address it to anyone in

1 particular here or to the group.

2 MR. DAN RICHARD:

3 Dan Richard, Spring Wetland

4 Services, southwest Louisiana. The original

5 purpose that we were asked here today was to

6 give specific projects where the university

7 might be able to interface with issues that

8 might be able to be solved by the university

9 system. I just have a litany that I would

10 like to give out, Aaron, and some of them I

11 think can help us. I wish Ms. Randolph was

12 here because she expressed frustration in

13 regard to not being able to get projects.

14 She should be from southwestern Louisiana.

15 LCA totally neglected anything west of

16 Vermilion Bay. One of the speakers earlier

17 this morning talked about sustainability. We

18 do need a sustainability study. We do need

19 to look at Louisiana, look at coastal

20 Louisiana, and determine what is sustainable

21 and take our monies to go in that direction.

22 I think that would be an excellent project.

23 We need a new WBA plan. We need the

24 university system to put something together

25 that will be able to put the Cheniere plain

1 on equal footing with the Delta 8 plain. At  
2 this point in time we do not have the  
3 Mississippi River in western Louisiana, so we  
4 do not have that option. We have hydrologic  
5 restoration, we have got the largest  
6 hydrologic restoration in the world at the  
7 Cameron Creole Watershed. We desperately  
8 need a study that shows that that program is  
9 successful. We have documented it, but we  
10 need scientific review that just documents a  
11 terribly successful area on a 110,000 acre  
12 hydrologic restoration area.

13 I would like to expound upon one  
14 comment from King Milling in regard to one  
15 voice. We not only need one voice from the  
16 state. We need one voice to make decisions  
17 in regard to projects. We have got projects  
18 that are approved by let's say a NARCA grant,  
19 and when we get to permitting, we can't get  
20 it permitted by some of the same agencies  
21 that approved the money for the NARCA grant.  
22 We need one voice that will put together all  
23 of these agencies. We've got agencies that  
24 work for commerce, environmental protection  
25 agency, Department of Army, Department of the

1 Interior. We have got to have some uniform  
2 way to move forward with that, and I think  
3 that we can have a university that would look  
4 into other particular projects around the  
5 country where a czar or energy sector,  
6 whatever you want to call it, has been  
7 appointed to make some final decisions to get  
8 some restoration implemented so that we don't  
9 study these things to death.

10 Upstream issues. We have got huge  
11 upstream issues in western Louisiana with the  
12 Sabine River, the Calcasieu, the Mermentau,  
13 and the Vermilion. Every time we talk about  
14 the coastal zone, we do not take those into  
15 account. We brought it up at LCA. We  
16 brought up the Sabine at Toledo Bend, the  
17 discharge flows. We are not having any  
18 progress in getting somebody to study what  
19 kind of water do we need coming down the  
20 Sabine River to be able to maintain our  
21 marshes. We have got huge numbers of  
22 drainage projects north of the Mermentau  
23 Basin that have never been studied or modeled  
24 that show what it does to the lower Mermentau  
25 Basin. The same with the Vermilion and the

1 same with the Calcasieu. We need a huge  
2 amount of studies in that regard.

3           Tim Osborn this morning talked  
4 about elevations. We need to have vegetative  
5 studies on elevations of marsh plants that  
6 build elevation. There was one done by a  
7 professor here at LSU that has shown that  
8 screpizomei (phonet) is able to build marsh  
9 and build marsh elevations in more of a  
10 brackish marsh situation. We need those  
11 kinds of studies that show what type of  
12 marshes could keep up with sea level rise.

13           The loss of cultural resources. I  
14 think that we really do need to have a  
15 university or a university individual that  
16 will do something that will show the extreme  
17 loss to this country for the lost of the  
18 cultural resources for the people in  
19 Louisiana that have to move from their area.  
20 It's a scary thought for me to have to sit  
21 out here and listen to where we are having to  
22 lose these people, lose cultural resources.  
23 I have been in the Arctic. I have been to  
24 Australia where we have taken people, whether  
25 it would be Aborigines or whether it be

1 Inuit. You destroy a civilization and a  
2 culture when you take people and move them  
3 out of their environment. I had the  
4 displeasure of seeing those, and I think we  
5 need to do that from our Louisiana  
6 universities.

7       The lack of diversity in regard to  
8 productivity. Mr. Rodriguez just talked  
9 about the diversity that used to be in  
10 St. Bernard Parish, and I think we need to  
11 have a study by Louisiana universities that  
12 look at that diversity and look at the  
13 promotion of that diversity from the cypress  
14 swamps down to the salt marshes to show how  
15 each one of those types complement each  
16 other.

17       Thank you for the time.

18       MR. AARON BROUSSARD:

19       Sir, you sound frustrated enough  
20 to be an elected official. We will make you  
21 an honorary elected official.

22       Questions from the audience?

23       MS. YARROW ETHEREDGE:

24       While you are looking at salt  
25 tolerant plants that could rebuild the marsh,

1 could you also look at something other than  
2 rocks and sheet pilings to stabilize the  
3 shoreline? I think there might be some  
4 better alternatives.

5 UNIDENTIFIED SPEAKER:

6 Such as?

7 MS. YARROW ETHEREDGE:

8 I don't know. I'm a lawyer.

9 MR. AARON BROUSSARD:

10 That means if you pay her, she  
11 will give you an answer. She is asking a  
12 question honestly. Can anybody give an  
13 answer to that from the academia side?

14 DR. IVOR VAN HEERDEN:

15 They all turn to rock and sheet  
16 piling. These have been used elsewhere in  
17 the world. One of them is called Armorflex,  
18 which is a flexible mat of concrete blocks  
19 connected by stainless steel cable. It has  
20 been used in a lot of countries to  
21 reestablish mangroves on eroding banks and  
22 navigation channels. There is some work that  
23 is being done looking at planing banks at  
24 about a 15 degree angle and putting in gravel  
25 or sand. So there are other techniques to

1 utilizing concrete or rock or sheet piling.

2           The last thing is I have seen some  
3 work done using boudin bags. I know folk on  
4 two sides of this issue, but I think it's  
5 something that deserves merit, and then the  
6 last thing, something that we have tried to  
7 get funded here at LSU in the past, was to  
8 look at artificial seaweeds where you  
9 actually make a mat that you put out, out in  
10 front of a shoreline, that has polypropylene  
11 cord that acts like a seaweed and actually  
12 trips up the wave, reduces wave action.

13           There are alternatives. Some of  
14 them we don't know. They haven't been fully  
15 tested.

16       MR. LEN BAHR:

17           I would sort of like to chime in  
18 on Ivor's comments. The floating wave  
19 attenuation device is the last thing he  
20 mentioned are being explored right now I  
21 think somewhere. Pat Forbes, who works in  
22 our office and the governor's office, wasn't  
23 able to be here today. He is in another  
24 meeting, but he has been exploring that.

25           I would like to suggest, although

1 I'm also not an advocate in general of  
2 limestone from Kentucky being barged down  
3 here at great expense to retard shoreline  
4 retreat when I think there are alternatives  
5 in many cases that are superior and more  
6 natural, but where hard structures are  
7 required, one of them is reef, shell reef  
8 restoration, which hasn't been mentioned very  
9 seriously in any of the LCA discussion, but  
10 it's of great interest to some of us. We  
11 dredged away the largest oyster shell reef in  
12 the world to build highways. It was a big  
13 mistake, one of the many mistakes that we  
14 made, and now there is a serious interest to  
15 restore at least part of that reef to do some  
16 beneficial things in the Vermilion Bay  
17 Acadiana base area, and I would like to  
18 suggest to the parish officials that some of  
19 that material, rather than importing  
20 limestone, could be developed locally through  
21 the recycling of concrete which is presently  
22 very often landfilled, which is a huge waste  
23 of a resource, because the calcium carbonate  
24 in concrete is very similar to limestone,  
25 oysters love it, and I would suggest that the

1 parish and local governments could develop  
2 staging areas where when concrete was being  
3 disposed of locally it could be stockpiled in  
4 a barge accessible area, and when a suitable  
5 load was in place, we could barge this rubble  
6 to appropriate areas to restore shell reefs  
7 and perhaps to do some other useful things  
8 where hard structures are required, and I  
9 think it would be a very useful thing,  
10 Mr. Broussard, for PACE to at least look into  
11 as part of the recycling and restoration, a  
12 very specific restoration technique.

13 MR. AARON BROUSSARD:

14 It sounds good, sir. If you could  
15 give me a letter on that so I can make sure I  
16 understand it all. I would welcome the  
17 opportunity to look at it and spread that  
18 letter around to our group.

19 UNIDENTIFIED SPEAKER:

20 I would like to ditto what David  
21 Richard and Len Bahr have said. We need to  
22 do some things, and recycling of construction  
23 materials is one of them, filling up  
24 landfills, and we have a dire need. I  
25 wouldn't advocate that perhaps if we had

1 money coming, but we don't. People in south  
2 Louisiana are very creative. They have done  
3 a lot of things over the years.  
4 Mr. Rodriguez and some of these people are  
5 very frustrated. We need the public, the  
6 private sector, the local governments need to  
7 be empowered to take some of these problems  
8 almost into our own hands to where we can  
9 begin addressing some of these problems in  
10 Terrebonne Parish and Vermilion Parish and  
11 St. Bernard, and one of the small ways is  
12 with recycling construction materials. I had  
13 the thought while the panel was speaking, you  
14 know, we've got a lot of pumpouts, a lot of  
15 areas where the land has subsided, yet we are  
16 taking yard material and probably bringing it  
17 out of parish to sell landfill. We should be  
18 filling the holes in our own parish. Think  
19 about that, guys, when you go home.

20       And one thing that the  
21 universities can do, at least for Vermilion  
22 Parish, is you can help us from both a  
23 research perspective and a legislative  
24 perspective to figure out how to convert rice  
25 fields and cattle pastures into shrimp farms.

1 It sounds funny, but we are not far from it.

2 So think about that at the LSU

3 AgCenter. We went to the Agricultural

4 Center. They are doing some fabulous work

5 there. We need to think about some of these

6 things.

7 MR. AARON BROUSSARD:

8 Thank you, sir. President

9 Rousselle?

10 MR. BENNY ROUSSELLE:

11 To comment on that, currently we

12 utilize all the concrete that we come in

13 contact with from people disposing of it.

14 Our problem has been getting the permits from

15 the Corps of Engineers or other people to

16 allow us to utilize it on the shoulder of the

17 road just to protect the integrity of the

18 road. I have been issued cease and desist

19 orders for dumping concrete remnants to

20 protect my road and still waiting for

21 somebody to come and sue me.

22 MR. AARON BROUSSARD:

23 Mr. Walter Brooks, Regional

24 Planning Commission.

25 MR. WALTER BROOKS:

1           RPC in New Orleans has already  
2 been in contact with several members of the  
3 university community, including Tom Osborn  
4 and also Dr. van Heerden. We are looking to  
5 strengthen that partnership.

6           Now, the role I see for the  
7 university is to help us with some targeted  
8 research and analysis in support of some very  
9 specific capital improvement projects. The  
10 ones we are most interest in right now  
11 include looking at the operation block  
12 concept for the Rigolets and the MRGO area.  
13 We will be developing other short-term  
14 projects where there could be an opportunity  
15 for the universities to give us some  
16 technical analysis, but the key word here is  
17 in support of what we are trying to  
18 accomplish at the local level. We don't want  
19 to stall out projects for years in looking at  
20 all of the ramifications of doing some type  
21 of action. We need to get some things done  
22 because we are in dire need of protection  
23 down there.

24       MR. AARON BROUSSARD:

25           Thank you, Walter. Yes, sir. Did

1 you have a question?

2 MR. TED FALGOUT:

3 Thank you. I'm Ted Falgout, Port

4 Director of Port Fourchon. I guess I'm on

5 the frustration end with Junior and Charlotte

6 about the inability of this date to move

7 forward with actual construction of projects,

8 and I would ask the universities to focus

9 more on actual construction technologies.

10 Just items like Benny just mentioned, the

11 ability to put riff raft on the sides of

12 highways and allow the local parishes to

13 protect themselves while we have no money

14 certainly is just a small step that we could

15 show how we are interested in really doing

16 things.

17 Speaking about interest and

18 willingness to tackle the hard issues. We

19 saw earlier where we have about \$150 million

20 of freshwater diversion projects in Davis

21 Pond and Caernarvon operating at 15 percent.

22 We are asking for \$14 billion, and we can't

23 operate our existing projects at the full

24 capacity. There is a problem there, and the

25 universities, LSU, Legal Sea Grant, Mike

1 Wascom, I think we need to work through those  
2 issues and come up with a cookbook method on  
3 how to make these things actually work, and  
4 we can have a showplace and perhaps people  
5 will lend us money or give us money, in fact,  
6 if we can operate things at full capacity.

7       Another thing that I would like to  
8 see the universities work on, you know, we  
9 have had pretty much the same dredging  
10 technology for 400 years. We are identifying  
11 clearly that dredging, pipeline disposal of  
12 material, is a key way to restore coastal  
13 Louisiana without changing the hydrology of  
14 the entire basin which massive conveyance  
15 shambles would do. We are not focusing and  
16 working on developing technologies that will  
17 get us there. I mean, that's where we need  
18 to be, and those are my comments. Thank you.

19       MR. AARON BROUSSARD:

20       Thank you, sir. Question in the  
21 back?

22       MR. KERRY ST. PE:

23       Hi, my name is Kerry St. Pe. I'm  
24 the director of the Barataria-Terrebonne  
25 National Estuary Program.

1 I have to add myself to the  
2 frustration list for quite a while, as long  
3 as many people in this room. I think we have  
4 come to the point where we are going to have  
5 to do some things ourselves. It doesn't look  
6 like we are going to be getting the money we  
7 need. Nobody has mentioned it, but coming up  
8 here they are talking about \$80 billion more  
9 needed for the current thing going on in  
10 Iraq.

11 We are going to have to do some  
12 things ourselves. This pipeline thing I'm  
13 very glad to hear several of the panel  
14 members bring this up. I'm glad to hear Ted  
15 talk about it. This is something -- it's  
16 instructive. Let's look at this. I brought  
17 this up at a strategy meeting three years  
18 ago. I didn't invent this. I grew up in  
19 Plaquemines Parish. Whenever we needed dirt,  
20 that's how we got it. That's how English  
21 Turn's golf course was built. It's just  
22 routine. When we brought it up, it was  
23 virtually ignored because -- you know, for  
24 some unknown reason. This kind of thing has  
25 to stop. If a technique is brought up and

1 it's a technique that has been proven, then  
2 why not embrace it and use it? Let's go with  
3 it. It doesn't always have to come from, you  
4 know, the accepted engineering practices.  
5 Agencies are big, and one particular  
6 engineering group may not have ever used that  
7 practice before, but others obviously have.  
8 We have been doing in Plaquemines Parish for  
9 years.

10 I want to bring one more point  
11 about that. You talked about the Mississippi  
12 River. Yes. We should look at the  
13 Mississippi River, but let's not overlook the  
14 Atchafalaya too for the sediment source, the  
15 bed load. The Atchafalaya has a particular  
16 issue going on right now. People are wanting  
17 to dredge it. Let's use that and use it for  
18 central and western Terrebonne Parish.

19 The other thing is an issue that  
20 has come up and we are hearing more and more  
21 about it. As an estuary program, we get a  
22 lot of calls from a lot of people, and  
23 there's the issue that is coming up that I  
24 note Jim Wilkins is working on, and it needs  
25 to be solved. It's a sleeping issue, but it

1 is one of access. We have had all the  
2 arguments back when we were talking about 404  
3 permitting and the need to protect, even if  
4 it's your private land, we are going to  
5 protect this because wetlands are a  
6 particular value, and so we are going to  
7 require you, even though it's your land, to  
8 get a permit so that you don't damage it too  
9 much. Those debates happened back then. You  
10 are going to make me get a permit for my own  
11 private land? And we won those because of  
12 the greater good and the greater value of  
13 wetlands.

14 Spending public money on restoring  
15 private marshland has brought up these issues  
16 again, and still we are able to say, "Hey, we  
17 are restoring something with public money.  
18 Yes. It's private property, but it's for the  
19 overall good of the public." The one thing  
20 that's going to kill that is if we are  
21 spending money to restore a wetlands system  
22 and then telling you that you can't fish  
23 there any more regardless of how many decades  
24 you have been allowed to, you know, that is  
25 going to swing public support for coastal

1 restoration in the wrong direction, and I  
2 think the poster child for that right now is  
3 in LaFourche and Terrebonne Parish. I was  
4 talking to Benny Rousselle earlier. It's  
5 just kind of getting started in Plaquemines,  
6 but I'm sure we are going to see it more and  
7 more and more. What is state land? What is  
8 our ability to determine what is state land?  
9 What are the laws? These are things that  
10 Legal Sea Grant can answer, and we need to  
11 answer those really quickly, I believe.  
12 Thank you.

13 MR. AARON BROUSSARD:

14 Thank you, sir. Yes, sir.

15 UNIDENTIFIED SPEAKER:

16 Excuse me. I've got laryngitis.  
17 I'm frustrated as well. I have got a deal  
18 for you. I'm the person in the state that  
19 operates the CORES network that Mr. Osborn  
20 was talking about. It's basically the  
21 ultimate solution to getting correct  
22 elevations in the state. I am making this  
23 offer to parish presidents. I think Junior  
24 actually made me cry, so that's why I am  
25 talking about this.

1           At LSU we will come to your parish  
2 and install a CORES station within the next  
3 year to those of you who can catch me before  
4 I leave. Give me your business card, and we  
5 will put a CORES station in your parish.  
6 Thank you.

7           MR. AARON BROUSSARD:

8           That's a positive thing. Thank  
9 you very much. On behalf of the elected  
10 officials, we want to tell you how much we do  
11 appreciate that positive action.

12           Yes, sir?

13           MR. JOHN ULA:

14           My name is John Ula, and I have  
15 been associated with Jefferson Parish's CZM  
16 program for years, and I'm extremely upset  
17 and disappointed. I would suggest a project  
18 -- use Myrtle Grove, Louisiana, as a project  
19 to pump sand and sediment into the basin so  
20 that we could get all the way over to the  
21 lower part of LaFourche and help recreate  
22 marsh in that area. I would like LSU to take  
23 a look at that project. We could do guide  
24 levees. Pump those in first and then let the  
25 material go out, and as it procreates, we

1 could bifurcate the pipeline to increase the  
2 marsh out in that area. Thank you.

3 MR. AARON BROUSSARD:

4 Thank you, sir.

5 MR. RAM RAMCHARDRAN:

6 I don't like to go into a monolog,  
7 but that means after the professor  
8 volunteered to put the GPS, the PACE members  
9 are (inaudible) installing satellite based  
10 vertical data measurement in the parish so  
11 that we can count on having, coastal  
12 parishes, having the network so that we know  
13 exactly how much is settling down, how much  
14 is being eroded. Is that what I hear?

15 MR. AARON BROUSSARD:

16 Yes, sir. That's what it sounded  
17 like to me. They have conducted the  
18 research, they developed technology, that  
19 will give us the capacity to get true  
20 elevations within each parish by putting that  
21 CORES element in each parish.

22 MR. RAM RAMCHARDRAN:

23 So we are going to see that in  
24 operation within a year, right?

25 MR. AARON BROUSSARD:

1           He said within a year for those  
2 that want it, and that's going to be very  
3 helpful. In Jefferson Parish, we have  
4 already initiated that study, so that's going  
5 to help us greatly conclude that study a lot  
6 faster.

7           MR. RAM RAMCHARDRAN:

8           As you know, it is operational in  
9 St. Charles Parish, too, both west bank and  
10 east bank. We have been using concrete for  
11 quite some time on the restoration part of  
12 it, so it is paying off. Our coastal  
13 restoration chief is here, and he is putting  
14 Christmas trees and actually improving the  
15 coastal areas in our parish.

16          For the good doctor, if you can  
17 persuade the DOTD -- we don't seem to have  
18 much stroke with the department -- ask them  
19 to fall in line using an NGVD29. That  
20 could be a very big help because our roads  
21 are three feet below what we think it is. If  
22 you can make the state agencies to  
23 implement NAVD88, it would be a very big  
24 help.

25          Everybody is talking simply two

1 words, economics and politics. You can have  
2 economics. If you don't have the politics,  
3 you don't go anywhere. If you don't have  
4 politics, you don't get economics. We better  
5 get our act today. You suggested some time  
6 ago the barrier islands can be protected by  
7 using all the abandoned ships, tow them in  
8 and dump them, just like Alabama has done.  
9 When I was sitting in the OSC committee  
10 meeting, I said what are you doing with all  
11 the abandoned oil wells in the Gulf, hundreds  
12 of them? We can tell those oil companies to  
13 clean them up and dump it in our barrier  
14 land. We can build the barrier islands in  
15 Louisiana using those abandoned oil wells,  
16 platforms. They are readily available.  
17       If you can arrange to stage the  
18 evacuation so that smaller parishes are  
19 joining bigger parishes can time ourselves  
20 for evacuation and also well known, well  
21 publicized routes, so that our people will  
22 not feel the frustration. Leave all the  
23 politicians with other problems, so at least  
24 we will look good. Time it right and also  
25 the right route. We need that education,

1 well publicized routes.

2           Long term. We can talk all we  
3 want. There are going to be communities in  
4 the west bank, which will be washed. What do  
5 we do? We do not have the resources or the  
6 funding to save them.

7           The next logical question is where  
8 do we draw the line? Build the wall just  
9 like the Dutch did years ago, save the rest  
10 of the west bank, so that we can look back  
11 and say, "We took the right decision." Who  
12 is going to make that decision? It is a  
13 political decision. In other words, you have  
14 to relocate communities to a safer site and  
15 build the walls, say maybe paddling the  
16 Industrial Canal because there is an  
17 Industrial Canal they can easily build the  
18 concrete bunkers and put it on barges and  
19 lift it up and put it on the swamp and save  
20 1,500 feet from the Industrial Canal and  
21 build a big wall. Maybe that's what we have  
22 to do. Maybe that's what we have to look  
23 into.

24           If that kind of practical  
25 technical approach can be taken and go to

1 those communities south of the proposed wall  
2 and reason with them, maybe we can save our  
3 coastland in Louisiana. It's a hard decision  
4 for politicians, economics. It's practical  
5 because if you build a spar -- (inaudible)  
6 Manufacture cement, make this six feet by six  
7 feet by six feet concrete block, put it on  
8 barges, take it to the Industrial Canal and  
9 sink it and fill it up with sand.

10 By the way, MMS or the OCS has  
11 licensing procedures. You can take gravel  
12 and sand and mine it. It's free if you're  
13 willing to mine those things. You don't have  
14 to pump sand in pipelines. You can mine  
15 them.

16 The last item. I talked to the  
17 EPA. They are very, very willing provided  
18 the local government initiates this move.  
19 Small project. One of them was promoted in  
20 St. John Parish. Take one of those diversion  
21 through a canal, dump it in the St. John  
22 swamp land, and flush out the salination or  
23 desalinate it, and they are looking into it.  
24 They are seriously considering funding it.  
25 Can we do the same thing in a small way?

1 Bayou Lafourche. Maybe what we should do is  
2 go near Donaldsonville, get them (inaudible)  
3 water and flush out Bayou Lafourche. These  
4 are all small initiatives which will pay  
5 larger dividends. Who is going to make that  
6 decision? Who is going to promote it? Maybe  
7 LSU could look into these things and help us  
8 make the decision.

9 MR. AARON BROUSSARD:

10 Yes, sir?

11 MR. WOODY CRUISE:

12 My name is Woody Cruise. I'm  
13 neither an academic, nor am I a politician.  
14 I guess I'm just a dumb fisherman, but I have  
15 two charges for the university system, and  
16 the first is more went along the line with  
17 what I suspect public officials may not  
18 choose to focus on, at least not very well,  
19 and that is the use of the GIS information to  
20 determine which coastal communities may no  
21 longer be tenable and at what point they may  
22 longer with tenable. That would be a  
23 difficult conversation for a lot of our  
24 public officials to have.

25 And, secondly, through Dr.

1 Caffey's socioeconomic group or studies is to  
2 consider a type of oversight where a project  
3 that might cost randomly a hundred million  
4 dollars to save a community of 15 people. I  
5 wouldn't want to lose my home. I wouldn't  
6 want to have to move, but still very, very  
7 difficult decisions need to be made, at least  
8 brought to the surface in the realm of  
9 conversation so that these poorly cited  
10 decisions made on the basis of passion and  
11 emotion can be averted. Thank you.

12 MR. AARON BROUSSARD:

13 Thank you, sir. I will pass the  
14 mike back here.

15 DR. IVOR VAN HEERDEN:

16 I just want to make some comments.  
17 This was for Randy Roach, and I did grab him  
18 as he left, but the Hurricane Center at LSU  
19 is doing a study on the Southern Building  
20 Code as it could be applied to Louisiana and  
21 what changes could be needed, so that's a  
22 study underway.

23 In terms of the impacts on people,  
24 the stresses of being forced to move, we do  
25 have a group right now who just completed a

1 very detailed public opinion survey in New  
2 Orleans to try and understand people's  
3 attitudes in New Orleans to whether they will  
4 evacuate, what they fear, where will they go.  
5 It was a transport study to try to get an  
6 idea of where people will go from New  
7 Orleans.

8         The potential is, and I will get  
9 all of you to bring some sociologists,  
10 because this is something that they would be  
11 interested in, and they, in turn, if they  
12 knew it was an area that they could work to  
13 go and get the funding to look at these sort  
14 of stress situations.

15         The last thing, beneficial dredge  
16 material. That's one of my old babies. We  
17 work very hard. I think we've got some very  
18 successful projects going in the Atchafalaya  
19 Basin where we brought in some technology,  
20 believe it or not, from Africa that showed  
21 how you could fantail the dredge work, and  
22 they have created many, many hundreds of  
23 acres of wetlands in that area. If there is  
24 a local community that wants to do its own  
25 beneficial dredge material project or look

1 into the technology, we will be more than  
2 willing to talk to you. There are a number  
3 of things you can do with dredge material,  
4 and also I was going to mention recycling.  
5 We have been working with Yarrow Etheredge  
6 looking at two different projects. One is to  
7 crush glass to use as beach material. It's  
8 something we tried to get going many years  
9 ago with CWPPRA. That's recycling glass  
10 bottles and crushing them down to the size of  
11 sand and using them as sand. The second  
12 thing is to use garden waste, to compost it  
13 and use it as a material to restore wetlands  
14 by actually spraying it out into the  
15 wetlands. So those are some of the  
16 discussions that we have had going, and we  
17 did get a little funding to start some of  
18 those. Thank you.

19 MR. AARON BROUSSARD:

20 Thank you so much. Closing  
21 comments by any of the panelists?

22 MR. MIKE BERTRAND:

23 The only thing that we would ask  
24 is that when the universities come into the  
25 parish, that they do meet with the parish and

1 they listen to what the parish people say.  
2 Just like was said before, there are a lot of  
3 things that a lot of these marsh managers  
4 have been utilizing in the way of techniques,  
5 things that we have thrown out in the past  
6 that seemed to have been ignored, and it's  
7 important I think for the universities to  
8 give that some due consideration and to find  
9 out what the people in the parish feel about  
10 coastal restoration or any of the other  
11 infrastructure of those kind of projects.

12         The second thing, dealing with  
13 transportation. One of the key things that  
14 was said earlier by one of the  
15 representatives I believe was the fact that  
16 there is a need to try to get a mindset into  
17 not only the DOTD but some of the other  
18 entities is that the alternate routes that  
19 are available besides the interstate routes.

20         One of the things in the last  
21 hurricane that we tried to get the state to  
22 try to get something moving was to try to get  
23 diversion of traffic that was hanging off in  
24 the New Iberia area to take Highway 14, which  
25 takes you through Abbeville, Lake Arthur, and

1 it goes all the way to Lake Charles and  
2 beyond. A lot of these people could have  
3 been diverted there and could have taken  
4 these routes, which were clear at the time,  
5 and could have utilized and taken a lot of  
6 that load off of the interstate system. So I  
7 think it goes back to, in any parish, a lot  
8 of these alternative routes that are the old  
9 routes that can be utilized safely and will  
10 help to divert that traffic.

11 MR. AARON BROUSSARD:

12 Thank you, sir.

13 MR. AL LEVRON:

14 On behalf of Terrebonne Parish, we  
15 would like to thank you for inviting us  
16 today. We look forward to partnering with  
17 the university or any other entity that would  
18 assist us in solving our problems because we  
19 want to be a part of the solution.

20 MR. TIM KERNER:

21 I heard some talk about getting  
22 discouraged on meetings and not much  
23 happening. I think we are very close to some  
24 positive things happening out of Washington,  
25 and I think it's due to the fact that PACE

1 has come together and working very hard, the  
2 governor of the state is working very hard,  
3 and I think the delegation that we send to  
4 Washington is working very hard. I'm asking  
5 everybody to stay united, stay focused, don't  
6 throw in the towel, continue to fight. I  
7 think we are close to having some wonderful  
8 things happen for south Louisiana and the  
9 state. So please back PACE, back the  
10 governor of the state, and let's get some  
11 help.

12 MR. BENNY ROUSSELLE:

13 I would also like to thank LSU and  
14 Dr. Jenkins again. I just want to reiterate  
15 my comments. I know we have heard some  
16 comments earlier today about Supreme Court  
17 ruling and what that would allow us to do as  
18 far as oyster cases and leases in the way of  
19 projects. From my reading of the decision, I  
20 think that it gives us pretty much a green  
21 light, except for third parties, like oil and  
22 gas companies, but as far as the state goes,  
23 I think it gives us a green light to move  
24 forward with the projects, and I would hope  
25 that if we wanted to continue with King's

1 theory about talking as one voice, that we  
2 get DNR, Wildlife & Fisheries, and coastal  
3 restoration effort in the state all on the  
4 same page, and that way when we issue an  
5 oyster lease, we know there is a project  
6 there, and I know there has been a moratorium  
7 over the years, but to me, if we can't get  
8 the state agencies to speak as one, then it's  
9 going to be hard to ask everybody else to  
10 speak as one. If you could do anything to  
11 coordinate the state's efforts and move  
12 forward with getting the projects on the  
13 ground, because by the time some of these  
14 projects will be put on the ground, the  
15 engineering that has been done several years  
16 ago is outdated and the projects are no  
17 longer feasible, so all of that money that is  
18 spent on engineering to get the project ready  
19 to go sitting in the can, we can't build it.

20 I would ask that you work in that  
21 direction. Thank you for having us.

22 MR. AARON BROUSSARD:

23 Ms. Etheredge?

24 MS. YARROW ETHEREDGE:

25 Three points for -- well,

1 something I will take home and something  
2 hopefully you will take one. One is  
3 definitely I agree with Tim that now is not  
4 the time to get discouraged. It's the time  
5 to get energized. We are very close. One of  
6 the things that I have heard that is limiting  
7 our success is definitely the appearance that  
8 we are not protecting what we are asking for  
9 the nation to protect through permitting and  
10 through oil and gas. I'm sure there is a way  
11 to resolve these issues, but I think we need  
12 to actively look at what we are doing to our  
13 own coast.

14 Another thing is that yes, we  
15 understand we need a regional evacuation  
16 plan, and lastly, I think that it is  
17 necessary for us to encourage leadership at  
18 the national and statewide level on climate  
19 change. I think that's part of our package  
20 of problems with sea level rise and coastal  
21 loss.

22 MR. AARON BROUSSARD:

23 Thank you. Mr. President?

24 MR. JUNIOR RODRIGUEZ:

25 Thank you. I want to thank all of

1 you all for the opportunity to be here today.  
2 Timothy, I can assure you that I'm  
3 frustrated, but I'm not giving up. Usually  
4 after I go through a little period of  
5 frustration, I really get ticked, and then I  
6 get all over again, you know, and it comes  
7 back, and I really get feisty. We have been  
8 to Washington. We've seen what it is up  
9 there with the attitude of these people. I  
10 think they need some attitude adjustments up  
11 there in Washington.

12       Every one of you all from every  
13 parish -- I know in St. Bernard and I'm going  
14 to assume in every parish in this state, the  
15 problems that we are associated with is not a  
16 result of what our parish has done or not  
17 done, even with regard to land use planning.  
18 It's always problems that's associated with a  
19 national situation, oil and gas, for  
20 instance. I don't want to spout out the  
21 numbers. You all know the numbers of what we  
22 supply, and it's always the economics of the  
23 situation. What concerns me is why don't the  
24 State of Louisiana get a little more positive  
25 and let's play a little poker hand? Why

1 doesn't somebody in the legislature bring up  
2 a bill and threaten to put a moratorium on  
3 all the oil and gas activities in the state  
4 of Louisiana? Do you realize that some of  
5 them folks up there think there's only one  
6 valve that gives them gas and oil? You know,  
7 I learned a long time ago a good threat  
8 sometimes works. Look at the Saints. They  
9 threatened to leave and we want to give them  
10 millions. Where's our priorities? Go build  
11 them another stadium. They can't even win a  
12 ball game, but they threaten to leave and all  
13 of a sudden we are going to throw millions  
14 after them. We need that stadium because  
15 that maybe where Mr. Nagin may have to put  
16 some of his people if they don't start  
17 helping us out on this coastal area.

18 I really think we ought to think  
19 about a moratorium and we ought to start  
20 implementing it. I think we ought to try at  
21 least. Can you imagine that? What happens  
22 when the cartel sees the price go down or if  
23 they get together? Doesn't the stock market  
24 fluctuate every time something happens?  
25 Think about it. They've got some people up

1 there that still think the Easter bunny  
2 brings the rabbits and he delivers the eggs.  
3 They don't know there are chickens around.  
4 Maybe we can fool them.

5 MR. AARON BROUSSARD:

6 Thank you. Mr. President?

7 MR. DON SCHWAB:

8 Just a few comments. Along with  
9 what Mr. Bertrand said, my name is Don  
10 Schwab, Parish President of Terrebonne. I  
11 would really like to make a recommendation to  
12 Dr. Jenkins and also I see Mr. Milling has  
13 left, but I think Berwick is still here with  
14 the Governor's Advisory Commission. In order  
15 for the parish presidents to have an impact  
16 on decisions that are being made on coastal  
17 restoration, we have some very talented  
18 individuals in our respective parishes. I  
19 know in Terrebonne we have guys that is  
20 familiar with coastal restoration that has  
21 done work on hurricanes. I think it would be  
22 great if we could recommend to Governor  
23 Blanco if we could maybe get two  
24 representatives from each parish, from each  
25 coastal -- in the PACE group and get together

1 and maybe make some recommendations to  
2 Governor Blanco's Advisory Commission or  
3 board that she has now. I think that would  
4 make us a lot more comfortable thinking that  
5 we were going to have some kind of impact on  
6 what's going to happen on our coast line,  
7 because, once again, to be repetitive, we  
8 have got some very talented people that knows  
9 about coastal restoration, that has seen the  
10 problem up front. Maybe they could add  
11 something to this commission.

12 I thank you all very much. Dr.  
13 Jenkins, thank you very much for the forum.

14 MR. AARON BROUSSARD:

15 On behalf of all the PACE members,  
16 those that are here and those that could not  
17 be here, we want to thank the university and  
18 Dr. Jenkins for hosting what we think is a  
19 landmark event and bringing academia and the  
20 elected officials together to interface about  
21 a problem that threatens us all. There is a  
22 lost of agendas at work here. There are  
23 federal agendas, there are state agendas,  
24 there are local agendas, but mother nature's  
25 agenda is winning out, and she doesn't need

1 lobbying and she doesn't need money and she  
2 doesn't need politics. She is just doing her  
3 thing. Today while we had this meeting, all  
4 of us know the math, we know how much  
5 Louisiana land we lost today talking about  
6 the loss of Louisiana land. She is winning.

7       Each of us here that represent a  
8 parish are fighting an individual battle to  
9 do as much as we can where we are. Our  
10 problems are different, but they are very  
11 much alike in a number of ways. We need the  
12 university to help us with the information  
13 that you are developing about a better  
14 evacuation plan for hurricanes. We need that  
15 information. Help us with that. Any  
16 information you have about innovative ways of  
17 hurricane protection, we need that  
18 information. We need and appreciate the  
19 offer of giving us the mechanism that we need  
20 to do our proper elevations. That was a  
21 wonderful offer that the university made.  
22 That's going to benefit every parish that's  
23 affected by these elevations. We need that  
24 information.

25       Land use is going to be a very

1 tough issue for all of us to come to grips  
2 with. At some point, each parish is going to  
3 have to define where is its Alamo, where are  
4 we going to make the last stand, and those  
5 are going to be tough decisions. The  
6 university can help us with that, and we  
7 would appreciate that assistance as well.

8       Conversely, whatever you think the  
9 PACE organization can do to help the  
10 university further the studies that you are  
11 embarking on, although we recognize, as  
12 Junior Rodriguez said -- and, look, if I'm in  
13 a foxhole fighting for anything, I want  
14 Junior Rodriguez right there on the side of  
15 me because he articulates it so well, but if  
16 there are studies that you are embarking on  
17 that you need the PACE organization to  
18 advocate for you at the state or federal  
19 level, please let us know those things so we  
20 can contact our state representatives and  
21 senators, so we can contact our federal  
22 delegation, to help the university in its  
23 quest to do these studies that ultimately  
24 will yield information such as what you  
25 revealed today because we recognize the worth

1 of what you do and we recognize that the end  
2 product of what you generate will go a long  
3 way to guiding us as to the right measures to  
4 take and the right paths to take.

5         We thank you very much as elected  
6 officials for all that you do and for setting  
7 up this occasion today. Hopefully we will  
8 meet again, and at that time we will be  
9 chasing mother nature down and hopefully  
10 catching her.

11         Thank you very much for your  
12 participation. We have some closing comments  
13 by the university.

14         DR. PAUL COREIL:

15         We are going to have the closing  
16 session, and Dr. Jenkins will have the last  
17 word, but I wanted to remind you of a few  
18 things you need to know before you leave.

19         The first thing is everything that  
20 was said today, and some people may or may  
21 not like this, but it was recorded, and we  
22 are going to have a transcription of the  
23 entire meeting, and from there, this meeting  
24 transcription -- we are going to develop all  
25 the action items of things that were brought

1 up that we should be looking at in terms of  
2 the university's involvement and other  
3 recommendations. That will be sent to  
4 everyone that's here.

5         The action plan that we developed,  
6 we want you to add and subtract from it. We  
7 will give opportunities for local government  
8 to do that, and the university will look at  
9 what can we do immediately to take action.  
10 We know we can't do everything, but we know  
11 we want to do more, and that's why you are  
12 here today, and that's why President Jenkins  
13 has made a commitment and a priority of this  
14 issue in his presidency here at LSU.

15         I can assure you that we share the  
16 frustration that everyone has. That's why we  
17 asked that you come here today and reengage  
18 in conversations that we have been having for  
19 a long time, but I also can assure you that  
20 when we quit meeting, that will be the end of  
21 the battle, and that's not going to happen.  
22 We have to meet to continue to remind  
23 ourselves how critical this issue is, but we  
24 also need to have plans on the ground, and we  
25 understand that as well.

1           We thank you for coming, and I  
2 really want to thank Dr. Jenkins for his  
3 support and leadership in helping us and  
4 providing the leadership for this meeting,  
5 and I'm going to give him the last word. You  
6 will be hearing back from us on the actions  
7 that we have talked about today, and we hope  
8 to have many more meetings like this that we  
9 actually begin implementing the action items  
10 with you.

11       DR. WILLIAM JENKINS:

12           Thank you very much, Paul, and  
13 permit me to thank you each and every one of  
14 you for gracing us with your presence today.  
15 I have enjoyed the proceedings very, very  
16 much. As Paul has repeated several times,  
17 it's a major issue in my own world and that  
18 is because I am well aware of the threat to  
19 this truly remarkable and wonderful state  
20 that is posed by the threat to our coast  
21 line.

22           I thank you, Aaron, and the rest  
23 of the PACE delegation that are present here  
24 today, and I think I can confidently predict  
25 what this initial meeting was all about was

1 for you to understand that we, as a  
2 university community, are very sensitive and,  
3 I reiterate what Paul said, equally  
4 frustrated that we are not making the  
5 progress that we would like to make, but we  
6 need to be in this with you, and the word  
7 "partnership" has been used several times.  
8 That is very important for me.

9         Paul did announce to you that we  
10 will develop an action plan, that we have the  
11 proceedings on record. I think equally  
12 importantly I would like to see the PACE  
13 delegation develop what they would see as the  
14 priorities of how we could help as a  
15 university community, and there might be  
16 thoughts that would spill out of today's  
17 proceedings that you would put a very high  
18 priority on.

19         Should you elect for us to meet  
20 again, and I would like that very much, but  
21 it's clearly your decision, there are other  
22 resources that I have access to that we  
23 didn't present today, and the question of law  
24 and legal aspects have come up, and of  
25 course, the Paul M. Hebert Law Center is

1 available as part of the LSU System and there  
2 are other components. You have brought up  
3 state agencies, and I can't tell the  
4 secretary of a state agency what to do, but I  
5 certainly am in a position to encourage them  
6 to come and spend time with, DOTD and others,  
7 and I happen to know the secretary, and I'm  
8 more than willing to do that for you.

9       When we form our delegations to go  
10 to Washington, I would be very happy to be  
11 part of your delegation. I am going to let  
12 my voice be heard. I'm actually leaving  
13 tomorrow, as many of you are in this room,  
14 for Washington, and as I interact once again  
15 with the congressional delegation, I will  
16 repeat, as I have done frequently, the  
17 importance of this issue and how it has to be  
18 addressed.

19       But we are there with you and we  
20 need your guidance. We, as a community,  
21 certainly bring research, we bring  
22 engagement, we bring education as well, to  
23 the table, but we need to work with you so  
24 that we clearly understand one another and we  
25 understand your challenges at the same time

1 we have limitations that I dearly like to  
2 remove because we do deal, as you all know,  
3 with federal regulations and federal  
4 constraints that is very hard for us to  
5 bypass.

6         One aspect that hasn't been  
7 touched on and I would like you to think  
8 about it is the question of public health and  
9 the implications that may emerge from  
10 certainly emergency situations. We have not  
11 paid a great deal of attention to that, but I  
12 think if you just review recent events in the  
13 Far East, you can see what those implications  
14 could well be, and perhaps we are not as well  
15 prepared as we think we are, and once again,  
16 there is a health science center in New  
17 Orleans. It happens to be the LSU Health  
18 Science Center for which I am also  
19 responsible.

20         I thank you very, very much for  
21 your presence. This has been for me  
22 personally a very beneficial day, a very  
23 rewarding day, and it's wonderful to see the  
24 synergy that I see developing within this  
25 room, and we, once again, permit me to

1 repeat, are as frustrated as you are, but we  
2 are very determined to do something about it,  
3 and if there is any way I can help in the  
4 future, if there is any contribution you  
5 think I could make, if my presence -- not as  
6 Bill Jenkins, but my presence as the  
7 president of the LSU System you think could  
8 help in any of your endeavors, just call on  
9 me and I will be there with you.

10       Travel home safely, be careful,  
11 and let's get this done together in the  
12 coming years. Thank you.

13       (End of Proceeding.)

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1           C E R T I F I C A T E

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3           I, DIANA S. EZELL, RPR-RMR,  
4 Certified Court Reporter, do hereby certify  
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10           That I am not of counsel, not  
11 related to counsel or the parties hereto, and  
12 in no way interested in the outcome of this  
13 event;

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