March 13, 2009
Call with Kerry St Pé
Interviewer: Winder Lyons

WINDER: I'd like to welcome everybody to our call today. My name is Winder Lyons and I have Kerry St. Pé with us today. Kerry, what exactly is your title with the Barataria-Terrebonne Organization?

KERRY: Well I'm a Program Director of the Barataria-Terrebonne National Estuary Program.

WINDER: And what exactly does that entail?

KERRY: Well it entails steering the program forward. We developed a plan, a restoration plan, over 5 years beginning in 1991 with hundreds and hundreds of people over that 5 year period. And during that 5 year period I was the elected chairman of the Scientific Technical Committee, Chairman, Committee. So I worked very closely with the program over those first 5 planning years. And when the original director, his 5 years were up, they asked me to become Director so I've been Director since that time.

WINDER: Okay and the focus and point of the whole organization is what exactly?

KERRY: The whole focus, the whole reason, National Estuary Programs were invented was to reach a point of agreement. We all agreed that restoration must occur but that's not the question. The question is how? How is it going to occur from this point forward? So we, through consensus, over those 5 years of planning, we reached an agreement. And the whole theory is that we aren't going to progress, any, until we move in accordance with an agreement. With an agreement between navigation interests, and scientists, and oyster people, recreational fishing people, the shrimpers, I mean the river created this place and over 6,500 years and we destroyed it in 75 years by building levies and cutting channels through that allow storm surges to be pushed up far into fresh water areas. And it doesn't look like it once did, of course, so we need to do something that's going to restore it. Now people have moved and they use the system the way it is now. We have navigation interests moving up the Mississippi River. We have oyster people that have moved in as the swing tides have increased farther north in the system. So bringing all those people together, how can we restore the system without arguing about it for the rest of our lives.

WINDER: Til it's too late.

KERRY: Til it's all gone. So that's the point I'm at now.

WINDER: But this is not a new thing for you, you've been involved in this and living in this area and watching this whole process since you were a child, right?

KERRY: Right, I grew up in southern Plaquemines Parish, in a little town called Port Sulphur.

WINDER: Port Sulphur. Describe what life was like as a child in this incredibly beautiful area, or at least what was an incredibly beautiful area.

KERRY: Well, I always tell people I had a very idyllic early years of life. We, in the early 50s, I mean, it was like everybody else down there. We left in the morning, during the summer, and we came back for supper. We played in the marshes. We played on the ridges, I still have vivid memories of when I was in high school of traveling out to the old schnears, the high places in the marsh that were full of living live oaks and filled with palmettos and camping out on those places. In fact that same ridge is a forest of dead trees today. It's sinking, the whole platform is sinking. This is the fast disappearing landmass on Earth. And as the ridges sink, the roots are totally inundated in water and the trees die. And that ridge that I played on as a kid, not too early as a kid, I mean, I was in high school, is now dead.

WINDER: And that's not unique to just a little bit of this incredibly rich and prolific delta, it's everywhere.

KERRY: Yeah, that extends to the whole deltaic region. The whole area that was built over 6,500 years by the river is suffering the same fate, it's all sinking.

WINDER: This is one of the most fertile deltas in the world is it not?

KERRY: Oh, very definitely. Just in the Barataria-Terrebonne region, that's the area between the Mississippi River and the Atchafalaya River, there's a fact that was uncovered in, when we were nominated to be in the restoration program, that 25% of the estuarine dependant species, 25% spent all or part of their lifetime just in the Barataria-Terrebonne region. So it's incredibly productive.

WINDER: Now, so you have this incredibly fertile area that was created by the Mississippi by depositing silt all over this huge millions of acres and because we channeled the river and the silt no longer can get there and it's allowing the salt water to intrude and it's killing everything in its path, is that a pretty good summation of it?

KERRY: Yeah, it's progressed, or regressed to the point where it's affecting everything. It's affecting drinking water; we have several drinking water sources that service thousands and thousands, hundreds of thousands of people, that are now becoming too salty to drink. We have storm surges pushed by hurricanes that are now infinitely more damaging than they once were when we had marshes out there to knock down the storm surge just through friction. I mean, those ridges that I talked about earlier were most important and gave us the most storm surge protection. Those ridges are now all dying, they're sinking, we no longer have the Mississippi River to replenish that system. So everything is sinking, everything is dying, the marshes are opening up, turning into open water, and now we have storm surges hitting directly and overtopping and breaching hurricane protection levies.

WINDER: I was in a conversation with Carlton Dufrechou the other day and he said something that just floored me. He said, you know, it's going to cost, he said I think about 100 billion dollars to actually address the problem, there's enough landmass or marsh areas still left to accomplish this if we move quickly. And, but he said if we don't then every time a hurricane comes now it's going to cost, I don't know what the estimates are, 20-50 billion dollars per storm in just damage repair. So if we don't, either we spend the 100 billion dollars in prevention now or countless billions or trillions in the future from not doing anything.

KERRY: Right, right. It's—

WINDER: Would you agree with that?

KERRY: Yeah, I do. It's much cheaper to fix the problem than it is to let us go. I mean…

WINDER: So why aren't we?

KERRY: Because people have continued, although we created a consensus driven plan over 15 years ago, people are still arguing about how to do it. How to do it. And Congress is not going to give us the money to address this issue if we don't agree as to how it's done. So I think this incessant arguing about how things are done how to bring it back is causing Congress not to give us the money we need.

WINDER: Are there some places that everybody, all the different organizations, do agree, that we could start on right away that would have impact?

KERRY: Yeah, we agree that there needs to be water diversions. Water diversions can bring minimal amounts of sediment, I mean, the fine silt, the fines as they're called. They can bring that in and keep what we have now. I mean they can sustain what we have now. We obviously need sediments to bring us back, to redeposit in the areas that are now open water that were once marshes, that were once barrier islands, cypress swamps and the ridges. We need sediments. What we're advocating is to harvest the sediments in the river from where it is, it's on the bottom, it's not in the water column anymore. The sediment in the water column has declined by 80-50%, by 50-80% since 1850 because of all the locks and dams that have been built in the water shed. So we are advocating going where the sediment is, it's on the bottom, and pumping it through pipes with dredges to rebuild the coast and immediately. I mean, we could build four hundred square miles of wetlands in 50 years.

WINDER: Just with the dredging program?

KERRY: Just with the dredging program. And then we would have to coincide that with diversions too, we need fresh water input to sustain the marshes that we have now and the marshes that we would build.

WINDER: Sort of mimicking what the river used to do in other words?

KERRY: Right, right. We need to mimic what the river did. It delivered sediments and water but the river is no longer the river it was when it built this place the first time. So we need to go to where the sediments is, at the bottom.

WINDER: Now in an earlier conversation that we had you mentioned that there was a lot of potential harvest of sediment in the Gulf, out, so the Mississippi has been flowing now since it's been channeled in the late 20s and 30s, taking all the silt that should have been deposited all across the delta and just dumping it off the continental shelf. But between the end of the mouth of the river and the shelf, there's a lot that's there. How do we get that out and use it?

KERRY: Well there are a number of sand deposits off shore that are not around the mouth of the river. The mouth of the river, yeah, the sediment is rolling along the bottom and there's about a hundred million metric tons of sediment flowing out the river now. And the Corp dredges out a navigation channel every year, every year they dredge out 20-22 million cubic yards out the river with hopper dredges and they bring it offshore and dump it. They're dumping what should be Louisiana. But, yhe deposits that are off shore of Louisiana, those deposits have been used in recent years to restore barrier islands. But we can use that 22 million cubic yards and then some we can use all the sediment that's deposited annually or that is not deposited annually because of all the deposition areas are filled. We can use those depositional areas that are outside the channel, you see, the channel is only a small part of the width of the river. On the shoreline or between the channel, the navigation channel, and the shoreline of the Mississippi River there's an infinite amount of sediment available there. In fact there are private enterprises that harvest that sediment and sell it, you know, as fill. In fact the place I grew up in, in Port Sulphur was built by Freeport Sulphur Company in 1922 with a dredge and a pipe. It was marsh and they filled it and raised it and with the sediment from the river. So this can be done, there's no question this can be done. It's very expensive however.

WINDER: Yeah, but it's very expensive not to do it, more expensive in the long run. And I think that, to me, seems like the overriding point that people just aren't getting. Inactivity or inaction and allowing this situation to continue to deteriorate is going to create a catastrophe beyond calculation. Not only is it going to be 20-50 billion dollars every time a hurricane gets close, just what that's going to cost the taxpayers, but then there's the inestimable loss of an entire culture and way of life and this incredible beauty that has existed for all these thousands of years that we're just squandering.

KERRY: There's no question. There's no question at all. You see, I point out that we're very different ecologically, I mean, we're at the mouth of one of the world's great rivers. So we're different in that respect, very different from other parts of the United States. When we seek high land to live on, we go to the water, because that's where all the ridges are, that's where all the high land is, that's where when the river flooded its banks it deposited the heavier particles, immediately next to the channel, and that process involved the fines, or the fine silt, perpendicular away from the channel, settling out and those were our wetlands. So we need to get back to that, we can harvest the sediment and pump it. Make up what we've lost.

WINDER: Well so, if everybody at least agrees on that part, again the same question, there's enough commonality, let's back up. There are a lot of interests involved in this, and some of them, the commercial interests are sort of at war, it seems to me, or not at war, that's maybe too strong of a word, they're at odds with the purely environmental and ecological groups that just want it to move quickly and get it back to the way it was as fast as possible and there's a divergence of opinion about how that should be done. Now, but still, everybody does agree on the basics of getting silt where it needs to go and getting some fresh water back in to keep some of the salt water down.

KERRY: Everybody agrees to that.

WINDER: So, that being said, what can we do to at least get that part of the program going and sort out the details on the rest of it as we go?

KERRY: Well, that's what we want to see. I mean, that's what we are espousing. There's no question that large diversions do have a place, they will restore the fisheries and over 1,500 years, they'll bring back some land to protect our communities. But the people here do not feel very safe waiting 1,500 years for the river to build us back. So why not build us back in the most quick, quickest way possible, by pumping sediment and depositing it in these open water areas, and still consider large diversions and work out all the details if it can be worked out at a later date. We, our plan, our CCMP, our agreement, allows us to consider certain things, it dictates we have to consider certain things. We have to consider the impact to fisheries, okay, large diversions would probably be very good for fisheries, in the long run, but it also requires us to consider the impacts to navigation in the river and displacement of oysters and shrimp and flooding people. You can't just put a bunch of water in here without flooding people. So we're limited to how much water we can put in, into the middle of the basin for example. But we're not limited to how much water we can put below where people are living now. And down the Atchafalaya, we all support such things. It's the, I told you about the ecological differences from the rest of the country, but we also differ culturally, very different. In my presentations I always make this point, my ancestors came here first in 1760 and they settled in a place called Barataria, Louisiana, that fact of living here generations, for generations and generations, can be talked about or pointed to by a large number of our population. People tend to come here and they stay. And that's why we have all this incredible cultural component to our region. We can say that our families first came here generations ago. It's not that we came here and settled in places where we shouldn't have lived. The system has collapsed while we have been here. And it's collapsed largely because we had to build higher and higher levies as the upper water shed of the Mississippi River, the flood plain was reduced, no longer could that water spread out up there, it was confined to the channel, so we had to build higher and higher levies to protect us from flooding. When my ancestor settled here in 1760, he didn't have any levies. Now he had hurricanes, but hurricanes would blow through here and knock a few trees down, probably on his house and he'd fix his house and go about his business. Now when hurricanes pass through here, walls of water float the house off the foundation. There's no building back after that. You might build back once, maybe twice, but sooner or later you're going to give up. And people are giving up now, along our coast, they're moving further and further inland. Where does it stop? I mean, New Orleans, Homua, Thibodaux, they're just a hurricane away from being destroyed, unless land is built between them and the Gulf, <u>now</u>.

WINDER: Somebody said that it's not a question if we don't fix this, it's not a question of whether or not the places you mentioned, New Orleans, Homua, Thibodaux, etc, will be gone eventually, it's only a question of when.

KERRY: That's right.

WINDER: Is that accurate?

KERRY: That's very accurate. If we don't do something towards restoration <u>now</u>, that means getting land <u>now</u> between us and the Gulf. You're not going to do it with water alone, you're not going to get the sediments we need in the time we need it with water alone, that's very clear. It took the Mississippi River 6,500 years to build this place and it didn't build it from its current channel. The channel moved around like the end of a hose, so with the reduced sediment load,

you're not going to build land in the time we need it with water diversions. You've got to harvest it.

WINDER: Yeah, so how much time do we have before it's too late?

KERRY: Well, two years ago I was quoted in, I and several other scientists were quoted as saying we had 10 years left. That's not to say that everything will suddenly be gone in 10 years. But that is to say that unless we get the infrastructure in place to deliver the sediments that we need now, to start rebuilding the coast within 10 years, then the place will be, I think, too far gone, it'll be, everybody will still live here, if we haven't had another hurricane to wipe us out. Everybody will still be here, but they'll be very vulnerable. I think we have, now, eight years left.

WINDER: Now, when Katrina came through, normally now we're losing about 25 square miles of landmass per year.

KERRY: Yes, that's right.

WINDER: I'm sorry?

KERRY: Yeah, statewide, that's correct.

WINDER: Down from about 60 square miles per year. And the reason that we're losing less now it's not because we've gotten better at this, it's just because there's less easily accessible or less vulnerable land to loss.

KERRY: Right, exactly, we've lost all the easy stuff and now we're losing the skeletal structure of our system, the ridges.

WINDER: Okay, if the government said, okay we get it and we're moving forward with this, and we're going to take, we're going to invest the 100 billion dollars it's going to take to fix this problem quickly and they took it on like a CCC project where they threw, we want to put some people back to work, how about bringing 100,000 people down there and the equipment and get done with what you've been describing and get the sediments where they need to go. How long would it take with a concerted effort and the right attitude to get the problem under control so we could stop the devastation?

KERRY: Well, this pipeline sediment strategy has been fully examined, independently by a large consulting engineering company called CH2MHill and they said that if we use the most aggressive strategy, that means two dredges on the Mississippi River, that means one on the Atchafalaya, and means one off shore, with water diversions, we can restore 400 square miles of wetlands in 50 years.

WINDER: 50 years?

KERRY: 50 years. And you could do, you could do a more aggressive strategy with more dredges, pumping into the Pontchartrain system and create more, it all depends how aggressive you want to be. Or you could be less aggressive.

WINDER: So, we're looking at two separate systems really, the Barataria-Terrebonne to the west of the Mississippi and the Pontchartrain Basin to the east of the Mississippi. And as I understand it, the eastern part is so vulnerable now that every storm that comes through is going to just devastate New Orleans again and again and again. So wouldn't that be a place that would require maybe the first or more aggressive action than the other?

KERRY: Well, there's no question that New Orleans has a higher population, but I remind you that part of New Orleans is on the west side of the river and the Barataria-Terrebonne region, the reason it's a National Estuary is because it's the fastest disappearing landmass on Earth. 16 of those 25 square miles of loss every year occur in the Barataria-Terrebonne, but there's no question that New Orleans has more people, so if you're going to put your money where it's going to do the most benefit I would think you'd have to do New Orleans, you save the Pontchartrain system, but at the same time you save the west bank.

WINDER: How do you put a value on either place, it's impossible, they're beyond calculation in terms of dollars. How many species of plants and animals and fish and insects would be lost if these areas go?

KERRY: Well, for years and years in the early days of the program and for the early days of my career, we talked about the importance of wetlands. I mean, this goes back years and years, I mean, to Percy Viasca who was the head of the agency that became our Wildlife and Fisheries and he cautioned everybody from cutting off our wetlands from the river, way back then. Well they didn't listen to him. He said the river is the heart, it's the thing that keeps us productive, it's responsible for this enormous productivity we have. Nobody listened to him. Nobody listened to biologist and ecologist from then on. It's, people they still get their shrimp, they still get their fish, in fact degrading wetlands result in more fish because of something called "the edge effect." The edge effect, when continuous marsh breaks up into smaller pieces it creates more edge, more edge that the smaller fish can feed around and the larger fish feed on them and up the food chain. And so a degrading marsh creates more fish, more productivity, and people experience that, I mean, and they go out and they can catch all they want. So I don't know if they don't believe the predictions that this will stop when it all turns to open water, suddenly the fish and the shrimp will collapse, it's been the storm surge damage that's brought people around. This is responsible for most of the activity most of the momentum that's moved towards restoration. Protect my home, protect my community, we need something now to, I mean, you don't even have to fish or hunt to be linked to the wetlands. If you live anywhere down here, you are dependant upon these wetlands to protect your house. If you don't eat seafood, if you don't fish or hunt, if you don't see the marshes at all throughout your life, you depend on these wetlands to protect your house from storm surges. And that's what got most people very scared right now and everybody is advocating for restoration now.

WINDER: Well, just from the aesthetic point of view, that's clear that we have to fix that, I think that people from all over the country don't realize how this will impact their lives, if I'm understanding this correctly, if the wetlands go, about a third of all our oil production or delivery will cease, because it will take 10 years to build it back. 50-75% of all of our migratory bird life will be stressed to the point of, we'll see huge declines in our bird populations, and the ecological reverberations of that one thing alone are huge, and on and on.

KERRY: Right, yeah, the near tropical birds that fly up to the East Coast and the West Coast and Mid-America, when they fly across the Gulf, the first land they see are Louisiana's ridges and habitats that support woody plants, I mean oak trees and we're losing all of that too. They need those habitats to protect themselves from predators, they need to hide, and often in the fall or in the spring when they fly over from South America and there's a late cold front, these birds fall out of the sky. I mean, they see land, they get to land, and just they fall out of the sky, they're completely exhausted. Now if they fall into an open field, they're very susceptible to predators. They need those woody plants to hide and replenish their food reserves, their water reserves, and to fly on through to the rest of the United States. So there's no question that ecologically, we're very important, very important to the rest of the nation. We, if you look at a map of the pipelines that transport oil to the refineries, Louisiana is covered with pipelines. Those pipelines are now exposed. They were buried beneath the marsh, they're exposed to eroding marshes then that shallow pipeline is now exposed and can be passed over by boats and it causes spills. The Barataria-Terrebonne region has more spills than any where else in the country because of that fact. The refineries, when the hurricanes came, Katrina and Rita, they disturbed the operation of the Norco refinery, the Alliance refinery in Plaquemines Parish and instantly the price of oil skyrocketed setting records. The price of natural gas skyrocketed, setting records, throughout the country. Now these, forget about the pipelines that are exposed now, but the refineries, the refineries are equally exposed. They are exposed to storm surges, the Alliance refinery, the ConocoPhillips refinery, was flooded completely. Because there's no protection anymore. The water can come up thru the marshes, past the ridges that were once there, and breach these hurricane protection levies, and the Alliance refinery was flooded for weeks. The Norco refinery, the pipeline that supplies Norco with crude oil was severed. It's located at Nairn, Louisiana, that's below Port Sulphur, below Empire, at Nairn, Louisiana, a place that nobody around America can pronounce or spell, these little places are important because of what they do, the pipes that pass under and through the levies and those were breached. So the chemical plants, the Monsanos, and Union Carbides and all of these infrastructure, this infrastructure is exposed to storm surge impacts now. And they provide innumerable, incalculable benefits to the rest of the nation.

WINDER: So the economic impact for the whole country of not fixing this is beyond imagination.

KERRY: It's astronomical. I couldn't even hazard a guess.

WINDER: Okay, so we've got everything going on here, you have the aesthetics, you have the ecological, you have the cultural, you have the financial, the practical, everything says guys we've got to get this done, so what can people do, what can the average person who doesn't have a lot of money to spend, or has a full time job and a family, what can the average person do to make a difference in this situation, because if a lot of people do what you're about to tell us to do, it will help, it will make a difference, so what would that be?

KERRY: Well, the most important thing is that you can educate yourself and you can educate by doing what you're doing right now and once you're educated you become an advocate, a rabid advocate for saving Louisiana's wetlands. And we appreciate, I mean, we appreciate the desire to save our homes so that we can continue to live here. But you need to protect it because of what it does for you too. It provides everything, I mean, all these chemical plants and refineries produce a lot of things that are used by the rest of the country, not to mention the incredible productivity of our fisheries. Producing everything that everybody cherishes as far as food. And once you

become an advocate you become an advocate for, in a position that's very important to us, you become an advocate to the legislature, the congressmen, the senators, from your state. Our own people, our own state representatives, they're convinced, I mean, they know, they're working to get us money to restore our system but what they need is the impact that comes with support from the rest of the country, the rest of the representatives, they need that, so that's the most important thing people around America could do for us.

WINDER: So we really need a grassroots rising, we need a grassroots movement to demand action now.

KERRY: Right. There's nothing that can't be done when people, everyday people want it done. There's nothing that can't be done. So I believe totally in grassroots efforts.

WINDER: Kerry I really appreciate your time, this has been a wonderful conversation. And in closing is there anything else that we have missed or anything else you'd like to say in the final moments here?

KERRY: Well we do have a non-profit organization and we have a very extensive volunteer effort that's run by our program, you can go to our website at www b-t-n-e-p and sign up for our volunteer program, you can also if you want to donate you can donate to our non-profit and we'll definitely use that towards our efforts to restore the area.

WINDER: We're going to have that on our website, let me go over that again, it's www dot b-t-n-e-p dot what?

KERRY: Dot org.

WINDER: Dot org. And you can go there, sign up to volunteer, make donations, do you have letters that people can send to their congressmen?

KERRY: No we don't have that on our website.

WINDER: We will, we'll have that on our website, we're going to have links from www.WinderSight.com to Kerry's organization and we're going to be furnishing things for people to use for outreach, so we're going to get into that and get all that done. And we're absolutely gona do everything we can to support this effort and bring as much attention as we can all over the country and all over the world and so you want people to go to your website to volunteer to make donations to spread the word, to educate themselves, become advocates for this, and together we can fix this.

KERRY: We can, we can fix it. I have no doubt that we can. It's whether or not we will. That's the question.

WINDER: It's not a question in my mind, we're going to do it. And that's all there is to it.

KERRY: Okay.

WINDER: Kerry, thank you and I appreciate what you've done with your life, because you have invested your entire career into this, your whole life has been involved in this work and I'd like to commend you for that and thank you on behalf of all of us who care so much, you're a hero and thanks.

KERRY: Well, thank you very much Winder.

WINDER: And everybody who's listening, start the process y'all, let's get this done. Git 'er done! Okay everybody, thanks very much for your time and attention. Bye bye.