

Winter/Spring Issue  
Volume 1, 2006

# Greener Roadsides

THIS ISSUE IS DEDICATED TO ALL THE HIGHWAY WORKERS WHO HAVE 6 MONTHS OF LESSONS LEARNED TO TELL!

## After the Storm, Stories of Hope!

### *From the Editor:*

With this week's release of the 228-page White House report about the Katrina disaster and lack of coordinated response (CNN/AP Washington, February 23, 2006), this Editor decided to print some realty news, the realty and response of the Louisiana and Mississippi Departments of Transportation (DOT) who kept working through it all! "It all" turned out to be one of the nation's deadliest natural disasters, with damage estimates approaching \$100 billion. I hope that other State DOTs will learn from the transportation stories I gathered and plan disaster strategies, just in case. In pursuit of a balanced issue about highway workers in both Louisiana and Mississippi, the



One of the many roads and people being put back together.

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Editor looked at more than 600 photos of highway and adjacent neighbors. The reality of the chaotic landscape is greater than anything I have seen on the evening news and is heart-wrenching. Displaced families, broken bridges, closed schools, and flattened coastal towns dominate the coast from New Orleans eastward. Yet these are stories of hope. I heard stories of determination. I read about hope for recovery. Out of this devastation, surely something will grow and Transportation workers will be a part of it. The Nation is grateful to the hard-working men and women who went to work, the morning after, and have not stopped clearing and repairing highways for the traveling public. Thank you! •

## You Plan for the Worst and Hope for the Best

By Roy Dupuy, Landscape Architect Chief  
Louisiana Department of Transportation and  
Development

At least, that's how the saying goes. When hurricanes threaten the Gulf States, you make your plans. If the storm presents a danger, you gather your supplies, family, and pets and evacuate to a location out of the projected path and expect to return the next day or so. If you plan to "ride it out," you gather food, water, batteries, gas for the car and generator and wait and hope that the only work afterwards is picking up some limbs in the yard. Besides, the evacuation routes will be clogged for hours. The storms have always turned at the last minute, and there is no reason to expect any difference this time.

Then the news programs report intensification of the storm. Urgency is heard in the officials' voices. The rain starts and the wind speed forces the closing of the elevated bridge structures providing evacuation routes to safety. You've waited too late to evacuate. The rain gets heavier and beats against the house in waves. Roofing and other debris fly past the window. The neighbor's tree is blown over, and you have to light candles because the power is off. Water starts to rise in the streets.

You hoped for the best, but it's worse than what you planned for.

Hurricane Katrina directly hit southeast Louisiana on Aug. 29, and Hurricane Rita attacked the southwestern part of the state on Sept. 24. Immediately following these storms of historic proportions, many people in the affected areas faced no electricity, no water and broken gas mains spewing flames through the floodwaters. Telephones weren't working, and the cell towers were gone. Then as radio batteries died, communication with the outside world was cut off. Entire neighborhoods were demolished. Downed trees—sometimes even houses that had been pushed into the roadway in the worst-hit areas—obscured



the end of the block. Trees and telephone poles are leaning or snapped, and debris covers the roadways. Before the energy crews can repair the damage and restore power, restart the flooded water pumps, repair the gas mains and telephone service, the roads have to be cleared.

In the wake of Katrina and Rita, the damage to Louisiana's transportation infrastructure and roadside was extensive. As the winds were dying down, dedicated Louisiana DOTD employees in the affected districts first had to use chainsaws to cut their way to the state roads, then to their units. Every road was blocked by downed trees, construction debris or masses of marsh grass, depending on your proximity to the coast. District employees in these areas **worked in the blistering September heat from sunrise to sunset**. Many had severely damaged homes, some had total losses, and yet they showed up every day to work. That is when you realize what "teamwork" and "family" really mean.

The employees were not alone in their districts. They had DOTD "family" all across the state who volunteered to assist. Teams from other districts throughout the state showed up to help. They arrived in convoys with personnel, equipment, fuel, ice, water and food. Since no hotel rooms were available, employees bunked in offices. So many districts made offers to send people that some of the help had to be refused because there

You Plan for the Worst and Hope for the Best *continued*

was simply no more room to house them. Together, within five days of Katrina's landfall, all roads in District 62 (the Hammond area) were cleared and road washouts repaired.

District 2, encompassing the New Orleans area, had 500 employees prior to Katrina, but is down to 459 today—mainly because of housing issues. To assist employees with housing, DOTD requested assistance from FEMA in constructing a trailer village in the parking lot at the district headquarters in Bridge City. Thirty employees and their families moved in Jan. 6.

Districts 2 and 62 had a total of 1,055 employees prior to Katrina. On Sept. 12, 474 were not at work; of this number 214 were unaccounted for. By Sept. 30, 749 were back at work; 276 had contacted us and were unable to return; and 30 had not contacted the agency.

After Rita hit District 7 (the Lake Charles area in the southwest area of the state), the Hammond district was the first to offer assistance even though personnel were still reeling from Katrina. **Everyone was willing to do whatever was necessary to put our roads and the lives of our people back together.** Employees manned phones to answer questions from the public: Could they come home, what about their animals they left, is I-10 open, did a certain neighbor survive?

When there was no place to buy food, employees emptied their freezers and cooked that food for the workers. They traveled outside the district to get food and supplies; they waited in long lines at Sam's and Wal-Mart; they made deals with food distributors; some came in at 4 a.m. to cook breakfast; make and distribute lunches; and prepare and cook the evening dinner meal. Others stayed late to clean up afterward.

More than 300 employees at District 62 were fed at each meal during the days following Katrina. Charts were posted, schedules made and assignments given. Makeshift showers were installed. Cots were placed in every corner of the building, although most slept little. Repair crews, cleanup crews, inspectors and dump-site monitors were



FEMA trailers housed employees and families at Bridge City District.

working 12- and 14-hour days (and many continue to do so).

We were prepared for related-storm damage, but not to this extent. We didn't have the specialized equipment with "thumbs" and "claws" to remove massive amounts of trees blocking the roadways. In those, we let contractors while other districts used their own forces.

**To date, 32 million cubic yards of debris has been collected in the state and placed at 80 different debris sites; 61 sites are for vegetation and 19 are landfills for construction debris. DOTD collected 3.2 million cubic yards, or 10 percent of the total, at a cost of \$112.6 million. 32 million cubic yards of debris is enough to fill a football field, including the end zones, to a height of 2.84 miles.**

Surveys of roadside vegetation and the hurricanes' impact have yet to be fully realized as debris continues to accumulate. Where debris was pushed to the roadside, earth was moved along with the process. Ditches now have to be reclaimed. Roadsides where trees were allowed to encroach to reduce mowing costs will have to be reassessed to prevent similar post-storm road-closing conditions.

**Meanwhile, normal upkeep such as litter control and mowing is suspended.** Inmates evacuated prior to the storms are crowding remaining facilities, upsetting the prisoner-to-guard ratio. With a few exceptions, inmate litter crews have

You Plan for the Worst and Hope for the Best *continued*

Six feet deep marsh hay covered many highways.

ceased operations. Storm-related budget adjustments may affect the number of mowing and litter cycles on all roads as well as contracted mowing and in-house herbicide applications. No budget exists to replace the trees and vegetation lost on the roadside. Meanwhile, during the confusion, vegetation has been removed without permit by unknown individuals—possibly to improve business visibility.

Devastation, chaos, enthusiasm, dedication, endurance, organization, compassion, kindness, hope, gratitude and family are words that employees used to describe this past five months. The recovery task is daunting and will take years to complete. Meanwhile, the next hurricane season (as of Feb. 3) is only 117 days away. We'll hope for the best. We know how to plan for the worst. •

## Devastation, Chaos, Hope, and Gratitude!

*By Jennifer Lopez, Administrative Staff  
Louisiana Department of Transportation and  
Development, District 07 - Lake Charles*

To sum up HURRICANE RITA in one word, DEVSTATION. In two, CHAOS. In three, Hope and Gratitude. I came back to work on the Sunday after she hit. The first people I saw were crews from Cameron. They were sweating; they were working; they were SMILING. They did not yet know if they had homes or belongings left! And then in the next few days when they knew all was lost, they cried, but still had the biggest SMILES.

Complaints were made that communications were bad. As the only clerical staff, I can tell you there was nothing wrong with the phones. There were so many calls, that I only caught a third of them. This parish was under lockdown for almost 2 weeks. People were calling to see how bad things were; if they could travel on I-10; if they could go home to see about their animals; if anyone knew how this or that neighborhood survived; if they could donate equipment, and Headquarters trying to determine damages, and what assistance we needed. etc. etc.

Also there were the comforting calls from our DOTD relatives offering manpower and equipment, and food and clothing. The first ones here were our neighbors in Hammond offering assistance when they were still in the same shape.

There were so many people here. It was hot! Generators were working to handle the phones and fans and stove. It didn't matter who you were, everyone was in the same boat—some far worse than others. Everyone was willing to do whatever was necessary to put our roads and the lives of our people back together. The wife of one of our supervisors stayed here cooking 3 meals a day for all of our workers.

I hope we never have to go through this again. However as chaotic and painful as it was for so many, there were so many blessings with everyone pulling together under those primitive conditions. •

# Stories From the Louisiana FHWA

## Story One



By Bob Mahoney, Louisiana Division

Before Hurricane Katrina arrived, the Louisiana Department of Transportation and Development (LDOTD) set a contra flow evacuation plan in motion for the coastal area. Over one million people followed the plan and got out of harm's way. Many levels of Louisiana and Mississippi governments assisted in making it happen. An extensive plan to avoid traffic congestion was in place due to our experience with Hurricane Ivan. After Katrina hit, LDOTD crews from around the State converged to clear roadways and assist where needed. Then came Rita which impacted the already damaged area, plus additional major damage to the West. Many stories of service and assistance are burned in the memories of crews and the people they helped. So many dedicated LDOTD crews just did whatever was necessary. The story is not over; the work will continue for a long time. The sense of urgency to repair and rebuild continues. •

## Story Two



By Colby Guidry, FHWA Area Engineer

The day after Katrina made landfall, I went out with a Bridge Inspection Crew to assess the integrity of bridges in St. Tammany parish. The roads were impassable in many locations due to large amounts of debris and marsh mud washed up on the roadways. We made it out to the area within 24 hours after the storm. A large LDOTD crew from Shreveport had arrived several hours before us. With their own heavy equipment in tow, they cleared roadways for first responders and area residents. After the clearing, Red Cross and National Guard vehicles were able to provide water, food, and assistance. The LDOTD District employees and their families cooked food for working crews and other first responders for weeks after the storm. •

## Story Three



By Scott Nelson, FHWA Area Engineer

When we traveled US 190 to continue bridge inspections, we came across a LDOTD platoon of vehicles, workers, and equipment busy clearing the roadway. We pulled up to talk to one of the guys, only to learn that the 40-50 workers were from the Shreveport office. I don't know if there were plans to bring these guys down here before the storm, because we had no idea how much damage the storm would leave behind. But there they were! I was impressed that this large crew drove more than five hours to help without knowing where or when they would sleep, eat or return home. •

## Dedication, Endurance, and Compassion

*By Connie Standige, Engineer Administrator  
Louisiana District 62*

My name is Connie Standige. I am the District 62 Engineer Administrator and was only in that position for 3 1/2 months when Hurricane Katrina hit. District 62 is comprised of 6 parishes on the northshore of Lake Pontchartrain—St. Tammany, Washington, St. John, Tangipahoa, Livingston, and St. Helena. I live on the southshore, in a suburb of New Orleans. This is the District 62 story:

It all started on Friday morning, August 26 when Hurricane Katrina was headed for Appalachicola, Florida. No one was concerned that she was coming this way, besides she was only a Category 1 hurricane. Friday afternoon the storm shifted and was headed this way. Baton Rouge EOC had a conference call Friday evening and told us to prepare for contra-flow for Sunday morning to evacuate the city of New Orleans. The contra-flow crews were to report to their units on Saturday morning at 8:00. Well things changed in a hurry.

Early Saturday morning I received a call from BR saying that the storm had increased in intensity and was headed straight to New Orleans and that we would be starting contra-flow at 4:00pm on Saturday. DOTD employees from many districts and statewide crews worked all morning to have

the VMS', barricades, and cones staged next to the highway by noon. Contra-flow began at 4:00pm. The contra-flow teams worked through the night and into the next evening. They then had to retrieve the contra-flow devices in tropical force winds.

The rest is history. Katrina slammed into south-east Louisiana causing much destruction and devastation. Many District 62 employees worked during the storm, and as soon as the winds subsided on Monday afternoon, many of our dedicated employees came out with chain saws in hand. They had to cut their way to the state highways, and then cut their way to their units. The next few weeks were a whirlwind of activities. Power was out in all parishes in the district. Food, water, ice, and fuel were nowhere to be found. Every road in the district was covered with downed trees and debris. District 62 employees came out in droves to work. These employees worked from sunrise to sunset in the blistering heat.

Many of these employees had damage to their own homes, some with total losses, yet they still showed up every day to work. On Tuesday evening teams of workers from other districts from throughout the state showed up to help. They arrived in convoys with personnel, equipment, fuel, ice, water, and food. Since there were no hotel rooms available, approximately 100 employees bunked up in offices throughout the district. Words cannot express our gratitude to these other districts for all of their support. So many districts made offers to send people that I had to turn some of the help down because we had no more room to house them.

Together, with their help and the hard work of the District 62 employees, within 5 days, all roads in the district were cleared and road wash outs were repaired. Then the cleanup of debris on the roadside and the repair of bridges began. Repair crews, cleanup crews, inspectors, and dump site monitors have worked and are still working 12 and 14 hour days. During the weeks after Katrina I saw dedication, enthusiasm, endurance, organization, compassion, and kindness.

When there was no place to buy food, the

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Dedication, Endurance and Compassion *continued*

employees in this district emptied their freezers and cooked that food for the workers. They traveled outside of the district to get food and supplies; they waited in long lines at Sam's and Walmart; they made deals with food distributors; some came in at 4:00am to cook breakfast, make and distribute lunches, and prepare and cook the evening dinner meal; and others stayed late to clean up afterwards. More than 300 employees were fed at each meal during the days following Katrina's hit. There were charts posted, schedules made, and assignments given. Makeshift showers were installed in the Lab. Cots were placed in every corner of the building. Very little sleep was had by all.

I encountered so many acts of kindness during this tragedy. When I was unable to return to my own home because of evacuation orders and flooding of my house, employees offered their homes to me and my family. They provided us with food and clothing. They welcomed us with great hospitality.

During this time there was a lot of sadness, anxiety, and depression. Emotions ran high. Together we cried, we shouted, we hoped, and we prayed. This district pulled together as a team. I have had people from other districts comment on the incredible teamwork exhibited by District 62. Together we were able to overcome the effects of Hurricane Katrina.

**AND THEN CAME RITA!**

But then Hurricane Rita set its sights on Louisiana. Several days before Rita made her landfall one of our employees, Brett Pounds, asked if we were going to help Southwest Louisiana like they had helped us. There was no doubt that we would help. District 62's "Team Rita" pulled together. Roland Maurin, District Maintenance Engineer, along with Brett, assembled a team of volunteer employees. They gathered supplies; they constructed huge insulated ice containers; and they loaded equipment. They were self-sufficient and only needed a place to bed down. Before they left for Lake Charles, these employees prayed together. They mounted American flags on their trucks. They left the Hammond yard on Sunday morning with a convoy of people, equipment, port-a-potties, ice, food, fuel, generators, tools, and supplies. Other trips were made to Lake Charles to deliver more fuel, ice, and food. Employees contributed money to purchase cookies and other treats to send to the workers in Lake Charles. These employees were truly generous in their offers of help.

I truly have to say from the bottom of my heart that I am proud to be a part of District 62. During the weeks after Katrina and Rita hit I saw a group of hard working, dedicated employees that are all unsung heroes and truly deserve recognition for their hard work. •

**A LOUISIANA PRAIRIE PARTNERSHIP**

*As excerpted from the January 21, 2006 article, written by Patrick Courreges*

*Five months after Katrina hit the coast, the Louisiana Department of Transportation and Development, with the help of the State natural Heritage Program and a team of 25 (LDOTD) Wildlife and Fisheries workers, students from Evangeline High School and the Allen Parish Correctional Center began a two day effort to salvage a prairie.*

*Yes, Louisiana once was covered with 2.5 million acres of coastal prairie. Now only 1000 acres remain. When U.S. 165 near Lake Charles was due for widening, four*

*acres of endangered plants were recorded. In order to prevent this rare plant community to vanish from the State, a partnership plan to salvage four acres in two days was planned.*

*Katrina delayed the plan, but did not cancel it! On January 21, a team began the two-day digging, moving, and replanting of these precious plants.*

*Now four acres of plants rest and will re-establish near Eunice Prairie along US 190.*

## Save That Prairie

By Roy Dupuy, Phone: 225.379.1969  
Email: RoyDupuy@dotd.louisiana.gov

Saving a remnant of Louisiana's coastal prairie should be simple and obvious. You move the small, scarce resource before you build the road. What actually developed is a story that brought together consultants, state agencies and volunteers to relocate coastal prairie remnants that made it through one of the worst hurricane seasons this state has ever had. This collaborative effort to save the prairie eventually may revegetate our roadsides.

Southwest Louisiana once contained vast expanses of coastal prairie, similar to tallgrass prairies of the midwestern United States, were incredibly diverse with more than 500 plant species and serving as home to a multitude of grassland birds, waterfowl, insects and other wildlife. The estimated 2.5 million acres of original Louisiana coastal prairie have been reduced to less than 1,000 acres.

Much of the former prairie was converted to pasture for cattle grazing or altered for growing rice, sugarcane and forage crops. Many of the animals once common to that type of land are gone, such as Attwater's prairie chicken, bison, antelope, elk and red wolf. The majority of the remnant prairies now exist along railroad rights-of-way between railroad tracks and highways and are continually threatened by human activities. Most of what remains is scattered in relatively small areas on highway segments and is generally too small to be self-sustaining.

One of these highway segments that includes prairie grass is on U.S. 165, between Fenton and Interstate 10, in Allen and Jefferson Davis parishes. It is currently slated for a road-widening project under the Louisiana Department of Transportation and Development's (DOTD) Transportation Infrastructure Model for Economic Development (TIMED) program. One of 16 TIMED projects, the 172-mile, \$867 million U.S. 165 Project is divided into 30 segments, each of which involves widening the road to four lanes.

The majority of the prairie remnants along this stretch of U.S. 165 are located to the east of the roadway while the road expansion will occur to the west side.

However, one small four-acre prairie remnant identified by the Louisiana National Heritage Program (LNHP) is in the path of the proposed roadway on what is now private land.



Botanists identifying rare prairie plants and collecting seed

Here is the dilemma. The TIMED program had no funding dedicated to plant removal and transplanting after acquisition. Moreover, DOTD cannot operate on private land prior to acquisition. How does one save the prairie with no funding and no access to the land? Partnership!

Together, DOTD; the Louisiana Department of Wildlife and Fisheries (LDWF); Gulf South Pipeline Corp., the landowner of the prairie site; and other organizations rescued the prairie plants found on the area. Volunteers and technical assistance also came from the Cajun Prairie Habitat Preservation Society, the Natural Resources Conservation Service, the U.S. Geological Survey (USGS)—National Wetlands Research Center, the U.S. Fish and Wildlife Service, the Allen Parish Correctional Facility inmates, AmeriCorps of the University of Louisiana at Lafayette, The Nature Conservancy and others.

Planning and coordinating for the two-day relocation event began about a year ago. The first dates chosen were in November 2005. This time of year was chosen specifically because the plants are dormant then and would have time to take root before the heat of summer. Then Hurricane Katrina hit Southeast Louisiana on Aug. 29, and Hurricane Rita, on Sept. 24, attacked the southwest part of the state where the site is located. Then there were sunny skies and no rain for weeks. While Rita accounted for about 20 percent of the annual precipitation total in the Lake Charles area, records show the same area broke into the top 20 list for driest years—its 18th driest year on record. Moreover, the hurricane's destruction of prisons resulted in inmate evacuations to surviving institutions, and the prisoner-to-guard-ratation at these institutions made the inmate labor to dig the plants questionable. A survey of the site also revealed it was too hard and dry to dig.

Save That Prairie *continued*

Would the planting dates be missed? Would the chance to save this prairie remnant be lost before acquisition? After all of the destruction and personal loss from the storms, would there be volunteers? After 50 days since Rita with no measurable precipitation, would it ever rain again? The event was rescheduled for January 2006. Fortunately, the rains came days prior to the digging and the weather was perfect: overcast skies, 58-65 degrees with a fresh breeze and soft ground where the root balls stayed together. Allen Parish Correctional Facility was able to send inmate labor, and state agency personnel and volunteers came out to help.

On the first day, the volunteer groups dug the prairie sod by hand from the U.S. 165 project site. Two species dominated the site: slender bluestem (*Schizachyrium tenerum*) and Gulf Coast muhly grass (*Muhlenbergia capillaris*). Slender bluestem is pretty common on prairie remnants and is very "conservative," meaning it is a fairly undisturbed plant community. Gulf Coast muhly grass, however, is not common on Louisiana's prairie remnants, and it was exciting to find and be able to preserve it. It normally occurs in the coastal prairies of the upper Gulf Coast of Texas where prairie is adjacent to the Gulf of Mexico and has a salt influence. Chris Reid, a botanist from the Natural Heritage Program present at the planting, identified a third grass called pine barren fluffgrass (*Tridens ambiguus*). It's the first known record from a Louisiana prairie remnant. Finally, there was a low growing relative of morning glory that was located in several places called silky evolvulus (*Evolvulus sericeus*). It also occurs further south in Texas, but has not been found in any of Louisiana's prairie remnants.

The prairie remnants were translated to three locations. The bulk of them went to the Duralde unit of the Lacassine National Wildlife Refuge, a 330-acre prairie restoration site.



Louisiana's Eunice Prairie

The second location is the McNeese University farm, where the plants will become part of the Louisiana Native Plant Initiative (LNPI). The LNPI is the result of a partnership between McNeese University, the Natural Resource Conservancy Service, the USGS National Wetlands Research Center and the Coastal Plains Conservancy. The goal is to preserve plants that have adapted to our unique growing conditions through thousands of years of evolution for use in ecosystem restoration, conservation, horticulture, carbon sequestration programs, bio-fuels, etc. Seeds collected from these plants will be released to Louisiana growers for production.

The third location is the Center for Ecological and Environmental Technology operated by the University of Louisiana at Lafayette. A three-acre prairie restoration site there is part of the University's "Heritage Habitats." The "Heritage Habitats" program is an education and research project that eventually will be open to the public. Perhaps someday we can begin planting these rescued native prairie remnants along with the help of plant materials from the LNPI.

DOTD gives its deepest thanks to Patricia Faulkner of the Natural Heritage Program within the LDWF and Larry K. Allain of the USGS. Completion of this goal would not have been possible without their tireless effort, enthusiasm and dedication to recovering our state's resources. •

## The Mississippi Division's Recovery Efforts

By Cecil Vick, FHWA Division Office

Despite the lack of electrical and telephone service to their personal homes and to their offices, the Federal Highway Administration's Mississippi Division Offices' Hurricane Katrina Recovery Team reported to work the morning following Hurricane's Katrina's landfall along the Gulf Coast. Left with only sporadic cellular telephone service and no gasoline, they began to quickly coordinate with State and local transportation officials to assess the damage to Mississippi and Louisiana's surface transportation system and to arrange for emergency repair work to begin.

For the first week following the disaster, team members manned Federal and State emergency operations centers twenty-four hours each day. Some employees stayed mostly in the capitol city to coordinate the recovery. They were challenged to manage limited recovery funding while awaiting appropriations of emergency relief funds. Innovative contracting techniques were developed. Travel arrangements were made for visiting Washington officials. Offices in Washington were constantly updated. It was a challenge just to manage the logistics of keeping the other team members in the field.

Within twenty-four hours of Hurricane Katrina's landfall, members of the Recovery Team were onsite in the most devastated areas. Within forty-eight hours of the most destructive natural disaster in our Nation's history, and working with their State partners, the Team helped reestablish a basic transportation infrastructure.

In the first few weeks following the storm, team members worked long hours and endured personal hardships. While their homes in the state capitols mostly still lacked power and while their families had no gasoline for their personal vehicles, the team members worked their way through the storm damage with their state and local partners. They determined first hand the repair tasks and costs that lay ahead. It was paramount to get the roads and



Another Mississippi bridge to nowhere. 5 State bridges were lost.

bridges passable for emergency vehicles, construction workers, and displaced citizens, and the Team was successful.

Devastation was not just limited to coastal areas. Katrina was a Class I Hurricane when it left the northern border of Mississippi and entered Tennessee. Almost the whole of the States suffered damage. The coastal areas were devastated.

Team Members often left their homes before dawn, drove two hundred or more miles into the devastation, worked a full day, and drove home well after dark. Often they worked on weekends. In the areas with the worse devastation there were no hotel rooms, no restaurants, and often no water. Team Members were going into the damaged areas with MRE's and bottled water. For most team members one of their most difficult tasks was to adjust mentally to the destruction and human suffering they saw.

Everyone did their best and helped to provide the citizens most directly impacted by this overwhelmingly disastrous natural event with a sense that their government was at work and would help get them through it. •

## Katrina Hit Mississippi Too!

*Reflections from Jackson, Mississippi*

By Dave G. Thompson, Mississippi DOT

It was almost 6 pm when we heard the last loud crash. A 10 inch limb had fallen from an oak tree onto our neighbor's car. August 29 had been a very long day! Earlier, we had watched CNN and other news stations at the office to see what was happening on our Mississippi Gulf Coast, 150 miles south of Jackson. At 11am everyone was told to go home and prepare for the storm as it ground its way north. When the full force of the storm hit Jackson, it was still a Category 1 storm with 75 mph winds and fair that felt like bullets when they hit bare skin. Thankfully the night was calm, but dark and quiet, except for the occasional buzz of a chainsaw.

When Governor Barbour had his first press conference on Tuesday, August 30, there weren't many who were able to see him on TV because the power was out for most of the State. He had flown the 80 mile length of our coastline and returned with startling news. It was hard to hear him say that everything from the railroad tracks south to the beach was gone. That one sentence probably had more impact on the citizens of Mississippi than any other thing. You see, the railroad tracks run parallel to the coast and they were 4 to 8 blocks away from the water. Within that space there was nothing remaining but large piles of debris. It was beyond our comprehension! There were no homes, restaurants, churches or small buildings. The only things that remained were some large buildings and our beautiful live oaks which gave the coast its flavor and unique character. Of course, there were no leaves on the trees after the 150mph winds had stripped them bare.

Highway 90, which is THE road to drive if you want to see Mississippi's (once beautiful) coast was either washed away, or covered with sand and



Operations scheduled from the District parking lot of "Camp Speedy"

debris. There are two important bridges on Hwy 90. On the west is the bridge over Bay St. Louis and

on the east is the bridge over Biloxi Bay. Both of these concrete structures were knocked down by the gigantic storm surge, which was more than 20 feet above normal. It will be at least 2 years before these are rebuilt.

In addition, every road, highway and driveway in South Mississippi had trees down across them. The Mississippi DOT was now responsible for the biggest cleanup it had ever experienced. Most of our employees left their families at home and went out to cut trees off the road to make way for emergency vehicles and support equipment. One employee who lost his home and all belongings said that going out to work on the cleanup actually kept his mind off the fact that he had nothing left!

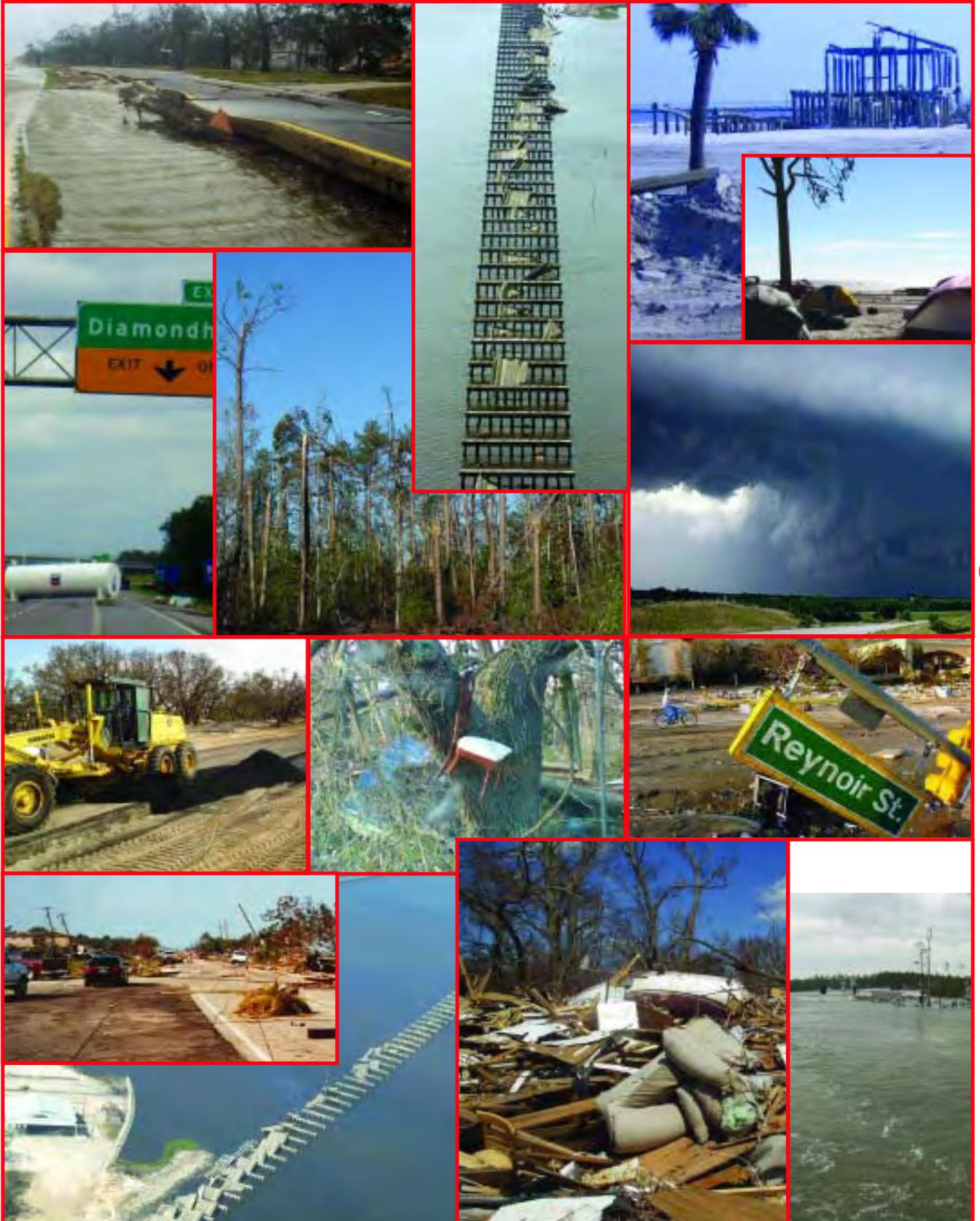
I believe most people who have been to the coast after the storm have come away with a very sobering image of the destruction. Seeing the pictures on TV just does not come close to the actual extent of damage which stretches for 80 miles.

Since that time we have experienced a great outpouring of assistance and good tidings. Before the wind had calmed down, we had calls from Florida, Alabama, Georgia and even Oregon offering everything from bridge inspection teams to fuel. The New Mexico DOT collected over \$11,000 and sent it to help MDOT employees who had been impacted by the storm. That check arrived around Thanksgiving, and thankful we were! Churches and civic organizations from all over the country have sent work crews and supplies to help. Thanks to all who have prayed for these good people on the coast! They still have a long way to go. •

# MISSISSIPPI MOSAIC: DAMAGE AND



RECOVERY EFFORTS CONTINUE



## A Neighborly Observation

By Tate Thriffley, Ecologist, De Soto National Forest

The Mississippi DOT has definitely had their hands full just cleaning up the major highways and interstates. I know lanes were open almost immediately after the storm from crews pushing and clearing then trees and debris. Folks were happy to have the transportation system open, even when we did not have much or any fuel. Those open roadways did facilitate speedy access for emergency equipment and supplies, law enforcement, military personnel, volunteers, and utility workers to reach the hardest hit coastal areas and start the steps toward recovery.

Full recovery for the Gulf Coast will take many years. Debris trucks, log trucks, construction equipment, and other heavy rigs will put Mississippi's roads to the test. MDOT's role in maintaining and improving our system is vital to the recovery process.

Here in the De Soto national Forest, many thousands of trees on our forest were uprooted or broken in half. We are doing all that we can to clean up the forest, trails, and recreation areas. To date, we have one recreation area open. Others will open soon. It might take a couple years to reopen all the trails. We are in the process of salvaging timber to facilitate recovery forest-wide. •

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## EDITOR'S NOTE:

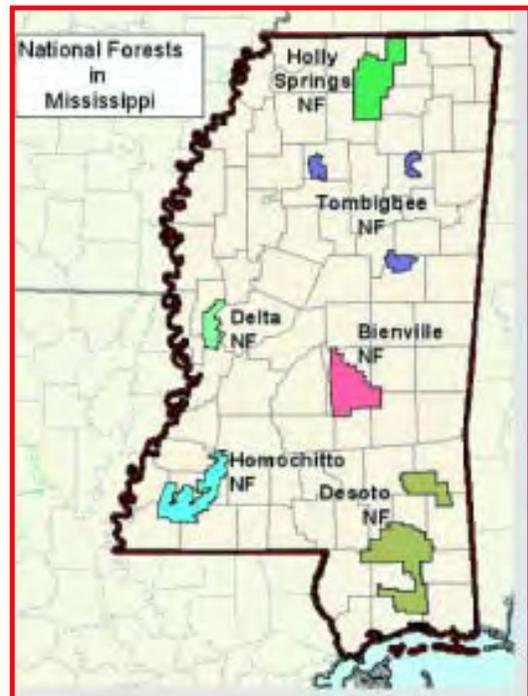
Thriffley, an ecologist, and his crew are in the field daily, surveying in support of a salvage/recovery operation to locate the endangered Louisiana quillwort. They have found 17 new locations for this endangered plant since Katrina! Forest Service employees from across the country have gone to Mississippi to help with the recovery and surveying. Thriffley's crew is also surveying for the threatened gopher tortoise burrows and protecting their endangered red cockaded woodpecker cavity trees and colonies....a whole other success story!! Over 28,400 acres of T&E surveys have been completed. "It just takes a lot of time to work through catastrophic life changing events."

## Another Road Report

*Excerpted from:*

[www.fs.fed.us/r8/mississippi/katrina/accomplishments](http://www.fs.fed.us/r8/mississippi/katrina/accomplishments)

Saw crews and heavy equipment have opened an estimated 1300 miles of roads closed by Hurricane Katrina. These are county roads and Forest Service roads. Since opening roads, the Forest Service's Incident Management Team has concentrated on recovery. Their primary focus is to reduce the heavy fuel load of damaged and downed trees by utilizing salvage sales. The heavy, woody debris increases the potential for hotter, more intense wildland fires this summer. This is especially troubling with the large amount of wildland urban interface within and surrounding the De Soto National Forest.



*The De Soto is the southernmost of Mississippi's 6 National Forests.*

Another Road Report *continued*

## EDITOR'S NOTE:

It is also worrisome from a wildlife aspect. The De Soto is safe haven for an endangered Sand Hill Crane, endemic to this forest area. The rare crane requires savannah habitat found on this preserve. The grassland/pine habitat is maintained by prescribed burns. Until the woody debris is removed, such fires would run too hot and have a negative impact on the Sand Hill Crane population. Just one more consequence of Katrina!

Within the Mississippi National Forests, over 150 employees are committed to work in the recovery effort. Some 320 personnel from off-forest have also supported this recovery. Thus far, the Forest

has sold 22 salvage sales for an estimated 115.5 million board feet of timber. Some 37 more sales are in the works.

The up to 155 mph wind gusts of Katrina that hit the De Soto were devastating, but the Forest has made great progress within their boundaries on behalf of the public interest.

Thousands of hours of work remain. And as one employee observed, they work knowing that the 2006 hurricane season is due in 100 days! •



**1300 miles of roads reopened**



**Over 100 miles of wildland urban interface have been cleared.**



**The charismatic gopher tortoise and recovery survey crews**

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U.S. Department of Transportation  
**Federal Highway Administration**

*Greener Roadsides* is a quarterly publication of the Federal Highway Administration, Office of Planning, Environment and Realty. If you would like to submit letters, comments, or articles, please address them to:

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Publication No. FHWA-HEP-06-003

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