

A newsletter from TxDOT's Environmental Affairs Division

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# Pharr District process incorporates environmental issues into PS&E

#### By VELMA GARCIA Pharr District

During the past several years, the Pharr District's environmental staff has developed a process to incorporate environmental issues into Plans, Specifications and Estimates (PS&E). The district has successfully used this process on several projects.

So how does the Pharr District's environmental staff incorporate environmental issues into PS&E? By involving the project designer. Designers are invited to attend all field visits and meetings with resource agencies so that they receive first-hand information. The project designer is asked to bring to meetings preliminary drawings, such as

schematics, right of way maps, aerial photos, plan sheets and old sets of plans. The location of wetlands, critical habitat, proposed culvert locations are noted on the drawings as they are discussed.

After meeting with resource agencies, the environmental staff meets with the project designer to discuss, from an engineering and environmental standpoint, feasibility and reasonability of the recommendations made by the resource agency. The environmental staff and designer work together to develop a mitigation plan and to determine the appropriate drawings to use when coordinating with resource agencies. The experience the environmental coordinator has in creating and enhancing wetlands

and the experience the project designer has in excavation and construction methods provides for a great combination of expertise. Once resource agencies agree to the mitigation plan, the drawings can be easily inserted into the construction plans.

So what happens after environmental commitments are incorporated into PS&E? The environmental staff remains involved by reviewing plans to ensure that all commitments are incorporated. The environmental staff also attends the preconstruction meeting after the project is bid for construction.

At the pre-construction meeting, all environmental commitments are discussed with the contractor and the inspector.

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# Five-year effort results in TxDOT's 3rd mitigation bank

### By RICHARD GOLDSMITH Environmental Affairs Div.

When Gov. George W. Bush and other state officials dedicated the new Austin's Woods Conservation Initiative, it culminated a nearly five-year effort that created TxDOT's third mitigation bank.

The Austin's Woods Conservation Initiative includes a total of 6,745 acres. TxDOT's part is 3,552 acres, known as the Nannie M. Stringfellow Wildlife Management Area. Texas Parks and Wildlife Department (TPWD) will manage the site for TxDOT for 20 years. TPWD will own the land at the

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end of the 20 years. TxDOT calls the site the Coastal Bottomlands Mitigation Bank.

The new mitigation bank resulted from years of study and negotiation between TxDOT and the federal and state agencies that regulate wetlands and wildlife habitat. The new Coastal Bottomlands Mitigation Bank is unique in that it includes not only wetlands "preservation," but also "restoration" and "creation" components, according to Tom Bruechert, who handled much of the project for ENV.

TPWD as part of its role in managing the property will create approximately 40 acres of emergent wetland marsh on 400 acres that are now pasture land and potential foraging area for bald eagles. The restoration component includes actively and passively managing the entire tract in perpetuity, generating some additional 140 credits for TxDOT use.

Bruechert said the Houston District initiated the plan in 1994 and developed a prospectus detailing how the bank would serve a transportation purpose. "The (See MITIGATION, Page 7)

## Kureska's job evolved from clerk to PIO/environmental coordinator

### **By JIM DOBBINS Environmental Affairs Division**

In today's job market, where switching jobs and employers is frequent, the career of Corpus Christi District Public Information Officer Becky Kureska stands in stark contrast. A veteran of 34 years with TxDOT, Kureska embodies much of her district's institutional memory.

"I started working for the department back when it was still called the Texas Highway Department," Kureska said. "The Materials and Tests Division hired me to work in their Corpus Christi Area Office. I did a lot of things, primarily clerical, but also helped with batch designs for concrete, doing the calculations. I earned \$150 a month."

The workplace has changed quite a bit from those days in the mid-1960s.

When I started with the department, women were not allowed to wear slacks to work - only dresses or skirts were acceptable. Most women were employed in clerical positions - there were very few in professional positions. Women were not allowed to drive a department vehicle, and they were expected to resign if they became pregnant. While carrying one of my sons, I got around that last provision by simply telling my co-workers that I was putting on weight! I needed my paychecks, so I kept the story up until the seventh month before resigning," said Kureska, who was rehired following the birth of each of her children.

Kureska became involved in both the district's environmental and public information programs in their infancy.

"About 20 years ago when I was serving as the Corpus Christi district engineer's secretary, the department started its first real public information effort. Back then, the assistant district engineer was the public information officer (PIO), as the administration wanted engineers to be the department's spokesmen. As the DE's secretary, I helped with the PIO work, which meant that I really ended up doing most of the job. I took to the work as I enjoy writing and have a background in journalism, having been editor of my high school newspaper. A few years later, when we starting getting into the environmental project clearance work, I was appointed



Becky Kureska (at the podium, above) conducts a public meeting for the U.S. 77 widening project in Refugio that uncovered an historic cemetery. **Corpus Christi District Photos** 

PIO/environmental coordinator, which was then a dual position," Kureska said.

Kureska would serve as the district's environmental coordinator for 10 years.

"From the perspective of the PIO/environmental coordinator, we learned early on that there is a big public information aspect of the environmental clearance process. We found that a lot of problems could be avoided by involving the public early in the project development process. We don't claim to know everything, and the public has been very helpful sharing important information over the years. To this day we have a lot of 'citizen meetings,' and work closely with our area engineers and contractors to inform the public and keep them updated as projects progress. Our public involvement process has evolved quite a bit from the early days, but I believe the process in place now is a better way of doing business," Kureska said.

Keeping people informed extends to members of the Texas legislature.



Kureska

"We work closely with our legislative delegation and consider them friends of the Corpus Christi District," Kureska said. "We try to keep them up to date on transportation projects and, in return, they have been very supportive of our efforts."

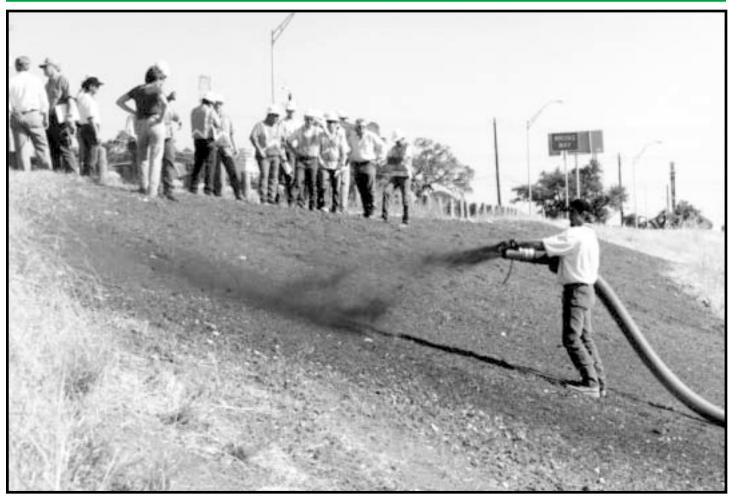
Ann Irwin, Director of ENV's Cultural Resources Management Section, has worked with Kureska for a number of years.

"Becky was one of the most knowledgeable and resourceful environmental coordinators that I have had the pleasure of working with," Irwin said. "She has built up one of the best networks of useful resources and contacts of anyone I know in TxDOT."

Challenges have been a part of the job for Kureska, who has seen a few in her time.

"The U.S. 77 project in Refugio has been one of my biggest challenges," Kureska said. "The mission cemetery that was found under the highway has required a lot of coordination, but the community

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In a demonstration for watching maintenance supervisors, a contractor sprays a manure/wood chip compost mixture on a slope along Loop 1 at Braker Lane in Austin.

Austin District Photo

# TxDOT tests compost mixture as ROW erosion control option

#### By CHRIS BISHOP Austin District

Manure happens. Getting rid of it is another matter. One option may result in highways that are easier on the eyes and the environment.

The idea calls for using cow manure and wood mulch compost to grow grass and wildflowers along challenging highway rights of way.

The west slope along Loop 1 at Braker Lane in Austin is the latest test zone for the compost. The steep slope has suffered from erosion and poor vegetation.

A crowd of district construction and maintenance supervisors watched a contractor blow compost on the test site in late September. The mixture included winter wheat, oat and Bermuda grass seed. Fall rains should promote germination in a matter of weeks, and hold the slope over the winter.

Billy Benningfield, Austin District erosion control coordinator, says, "If this works, it should choke out the noxious weeds and grasses, and let good stuff grow. I'll use anything if it

works."

The Texas Natural Resource Conservation Commission (TNRCC) is partnering with TxDOT on the project. Pneumatic hoses have blown the deodorized and sanitized mixture on sites in Dallas, Abilene, Tyler and Amarillo districts. Some of the test sites have already shown measurable results. Scott McCoy, TNRCC's compost project manager, displayed comparison photos that impressed onlookers. Thick green grass filled areas that wiry weeds had once only sparsely covered.

McCoy says TNRCC likes the two prong benefits of using the manure mulch to protect top soil as well as finding a use for some of the tons of cow manure produced daily in Texas. The organic waste clogs landfills, and can be a water and health hazard during and after floods.

Barrie Cogburn, landscape architect in the Design Division, says the waste problem is not restricted to cow manure. Cogburn is helping promote testing and expansion of the compost program. She says that in the Bryan-College Station area, instead

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Pharr District staff (from left) Steve Walker, landscape architect, Guillermo Arratia, design engineer, Velma Garcia, environmental supervisor, and Mark Iglesias, environmental specialist, work together to incorporate environmental issues into Plans. **Specifications** and Estimates (PS&E).

Pharr District Photo

## Pharr: Getting environmental issues into PS&E

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Contractors and inspectors are given permits and licenses. General conditions are reviewed. The mitigation plan is also reviewed and discussed. The contractor is reminded to minimize brush clearing and use erosion control methods. The contractor also is reminded to coordinate with resource agencies when choosing Project Selection Locations (PSL's) in areas that may be of concern. The environmental staff stays involved by answering contractor questions and through occasional contruction site visits.

Involving project designers in the environmental process is very beneficial. Early involvement accomplishes several things. One, the designer learns about the environmental process and its requirements, thus becoming aware of what needs to be done to obtain environmental clearance. Two, the designer gets the opportunity to hear directly from resource agencies the type of solutions they want used. In addition, resource agencies learn about the limits engineers face in designing and using their recommendations, as well as other factors such as cost, safety, traffic control and construction methods. Better working relationships are developed between all parties involved. This can be an advantage when done during the early stages of project development.

Another benefit is that the contractor, prior to bidding on the contract, has a clearer picture of the environmental issues that the project entails. This reduces the chances of possible claims later from violations, delays and fines. The preconstruction meetings allow the contractor the opportunity to meet members of the district's environmental staff.

By involving the project designer and incorporating environmental issues into PS&E, the district environmental coordinator is provided with first-hand knowledge of the designers schedule to complete, process and bid the project and, in the long run, encounter fewer problems on future projects. This creates a win-win situation for all parties.

Environmental commitments can be incorporated into different areas of the PS&E. In the General Notes, under Item 100 Preparing Right of Way, notes regarding clearing and grubbing, tagging trees, and notes on complying with permits and licenses can be included. Other notes can include the proposed

typical sections and plan and profile sheets. The areas to leave undisturbed can be shown to include widths and station lengths. Any proposed fencing can also be included in these sheets. The mitigation plans can be developed from the schematics to depict areas to remain undisturbed and areas to be enhanced and improved. The same schematic can be used to show wetland areas to be affected, the new mitigation and amount of excavation to create the new wetlands.

If these suggestions are followed, the district's environmental staff can successfully incorporate environmental issues into PS&E. Remember to involve others, such as the area engineer, the landscape architect and the designer, to assist in the decision-making process and in developing mitigation plans. Communicate with the construction engineer and the inspectors by reviewing plans and permits during the preconstruction meeting. Develop good relationships with resource agencies and contractors. And, finally, open the lines of communication between everyone involved, such as engineers, environmental coordinators, resource agencies and contractors.

## **Brownfields Initiative offers new way** to revitalize contaminated areas

By ORLANDO VILLA JAMANDRE Jr. Transportation Planning and **Programming Division** 

Many former commercial and industrial properties in Texas lie dormant. underutilized, or vacant due to light, moderate, or perceived hazardous material contamination. These properties, broadly referred to as "brownfields," are usually found in urban areas previously used for industrial and commercial operations that generated waste materials.

Because they do not pose a serious public health risk to the surrounding community. brownfields do not qualify as either Superfund or National Priority Listing sites. However, the contamination liability, cleanup costs, and regulatory barriers associated with brownfield properties often complicate their redevelopment. In recognition of the potential that brownfields redevelopment can have for community revitalization, the **Environmental Protection** Agency (EPA) has developed the Brownfields Economic Redevelopment Initiative, which provides grants. incentives and technical assistance to states and local communities to promote environmental protection and restoration, economic redevelopment, and public health protection through the assessment, clean-up, and reuse of brownfields.

### **Brownfields Economic Redevelopment Initiative**

One component of the **Brownfields Economic** Redevelopment Initiative is EPA's National Partnership Action Agenda, which promotes interagency partnering and cooperation among states and federal

For more information about brownfields, visit these web sites:

• EPA Brownfields Program

www.epa.gov/brownfields

• TNRCC – Voluntary Cleanup Program (VCP)

www.tnrcc.state.tx.us/permitting/remed/vcp/index.html

•FHWA - Environmental Guidebook - Hazardous Waste and Brownfields

www.fhwa.dot.gov/environment/guidebook/chapters/v1ch7.htm

• City of Dallas Brownfields Program

www.ci.dallas.tx.us/html/brownfields.html

agencies, including the Department of Transportation, to identify and address barriers to cleanup and redevelopment. Changes in federal and state policies are now reducing liability concerns and stringent cleanup requirements that previously discouraged the redevelopment of brownfield properties.

At the state level, the Texas Natural Resource Conservation Commission operates the Voluntary Cleanup Program and the Texas Innocent Owner/ Operator Program (IOP), both of which provide incentives for brownfields to be investigated, cleaned and redeveloped. IOP provides a certificate entitling innocent owners and/or operators immunity from liability, under the Texas Health and Safety Code or Water Code, if their property becomes contaminated from a source not located on their property and they did not cause or contribute to the source of contamination.

With regard to federal transportation policies, the Federal Highway Administration (FHWA) has had a policy for more than 10 years that emphasized the avoidance of all contaminated properties as a first consideration during the environmental and transportation development

processes if other possible alternatives existed. FHWA revised this policy in 1998 and is now encouraging state and local transportation agencies to address community brownfield redevelopment in transportation planning and the project development process.

Both FHWA and the Federal Transit Administration (FTA) now provide the flexibility, where feasible and reasonable, for states, local governments, and transit agencies to participate in transportation projects that include the reuse of brownfields if the site meets all other appropriate criteria and is consistent with a specific transportation project.

Besides supporting the use of brownfield properties for transportation-related development, FHWA and FTA also are encouraging transportation agencies to ensure that potential projects consider access to planned brownfields redevelopment and also to foster new partnerships with state and local environmental and economic development entities to attract additional funds and resources.

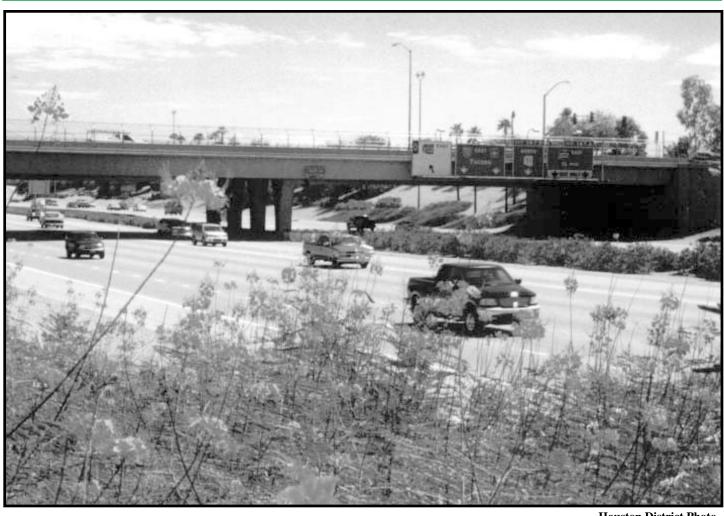
### **Brownfield Pilot Programs** and Showcase Communities in Texas

EPA has established Brownfield Pilot Programs in

Austin, Brownsville, Dallas, Fort Worth, Galveston, Grand Prairie, Houston, Laredo and San Antonio. Pilot programs are also operating in the El Paso area through the Rio Grande Council of Governments, and in Tarrant County. Moreover, Dallas was selected last spring as one of 16 Brownfields Showcase Communities nationwide. EPA Showcase Communities serve as national models for the **Brownfields National** Partnership and demonstrate the benefits of multi-agency partnership.

Communities with brownfield redevelopment plans are eligible for grants, loans and tax incentives for redeveloping brownfield sites. For example, grants are available to fund Phase I and Phase II Environmental Site Assessments and Engineering Evaluation/Cost Analysis studies. Austin and Dallas are also current participants in the Brownfields Cleanup Revolving Loan Fund and projects in those cities are eligible for short-term loans for brownfields clean-up. In communities with brownfield redevelopment plans, FHWA and FTA are encouraging metropolitan planning organizations to develop their three-year transportation improvement programs in conjunction with siteremediation and redevelopment efforts. The use of brownfield sites for transportation projects should occur only if those locations are consistent with the purpose and need of the transportation improvement being proposed and the cleanup costs are reasonable when considering the total cost and public benefit of the project.

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Houston District Photo

The Houston District's Green Ribbon Project recommends improving the appearance of the city's freeway system.

# Houston District's 'Green Ribbon Project' aims to improve roadway aesthetics

### NORMAN WIGINGTON Houston District

For years, residents, business people and local government officials expressed concern about the inconsistent and unflattering appearance of the freeway system in and around Houston. While some areas retain lush plantings (such as the oleanders planted in the median on Galveston Island), other areas seemed bereft of life. These concerns resulted in a new project for the Houston district called the "Green Ribbon Project" (GRP).

In early 1997, State Representative Garnet Coleman met with TxDOT officials to establish a blueprint for action. Initial discussions failed to create definite plans, but Representative Coleman and other community leaders pushed the idea for a design committee to reality. The Green Ribbon Committee (GRC) formed in fall

1997 with representatives from the arts, environmental and cultural organizations, business and homeowners associations and representatives of governments and transit authorities. In spring 1998, TxDOT selected a team of design consultants to work with the GRC to develop the Master Plan. Public meetings were held in October 1998 to introduce the project and gain public support. A slide show was presented to business groups, neighborhood associations and other interested groups and individuals. The GRC contacted public officials, including Houston's mayor and city council members, state legislators and municipal officers from adjacent cities for their input. Members of the business community, including the Greater Houston Partnership, Greater Greenspoint District and the Galleria area's Uptown, were contacted as well as other business and

neighborhood associations. Participation by these and other interest groups was seen as essential to build public support.

The project provides guidelines for TxDOT to plan future freeways or road improvements for more than 2,700 centerline miles of roadway in the Houston District. GRP guidelines set a standard for engineers and planners to incorporate plantings, lighting, architectural improvements, and art into freeway designs. In addition, the guidelines address improvements to freeway structures, such as interchanges and bridges. TxDOT does not have the financial resources to carry out all proposed design concepts, so it became apparent at an early stage that successful public/private partnerships with the community would maximize the impact of available TxDOT funding. At the same

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## Mitigation: New TxDOT bank created

(Continued from Page 1) district took the lead on the scientific study and wetland delineation," Bruechert said.

ENV's role was to handle the bulk of negotiations with regulating agencies to create an agreement that allows the district to use the bank as credit against wetlands it cannot avoid, or minimize impacts to, for transportation projects. The U.S. Fish and Wildlife Service, the Environmental Protection Agency, the Army Corps of Engineers, the General Land Office, the Texas Natural Resource Conservation Commission, TPWD and TxDOT all had to sign off on the agreement.

Bruechert says most people do not recognize the economy of mitigation banks. This mitigation bank cost between \$2,698 to \$3,042 an acre to buy and manage. Some state transportation departments pay up to \$70,000 per acre for wetlands that are impacted by a project as the agreed upon cost for creating from scratch wetlands to replace what is taken. Bruechert said the most TxDOT has spent is up to about \$35,000 an acre to create from scratch wetlands that it could not avoid taking for a

"Wetland banks pay for themselves when used properly," Bruechert said. "Creation is not an exact science. The quality is not there because man is only so good at creating a natural ecosystem."

The Houston and Yoakum districts get to use credits from the Coastal Bottomlands Mitigation Bank at a ratio that varies with the value of the wetlands taken by a project. For the most valuable wetlands impacted by a project, six acres are counted against the mitigation bank for each acre taken by the project. Ratios of 4-to-1 and 2-to-1 acres are established for takings of less valuable wetlands.

TxDOT's other two mitigation banks are the 3,343-acre Blue Elbow Swamp in the

Beaumont District and the 2,243 acre Anderson Tract that serves the Atlanta, Lufkin, Paris and Tyler districts.

Adding the latest 3,552-acre tract brings TxDOT's total banking effort up to 9,138 acres from which the public gets both transportation and recreation benefits.

The Austin's Woods Conservation Initiative also includes two tracts of land adjacent to the Peach Point Wildlife Management Area bought by Dow Chemical Company and given to TPWD. Those two tracts of land are known as North Stringfellow and South Stringfellow and total 3,193 acres.

## **Houston:** GRP

(Continued from Page 6)

time, enhancing safety and stabilizing maintenance costs remained a priority for the department.

More than 80 miles of Houston's freeway network were selected as representative roadways for the GRP. Transportation corridors for the initial project are Interstates 10, 610, 45 and U.S. 59, all within Beltway 8. The guidelines are ready and improvements will be implemented over time as enhancements are made to the Houston-area freeway system.

Highway corridors generally consist of two primary zones: main lanes and frontage roads. In most locations, the frontage road and main lanes have an outer separation zone in between to separate them. The design teams recommended that TxDOT improvements focus on the main lane zone, including the medians and outer separations. In addition to sound engineering principles, Green Ribbon Committee design concepts are intended to adhere to Texas Transportation Institute (TTI) recommendations. TTI extensively researched landscape treatments for roadway corridors and recommends that such treatments integrate safety, construction, feasibility, functionality and reduced maintenance.

In partnership with the GRC and consultant team, TxDOT developed nine goals and five design principles, which were established as a guide for

enhancement concepts.

First, the design principle of *Green First* established that, whenever possible, new plantings or the preservation of existing plants is the first priority in recommended improvements. If new plantings or preservations are not possible, recommend the integration of architectural and/or public art elements.

Second, consider all improvements in context and design solutions to emphasize the visual and physical *Integration* of all components.

Third, establish *Continuity*, designing all components to create a continuous appearance.

Fourth, remember that *Freeways are a Public Space* and the freeway right of way belongs to the public and should provide a pleasing visual experience.

The fifth and final design principle, the planning and implementation of all improvements, should consider long-term *Maintenance* costs with respect to plantings, structures, surface treatments, and other materials along roadways.

By relating the design principles to the plan's development process, a clear reference foundation was established for the GRC goals:

**Aesthetics**: Establish a higher level of visual appeal along the corridors through landscape and architectural improvements.

**Mobility**: Promote and enhance highway safety and maintain traffic flow.

**Sustainability:** Promote fiscal responsibility in capital investments and reduce maintenance costs by using sustainable plantings, including native

trees, shrubs and grasses.

**Sensibility**: Reduce implementation and maintenance costs through the design of sustainable landscape.

**Partnership**: Promote public/private partnerships for implementation and maintenance of improvements.

**Expression**: Develop unifying themes through the use of art and neighborhood gateway markers to express cultural uniqueness of adjacent neighborhoods.

**Innovation**: Develop functional and innovative design solutions for architectural elements, including bridge components, walls, railings, barriers, sign supports and lighting.

**Artistic Expression:** Integrate civic art of any material or medium that is permanent in nature and integral to the environment in which it is placed.

**Involvement**: Inform the community, solicit input and build support through a proactive public involvement process.

A comprehensive analysis of the current roadway inventory was completed as part of the project. The GRC identified locations where design features were already part of the roadway and where opportunities exist for future placement.

Distribution of the materials to TxDOT designers and engineers marks the beginning of the project's impact on highways and freeways districtwide. Once the concept and ideas are assimilated in the design vernacular of TxDOT employees, the district should see evidence of the GRP's efforts – a visually pleasant and improved highway corridor.

# Odessa takes environmental award for vegetation management program

### By JIM DOBBINS Environmental Affairs Division

Odessa District Vegetation Manager Robert Watts and his staff took home the 1999 Environmental Achievement Award, presented Oct. 11 at the TxDOT District Engineer /Division Director/Office Director meeting in College Station.

The Environmental Achievement Award recognizes the best examples of projects and processes that fulfill transportation objectives while protecting and enhancing the natural and human environment. The award is presented annually by the Environmental Affairs Division (ENV) to the district whose efforts demonstrate outstanding results.

The winning project was the Odessa District's vegetation management program.

Establishing and maintaining erosion-controlling vegetation in a district that typically receives 14 inches of rain annually is no small undertaking. Doing it in a cost-effective manner is all the more impressive. The project, led by Odessa District Vegetation Manager Robert Watts, developed and carried out a multifaceted program that has produced impressive results.

Using biodegradable soil retention blankets and a temporary above ground drip tubing system, native grasses were established on header banks along Loop 250 in Midland.

An irrigation system for the Texas 191 and Loop 338 intersection in Odessa used reclaimed effluent water from the City of Odessa's wastewater treatment plant. This system reduced irrigation costs from \$2.75 per thousand gallons to just 30 cents per thousand gallons.

At a number of sites in the district, gravity-flow drip systems fed by water trucks were installed to maximize the efficient use of water. Herbicide application became more efficient when a four-wheeled utility vehicle with a 25-gallon tank replaced the traditional method of using walking employees with backpack sprayers.

Savings in manpower, water and herbicides are documented as a result of the program. The methods developed and used in the Odessa District have produced cost-effective results that can be applied to other district vegetation management programs.

Barbara Hickman, an archeologist in ENV's Cultural Resources Management Section, served on the review committee.

"I liked the Odessa District's entry because they did not have to do this because a regulatory agency said so, or to comply with the county's wishes," Hickman said. "They went beyond the project to control erosion, re-vegetate with native species, and beautify the right of way."

"I was very surprised to win the award, for sure," Watts said. "Our district's maintenance staff, herbicide applicators and engineers all deserve a pat on the back for the job that they do. This really was a group effort – I just happened to be on the receiving end. Credit also goes to Laurie Williams, my boss, who has been very supportive and has allowed me to do things the way I want to do them."

Also honored were:

**Runner-up** – Amarillo District's Bat Colony Relocation.

When Canadian Middle School officials contacted Mark Dorris, the Hemphill and Roberts County Maintenance Section Supervisor, asking for help to move a bat colony out of the school, Dorris helped come up with a solution that allowed both the students and bats to win. Supplying plans and materials in the form of scrap sign boards, Canadian Middle School seventh-graders constructed bat houses for placement under the Canadian River Bridge by maintenance section staff. Following successful efforts to humanely exclude the bat colony from the school, estimated at 33,000 Mexican freetail bats, alternative roosting premises were provided under the bridge.

Canadian Middle School students were educated about bats and their habits, and the flying mammals received a new, more appropriate, roosting site.

Also, **Runner-up** – Lubbock District's Catching the Wind: Shelterbelts and Living Snow Fences on the Prairies.

A project that widened FM 1731 in northern Bailey County brought a more than 50 year-old shelterbelt to the attention of the Lubbock District's Ann Finley and Davis Melton. Constructed by Civilian Conservation Corps workers in the 1930s and '40s, these shelterbelts were designed to act as natural windbreaks and snow fences on the usually treeless plains. Shelterbelts were important in helping reclaim over-grazed and drought-stricken land. A close examination of the shelterbelt found many of the original trees missing. Working with the Texas Parks and Wildlife Department (TPWD) and the Texas Forest Service, a plan was devised to restore the shelterbelt by replacing the original trees. Assisted by the students of the Three Way School, Muleshoe Maintenance Section personnel planted seedlings and installed protective materials, such as mats, plastic tubing and wind screens, to allow the trees to become established.

These living snow fences will ultimately save TxDOT money in the form of lower snow removal costs and restored a Depression Era project to its original state.

**Honorable Mention** – Corpus Christi District's FM 70/Petronilla Creek Bridge Replacement.

The FM 70 bridge spanning Petronilla Creek in southern Nueces County was unsafe and needed to be replaced. The new bridge location was identified as habitat for ocelots and jaguarundis - two endangered cat species – and two rare plants – the endangered slender rushpea and the watch-listed Chandler's craig-lily. Corpus Christi District's Paula Sales, David Potter and Robert Leahy went to work to come up with a design and plan that would accommodate these plant and animal species. In coordination with TPWD and the Corpus Christi Botanical Gardens, a plan was devised to remove the affected individual plants and hold them at the botanical gardens until construction was completed, when the plants were replanted. A longer, higher bridge design was selected that would require less fill and provide minimum disturbance to the native brush.

Through the efforts of Corpus Christi District staff, endangered species, habitat and motorists all were winners on the FM 70/Petronilla Creek Bridge Replacement project.

A panel of ENV staffers reviewed and

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## NRM Director David Dunlap heads west

### By RICHARD GOLDSMITH Environmental Affairs Division

David Dunlap, director of ENV's Natural Resources Management Section, left as of the end of the year to move to the San Francisco Bay Area where he will work for the Santa Clara Valley Transportation Authority as an environmental analyst. Dunlap headed NRM since August 1998 and has been a part of ENV for 6 1/2 years.

Dunlap said that a year and a half as head of NRM has taught him "more than I ever wanted to know about water resource regulations and that a person can nearly suffocate under a pile of paper."

"I had not anticipated that this job would be so paper oriented. I have discovered that I have a strong interest in seeing more of the product of my work," he said. Add the pull of family to that — he

will be close to his parents and other family members who live in the San Francisco area — and Dunlap said he decided to make the move.

He says he will miss the people and seeing some of the initiatives NRM has undertaken in the past year reach fruition. Those initiatives include the first conservation easements and the creation of

a statewide stormwater management program.

TxDOT is close to completing the creation of two conservation easements, one on U.S. 277 for black capped vireos, and the second on Texas 40 for the Navasota ladies'-tresses.

The Statewide Stormwater Management Program will help the department by eliminating inconsistencies that exist from district to district. "That (the system) will be a creature that is evolving and ongoing," Dunlap said

Dunlap also worked for an Oregon county works department, where he conceived and introduced the idea of protective roadside signing to minimize the impacts to protected resources from routine right of way activities, such as mowing. He brought that idea to TxDOT.

Dunlap, during a previous stint with TxDOT, was also responsible for revising the seeding specifications for erosion control in the right of way, specifications still current.

His tenure as head of NRM has been a busy one that has included a legislative session, many changes in the regulations applying to water quality, as well as many staff changes. "Still no projects fell off letting," he said.

In California, Dunlap's job will be more project specific than his job here with ENV. "The agency doesn't have much highway experience and has recently taken that on in addition to bus and light rail."

His new job will be roughly the equivalent of a TxDOT district environmental coordinator, he said. "It will be a different kind of a challenge."

## **CRM** director Ann Irwin wins Stotzer Award

### By JIM DOBBINS Environmental Affairs Division

ENV's Ann Irwin, director of the Cultural Resources Management Section (CRM), was presented the prestigious Raymond E. Stotzer, Jr. Award Oct. 12 at the Transportation Conference in College Station.

Irwin, a 21-year TxDOT veteran, was recognized for her outstanding leadership and dedication to service to the department by a non-engineer.

Ken Bohuslav, ENV deputy division director, has worked with Irwin throughout most of her TxDOT career.

"Ann is a very knowledgeable, hard working and innovative employee," Bohuslav said. "She is very dedicated to TxDOT, the employees she supervises, and her profession. She is also a very nice person who does not take herself too seriously and enjoys a good joke, even if it is on her. I know I can speak for all the people that Ann has worked with to say that we are all very proud of her."

Irwin's nomination read in part "Many believe that Ann's reputation and track record have afforded TxDOT greater



TxDOT Executive Director Wes Heald presents the Stotzer Award to ENV's Ann Irwin.

Photo by David Stolpa/DES

latitude in its dealings with state and federal resource agencies – demonstrating a high degree of trust.... Ann's efforts over the years have contributed greatly to the success TxDOT has had in dealing proactively with archeological and historic

preservation issues, while keeping transportation projects on track."

The award took Irwin by surprise.

"I was totally flabbergasted that I won," Irwin said. "I like to think that the award is a reflection of the dedication of ENV's staff to doing the very best job of ensuring TxDOT's compliance with applicable regulations and laws, all to keep transportation projects moving. I have to thank Dianna Noble (ENV director) and Ken Bohuslav for the opportunities presented to me and their support, my branch managers, Lisa Hart and Nancy Kenmotsu, and CRM's staff that are constantly making me look good."

In addition to a plaque bearing the likeness of the former engineer-director, Irwin took home a \$1,000 prize. What are Irwin's plans for her monetary windfall?

"I plan on doing something very special with the money," Irwin said. "I don't know yet what that will be, but I will know it when it comes along."

For more on Irwin, please see "ENV's Ann Irwin finds balance in approach to project clearance," Summer 1998.

## **Compost:** Testing

(Continued from Page 3)

of cow manure, poultry waste could be used to make the compost mix. McCoy notes that the specifications for compost are very strict, to safeguard against air and water contamination. The product has to meet stiff EPA standards for Class A biosolid wastes. During the Loop 1 demonstration, witnesses detected only a slight earthy odor from the dried cow chip/wood chip mixture.

Cogburn is as excited about the project as someone can be about compost and manure. She believes it will be used most often to help topsoil in landscaping along the right of way. In larger chunks, it is suitable for erosion control. A third classification could work in beautification projects. Cogburn says maintenance crews could also "top-dress" rest areas and lawns, where the chip compost would fertilize and reduce water consumption in the summer. McCoy says the manure and wood chip compost has shown superb water holding capacity, and a tendency to resist washing away, even during significant rainfall. Those characteristics could be a plus in the variable weather conditions over much of the state.

Will the cow patty compost catch on? Cogburn says it may take time, as engineers have many other options. However, it is an easy way for TxDOT to be "green"; reduce waste statewide, and put more green along the highway.



**TPWD Photo by Jack Bauer** 

### Little cabin in the woods

A circa 1826 cabin is on TxDOT's 3,552-acre Coastal Bottomlands Mitigation Bank, also called the Nannie M. Stringfellow Wildlife Management Area by the Texas Parks and Wildlife Department, which will manage the site for TxDOT for 20 years and will then own the land. The cabin was built by a tanner who was part of Stephen F. Austin's colony. (See story Page 1)

## Kureska: Refugio project presents biggest challenge

(Continued from Page 2)

has been very supportive of the project." (See "U.S. 77 project uncovers historic cemetery" – Spring 1999, and "Remains of Refugio mission left undisturbed by U.S. 77 widening" – Fall 1996)

"The Refugio project has gone very smoothly, which I credit to Becky's hard work," Irwin said.

When Interstate 37 was under construction, the Loma Sandia prehistoric archeological site was found in Live Oak County and represented another major challenge for Kureska. The site contained about 205 prehistoric burials in the highway right of way that dated back to about 850-550 B.C. and required a lot of work.

"We needed to take some aerial photographs of the Loma Sandia site, but did not have the resources to draw from," Irwin said. "Becky made a few phone calls and all of a sudden, we had a Department of Public Safety helicopter at our disposal!"

What has kept Kureska with TxDOT all these years?

"I really like my job. I believe very strongly in what the department does and enjoy helping the public see all the good things that we do," Kureska said. Like any other job, Kureska's position has a downside.

"What I like least about my job is that by the time most people reach me, they are usually quite angry about some transportation tie-up or other problem," Kureska said. "Cell phones have been a nightmare – now people can call from their cars when they are sitting in traffic. Not long ago, one woman who was stuck in a traffic jam spent 45 minutes yelling at me on the phone. People can say such ugly things sometimes..."

Kureska's work has been recognized twice in recent years, garnering two awards in the Public Information Office's Communications Award competition – the 1996 Director's Choice Award and the 1997 Media and Public Relations Award.

Billy Parks, Corpus Christi District Engineer, recognizes a valuable employee when he sees one.

"Becky has a wealth of TxDOT knowledge," Parks said. "She is able to anticipate situations and react to them before they happen. She is a tireless worker and has provided me with a tremendous amount of assistance, which I appreciate."

What are Kureska's plans for the future?

"I have been telling people that I won't retire until the Crosstown Expressway project begins construction, probably in early 2001. I enjoy my job and feel like the department needs my institutional knowledge. I work well with Mr. Parks and we share similar philosophies. I have a good crew to work with in Cliff Bost and Gert Stewart, so I am in no hurry to leave," Kureska said. "Once I do retire, I will concentrate on church work, yard work and gardening. My church group has been helping the folks in Cuero left homeless by the October 1998 floods - I find that sort of work fulfilling, and I hope to do more of it once I retire."

Kureska has two grown sons ("the delight of my life – I'm happy to see them as adults") and five grandchildren to keep her busy.

Kureska provided a few words of encouragement for her fellow TxDOT employees.

"I think we need to be committed to the good job that we do at TxDOT. We work hard for the public on projects that really belong to the people of Texas. We are a lot more knowledgeable and use more cutting edge techniques than many give us credit for. This is a good field to work in and I'm extremely proud of TxDOT."

# ENV staff changes

David Dunlap, director of ENV's Natural Resources Management Section (NRM), left at the end of the year to move to the San Francisco Bay Area where he will work for the Santa Clara Valley Transportation Authority as a environmental analyst. Dunlap headed NRM since August 1998 and has been a part of ENV for 61/2 years. (See related story)

Christy Williams, who joined NRM's Water Resources Management Branch June 1, has moved on to join SAIC, an Austin environmental consulting firm.

Norm King joined NRM's Water Resources Management Branch Nov. 1. He came to TxDOT from a natural gas liquid company in Houston where he handled environmental compliance issues for seven years. King has a bachelor's degree in environmental management from the University of Houston at Clear Lake and an associate degree in meteorology from San Jacinto College. King and his wife, Dawn, have three grown children. King is a pilot, recently sold his Cessna 172, but keeps his hand in flying search and rescue missions for the U.S. Coast Guard Auxiliary.

Peter Dedek left ENV after eight months with the Cultural Resources Management Section's Historical Studies Staff. His last day was Nov. 30. He now works for the Texas Historical Commission as a project reviewer in the Department of Architecture.

Kyle Ford joined the Project Management Section (PM) Dec. 1 as a project manager. Ford has a degree in environmental geography and has worked extensively in the

See STAFF, Page 12



## BrainBender

by CRM's Steve Sadowsky



### **Texas State Parks**

Find the names of these Texas State Parks listed in the column at right in the puzzle below. Names may be horizontal, vertical, diagonal, and in reverse order. Letters may be used more than once. (Answers on Page 12.)

D	A	S	N	A	T	U	R	E	T	R	A	I	L	N	E	O
A	H	o	M	D	C	E	E	L	N	A	Y	I	N	N	E	N
$ \mathbf{v} $	R	I	R	S	K	A	E	R	В	R	E	P	P	o	C	C
I	w	E	K	C	Н	o	K	E	C	A	N	Y	o	N	N	R
S	T	X	$\mathbf{E}$	E	D	S	U	R	A	I	N	S	S	T	D	E
$ _{\mathbf{M}}$	C	K	I	N	N	E	Y	F	A	L	L	S	S	T	E	T
0	D	N	Y	w	o	T	R	Н	S	P	A	$\mathbf{M}$	U	A	X	S
U	N	Ι	F	F	Ι	R	G	Т	R	o	F	F	$\mathbf{M}$	Ι	L	A
N	L	N	Ν	L	P			R			I			L	E	C
$ _{\mathbf{T}}$			E		Ι			T								
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N	E	Ι	D	K	K	L	A	N	W	N	K	A	D	W	C	T
S	C	E	V	D	A	T	A	K	A	B	E	N	0	E	I	R
M	P	P	$\mathbf{E}$	E	$\mathbf{V}$	A	L	S	E	T	R	R	M	H	R	O
L	A	A	E	T	S	A	S	E	G	D	o	S	$\mathbf{C}$	R	o	$\mathbf{F}$
Y	L	S	N	N	G	N	L	C	A	N	I	C	I	S	T	P
o	o	J	$\mathbf{E}$	A	A	Y	V	I	A	T	A	$\mathbf{S}$	E	T	S	0
$ \mathbf{w} $	D	P	S	Н	N	$\mathbf{S}$	L	T	o	M	o	K	X	U	I	X
Н	U	Н	A	C	N	o	A	C	P	R	A	N	Н	o	Н	A
T	R	N	A	N	G	N	I	S	T	L	F	R	E	N	$\mathbf{M}$	A
$ _{\mathbf{M}}$	o	R	S	E	L	P	A	M	T	S	o	L	S	o	Н	A
$ _{\mathbf{M}}$	A	T	E	P	E	A	В	A	L	M	0	R	Н	E	A	M

Balmorhea

**Davis Mountains** 

Fort Lancaster

Fort Leaton

Hueco Tanks

Monahans Sandhills

Copper Breaks

Fort Griffin

Palo Duro

Possum Kingdom

**Enchanted Rock** 

Garner

Inks Lake

Lost Maples

McKinney Falls

Goliad

Choke Canyon

**Fannin** 

**Park** 

Lakes

Lakes

**Historic Site** 

Camp

Hike

Swim

Fish

Nature Trail

**Picnic** 



**Environmental Affairs Division** 125 East 11th Street Austin, Texas 78701-2483

Address correction requested



## **ENV**: Award

(Continued from Page 8) discussed the merits of each nominee. Eight projects were submitted for consideration.

Terry Dempsey, an Environmental Quality Specialist in the Hazardous Materials Management Section, also reviewed the nominees.

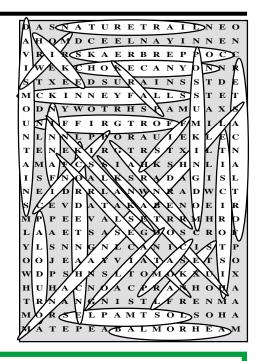
"I thought we had a lot of strong projects to consider this year," Dempsey said. "I was especially impressed with the two projects that involved school children, which were nice examples of public involvement. I am looking forward to seeing more nominees next year."

Look for the call for nominations for the 2000 Environmental Achievement Award in early January. Entries must be received at the Environmental Affairs Division by 5 p.m. on Friday, May 5, 2000.

## Staff: Ford

(Continued from Page 11) oil industry. He also has a degree in historical geography and is working on his applied geography masters degree thesis about wilderness preservation in New Mexico's Gila National Forest. Ford and his wife, Julie, have two children, ages 2 and 3 1/2.

Jo Jarrell joined PM as a project manager, also Dec. 1. She came to ENV from the Austin State Hospital where she was assistant director of Environmental Services. She also has worked for an Austin-based environmental consulting firm. She has a master's degree in applied geography from Southwest Texas State University and an undergraduate degree in environmental science from Concordia University at Austin, Jarrell and her husband, Curtis, have three grown children.

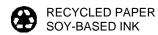


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GroupWise to "rgoldsmi" within TxDOT; "rgoldsmi@dot.state.tx.us" for e-mail from outside TxDOT.

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**Division Director** Dianna F. Noble, P.E.

**Deputy Division Director** Ken Bohuslav, P.E.

**Communications Director** Jean Beeman

**Editor Richard Goldsmith**