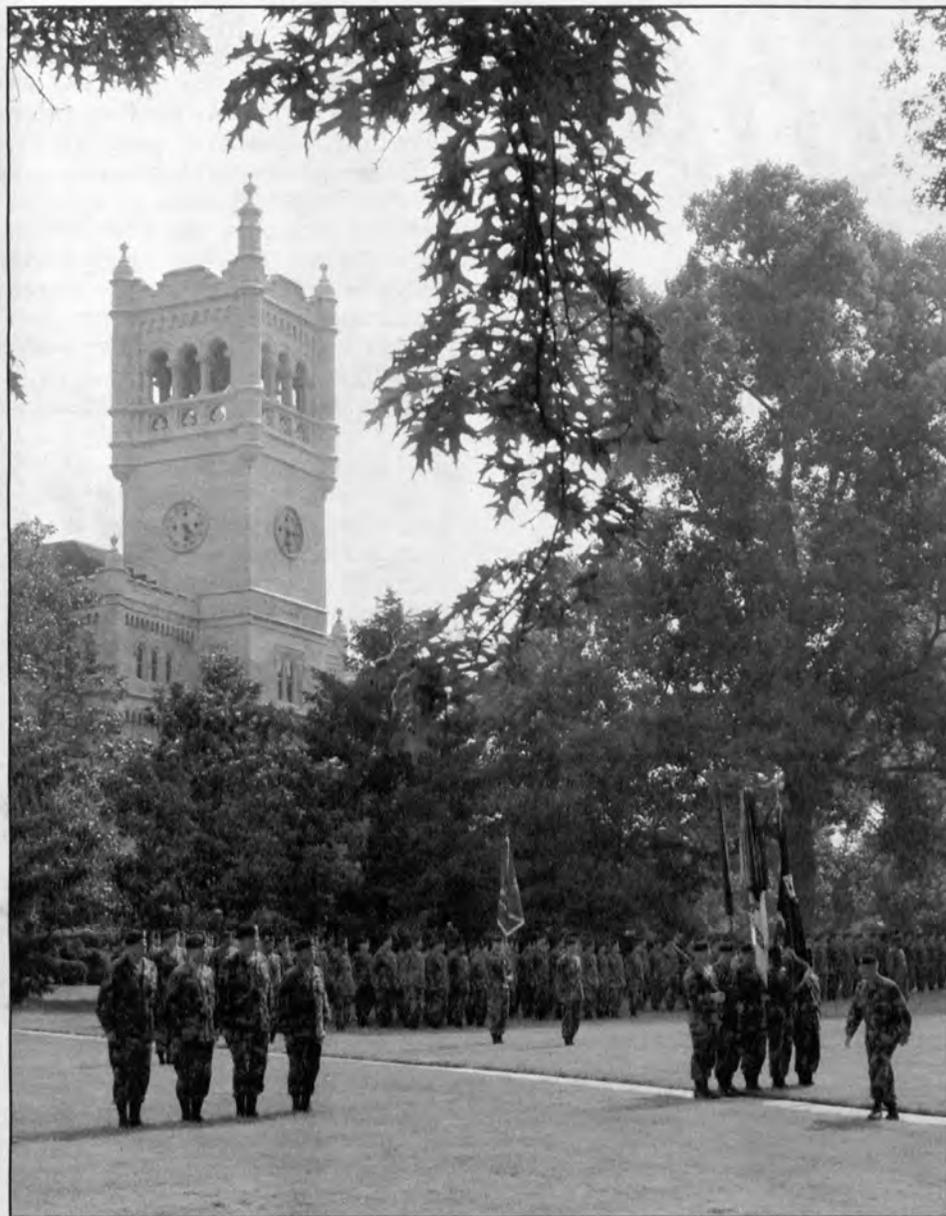




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Corps soldiers form up on the parade field at the U.S. Soldiers' and Airmen's Home. Lt. Gen. Robert Flowers, Chief of Engineers, assembled all soldiers in the Corps (about 600) from around the world for the 226th Army Birthday on June 14. (Photo by F.T. Eyre)



Maj. Robert Tuscano, a Corps Reservist, chats with a retiree at the U.S. Soldiers' and Airmen's Home. About 1,300 retirees live at the 320-acre community in Washington, D.C. (Photo by Marti Hendrix)

Corps soldiers celebrate berets, Army birthday



Sgt. 1st Class Towanda Myers of Headquarters (left) helps another Corps soldier adjust his beret before the parade. By order of Gen. Eric Shinseki, Chief of Staff of the Army, the black beret became standard Army headgear on June 14. (Photo by Marti Hendrix)



Soldiers of the 249th Engineer Battalion (Prime Power) execute eyes-right as their commander, Lt. Col. Anthony Vesay, salutes the reviewing stand. (Photo by F.T. Eyre)

Insights

Americans should count blessings

By Col. Lowell Moore
Chaplain, U.S. Army Corps of Engineers

"God bless America, land that I love," goes the song that you hear a lot this time of year.

However, when I look around this great country of ours, I think He already has. There are signs everywhere that this nation has been blessed.

During my lifetime, I've been fortunate to visit 32 different countries and all 50 states. I love to visit other countries, experience other cultures, talk with other people, and learn about different ways of life. My life has been greatly enriched by learning about other people and places around planet Earth.

Other nations, other problems

But as enjoyable as my travels have been, I'm always glad to get back to the good ol' United States of America. Whenever I return home, I always have a new appreciation for the country that I call home.

Did you know that:

- You can be fined for chewing gum or spitting in Singapore?
- A woman can't leave the house without covering her face in Saudi Arabia and other Middle East countries?
- Only elementary school education is free in Korea? High school costs, and college costs a lot more.
- Many fathers in Japan usually see their children only at breakfast due to long working hours?
- Some women in Honduras have to wash their clothes in local streams?
- Gasoline can cost up to \$8 a gallon in the United Kingdom?
- You have to register with the government before you move anywhere in Germany?

• There are no speed limits on the autobahns (freeways) in Germany, and the fastest car has the right of way?

• You can't drink the water in Honduras and other Central American countries?

I'm not saying that all these differences are bad. (Washing your clothes in a stream is a lot less expensive than using a washer and dryer.) But when I compare the benefits, the laws, the standard of living, and the freedom of America to the other countries I've visited, I've come to believe we live in the greatest nation on Earth.

Perspective

I know I'm not alone with this belief. In fact, I've heard others say that every American should live outside the U.S. for at least one year. Then we would really



appreciate this great nation.

Recently, I heard a new spin on that idea of living away from home to appreciate it more when you return. I visited South Atlantic Division in Atlanta, and I met a lady who had just joined the SAD team. I was quick to welcome her to the U. S. Army Corps of Engineers, as I always do when I can find someone with less time in the Corps than me.

But she informed me that she had actually been with the Corps for years. She had gotten married and left the Corps to follow her husband. For five years, she worked for another federal organization before her husband moved again. This time she was able to get a position that allowed her to work once again with the Corps of Engineers.

When I asked how the Corps compared to the other federal organization she said, "The Corps is great! I think everyone should work outside the Corps for at least one year, and then they would really appreciate working for the Corps."

When I left Atlanta on that trip, I went straight to visit New Orleans District. The folks in district's Construction Division were having their annual crawfish boil that evening at Lake Pontchartrain, and they invited me to join them.

Crawfish boil

Since we're talking about other places and other customs, maybe I should explain a "crawfish boil" for the benefit of Corps folks in other parts of the nation and the world. A crawfish (crayfish) is a kind of fresh-water shrimp, and they are prepared much like shrimp. You season boiling water with a secret blend of spices like onions, salt, pepper, and red pepper, and cook pounds of crawfish in big No. 3-sized washtubs.

You serve heaping platefuls of crawfish with sausage and corn-on-the-cob to a lot of friends and coworkers, and wash 'em down with plenty of ice-cold beer (or Coke in my case). Put it all in a beautiful place like Lake Pontchartrain, and you've got the recipe for good eatin' and a good party, Deep South style!

Of course I accepted their invitation, and I had a great time enjoying their Southern hospitality, plus a couple of plates full

of delicious crawfish.

While sitting around a table with crawfish juice running down my elbows (there is no dainty way to eat boiled crawfish!), I shared the story about the lady in Atlanta who thought everyone ought to work outside the Corps for one year to appreciate it more.

And a lady who was enjoying crawfish at our table, and had also worked outside of the Corps, jumped to her feet and ex-

claimed "I agree! We don't know how good we have it!"

Pray for blessings

Well, my personal experience does not qualify me to compare the Corps with other federal agencies or places to work. But judging from the comments I hear from the Corps employees I meet while visiting the field, I've come to believe that, just as America is a blessed country and a great place to live, the Corps is a blessed organization and a great place to work.

This Fourth of July, I encourage everyone, whatever your faith, to pray. And when you do, ask for continued blessings on America, and on the U. S. Army Corps of Engineers.

(The views expressed in this article are those of the author and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of Defense, or the U.S. Government.)

JOSEPH W. WESTPHAL

13131 NEW PARKLAND DRIVE, HERNDON, VIRGINIA 20171

June 1, 2001

Lieutenant General Robert B. Flowers
Commanding General
U.S. Army Corps of Engineers
441 G Street, NW
Washington, D.C. 20314-1000

Dear General Flowers:

As I end my tenure as both Assistant Secretary of the Army for Civil Works and Acting Secretary of the Army, I wanted to express to the Engineers, through you, how proud I have been to have had this association with such outstanding and patriotic men and women. The work of the Engineers, both in combat and in serving our Nation's domestic needs, have been unparalleled in this world.

I want to especially thank the men and women of the Corps of Engineers who have such a great commitment and dedication to this Nation's progress and well-being. As I traveled to nearly every District and Division, I was always impressed with the innovation and creativity of the Corps great civilian workforce. I am grateful to those at Headquarters who helped me develop budgets and sustain our program through difficult times and the ever present competitive nature of Washington's decision-making process. There is so much talent in this great organization that all of us, retired and active, should ensure that our leaders understand what a great asset the Corps is to our Nation. You can be assured that I will do my part in the future.

Bob, I was surprised, honored and humbled by the award of the Silver Order of the de Fleury Medal and your kind and warm remarks at the Engineer Dinner. I want to thank you and commend you on your outstanding leadership and the great values you exemplify for the Corps. I leave with a sense of comfort in knowing that the organization is well managed by strong leadership at all levels. Thank you for your support and good work and know that should the Engineers ever need my assistance, you have but to call on me.

Essays,

Joseph W. Westphal
Joseph W. Westphal



Commentary

Army has good values

By Jim Peak
St. Paul District

While attending the Sustaining Base Leadership Management course at the Army Management Staff College at Fort Belvoir, Va., our class focused on the Army Values. Our instructors asked each student to briefly write "What the Army Values mean to me."

At first, I thought this would be just another rote assignment. But as I began to think, personalize, and write about the Army Values, I realized that these seven organizational values closely align with my personal values and deeply-held beliefs.

I've been blessed to work with countless peers, subordinates, and supervisors in many parts of the world who also exemplified these simple but profound values. That's one reason I enjoy working for the U.S. Army Corps of Engineers.

I still reflect on that assignment from time to time, and often share it with new employees. I'd like to share it with the rest of the Corps' employees, and I encourage each person to personalize the Army Values for him- or herself.

In my mind, I arranged the values in a pyramid with duty, integrity, and loyalty as the base, and honor at the pinnacle.

Duty

I freely chose and accepted the position I occupy. My acceptance implies that I have agreed to accept full responsibility for my actions in my position. It is my duty and obligation to carry out those responsibilities to the best of my abilities. In doing so, I demonstrate my resolve to fulfill the pledge I made to myself and to the Army.

Application — Accept my next assignment willingly, meet it with a positive attitude, and be eager to follow through with the responsibilities of my position.

Loyalty

I believe that loyalty builds upon duty. Loyalty takes the commitment required under duty and adds allegiance — allegiance to the Constitution, to the Army, and to my fellow team members. If duty is my "contract," then loyalty is the "ink" with which I sign the agreement. Loyalty is the visible proof of my commitment to duty.

Application — Remain focused and committed to the task at hand until completion. Give confident support to my leadership and my team members for the long haul.

Integrity

Integrity is the seal I stamp on my agreement for all to see. By this value, all can know that my word is good and will not be broken. Integrity is not swayed by the passing of time and cannot be counterfeited. It is the value that calls me to honesty and enables me to do the right thing when others do not.

Application — Be honest with customers in reporting the progress of projects. My word should be my bond.

I believe these three values (duty, loyalty, and integ-

rity) form a firm foundation for the values that follow.

Courage

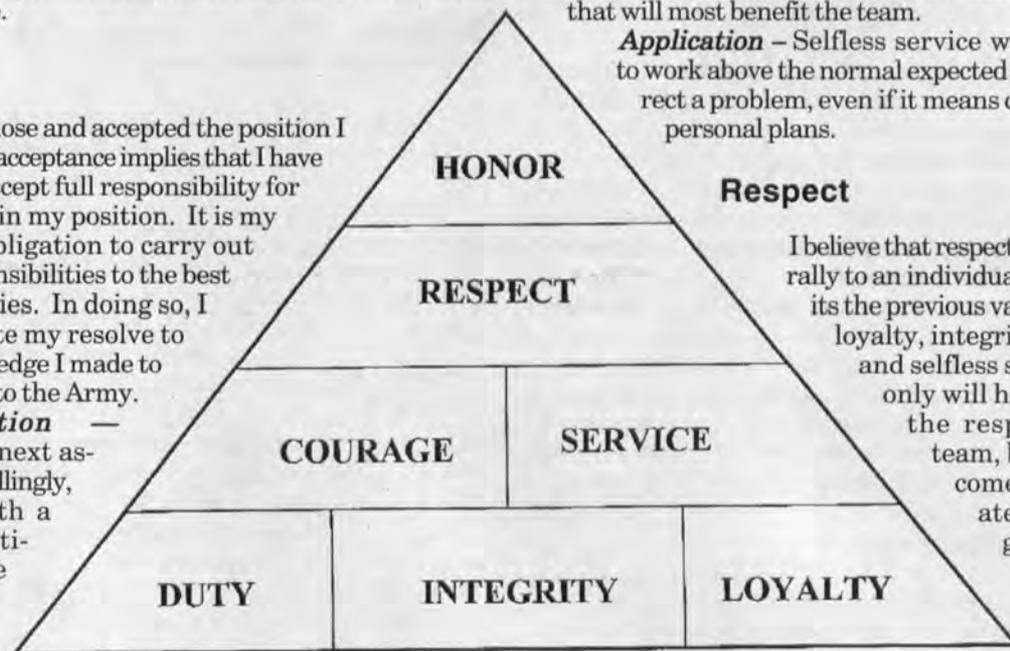
How can I hold fast to my resolve when I'm tempted to break my seal of integrity? With personal courage, I can find the moral bravery to stand against fear, uncertainty, and adversity. I believe that moral courage is a virtue to be pursued and prized. Wherever moral courage exists, physical courage follows close behind. From courage comes the will to fight and succeed.

Application — I've just discovered a major design mistake two days before bid opening. Moral courage will enable me to surface the problem and take corrective action.

Selfless service

As courage provides the strength to overcome adversity, selfless service calls me to remember that we are all servants of humankind. I bear a moral obligation to treat others as I would like to be treated. This value enables me to rejoice in the victories of others without feeling threatened. I must sometimes put aside my personal desires and sacrifice myself toward those things that will most benefit the team.

Application — Selfless service will drive me to work above the normal expected hours to correct a problem, even if it means changing my personal plans.



Respect

I believe that respect comes naturally to an individual who exhibits the previous values of duty, loyalty, integrity, courage, and selfless service. Not only will he or she win the respect of the team, but also will come to appreciate the innate goodness and dignity of fellow team members.

From respect comes fairness, consideration of others, and compassion.

Application — I will listen attentively to those with views different from my own. I will try to look at the issue from their perspective, and challenge my own assumptions.

Honor

If all the other values were building blocks of a pyramid, then honor would surely be the pinnacle. It is the crown jewel of the other combined values. Honor is the desired state that publicly signals my commitment to a strong moral code.

Application — Next time I am faced with an ethical decision, I will ask myself — Will my decision potentially bring either honor or disgrace to myself, my organization, the Army, or America? Then I will strive to do the honorable thing!

(Jim Peak is the Assistant Chief of Engineering Division, and the Chief of Technical Services Branch in St. Paul District. He has also worked in Saudi Arabia, Japan District, and the Huntsville Center.)

(The views expressed in this article are those of the author and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. Government.)

Falls cost big bucks

By Bernard Tate
Headquarters

A group of us were walking down the hall the other day when one of my coworkers suddenly went down like he had been hit by a truck, right in front of the command suite at Corps Headquarters.

"What happened?" we exclaimed as we rushed to his aid.

"I slipped on something," he answered through gritted teeth while lying there clutching his knee.

Sure enough, there was a small spill right under his shoe, almost invisible against the dark tile floor. But that wasn't all. There was a trail of little drips and spills from where he fell all the way to the elevators.

Some of us helped him up while others whipped out handkerchiefs and facial tissues and wiped up all the spills we could find.

He walked away from the accident basically unhurt, but a lot of people aren't so lucky. A friend of mine at Oakland Army Base, Calif., broke her wrist falling on a spill.

According to statistics published in the March 26 issue of *US News & World Report*, about \$38.7 billion is spent each year on medical expenses and lost wages for employees harmed on the job, and falls are the second-largest category.

Estimated workers' compensation costs for workplace accidents in 1998 were:

- Lifting, pushing, pulling** — \$9.8 billion.
- Falls** — \$8.0 billion.
- Bending, climbing, slipping without falling** — \$3.6 billion.
- Struck by object** — \$3.4 billion.
- Repetitive motion** — \$2.3 billion.
- Highway accidents** — \$2.1 billion.
- Bumping into object** — \$1.9 billion.
- Caught in equipment** — \$1.6 billion.
- Heat exhaustion, burns, frostbite** — \$300 million.

Many workplace injuries are preventable. At least, our buddy's fall was. It didn't take but a few seconds to wipe up those spills.

So if you spill it, wipe it up. A spill is as unobtrusive as a land mine, and every bit as effective in putting someone out of action.



Everglades restoration just beginning

“Our challenge is to restore this national treasure for future generations.”

By Homer Perkins
Headquarters

(Editor’s note: An update on the progress in the Everglades restoration will appear each quarter in the “Engineer Update.”)

It was once a “River of Grass,” both majestic and subtle. The Everglades’ waters once spread in a shallow, slow-flowing “river” that covered much of the South Florida peninsula and was home to alligators, snakes, panthers, and a multitude of other animals and plants. An ecosystem like the Everglades existed nowhere else in the world.

But the Everglades are dying. During the past half-century, the health and size of the Everglades have steadily declined. Half of the Everglades have been lost to agriculture and development. Sixty-eight of the Everglades’ plant and animal species are threatened or endangered. The wading bird population is down 90 percent. More than one million acres of the ecosystem are under health advisories for mercury contamination. More than 1.5 million acres are infested with invasive, exotic plants. And an average of 1.7 billion gallons of water per day are lost through discharge to the ocean or Gulf of Mexico.

It will be impossible to recreate the Everglades of a century ago. “Our challenge is to restore and preserve this important national treasure for future generations,” said Lt. Gen. Robert B. Flowers, Chief of Engineers.

How did it happen?

During the past 100 years, excessive drainage of wetlands and natural changes in water flows have altered the Everglades wetland ecosystem on a regional scale. Most negative changes in the ecosystem are a direct result of water management to control floods and provide water supply. Historically, most rainwater soaked into the ground in the region’s vast wetlands. As South Florida developed, the canal system built during the past 100 years (much of it by the U.S. Army Corps of Engineers) worked very effectively and drained water off the land too quickly.

“The Corps of Engineers did what the nation asked it to do at that time,” said Flowers. “Now we must join our partners and do what we must to protect this unique national ecosystem.”

How do we cure the problems?

There is no quick fix. It took 100 years to create the problem, and it will probably take at least one-third that long to solve it. Congress authorized the Corps to complete a comprehensive study of the Central and Southern Florida (C&SF) Project and the Everglades in the Water Resources Development Act (WRDA) of 1992.

More direction was provided in WRDA 1996. Florida and the Assistant Secretary of the Army (Civil Works) sent the C&SF Project Comprehensive Review Study to the Congress on July 1, 1999.

Finally WRDA 2000 authorized the Comprehensive Everglades Restoration Plan (CERP) as a comprehensive framework for modifications and operational changes to the C&SF to restore, preserve, and protect the South



Much of the Everglades lives up to its nickname, “The River of Grass.” (Photo courtesy of the South Florida Water Management District)

Florida ecosystem. CERP authorized about \$1.4 billion as the first step in restoring the Everglades.

The estimated total cost of the comprehensive plan is \$7.8 billion spread out over more than 35 years. It will cost about \$182 million each year to operate, maintain, and monitor the complete project. The cost is split 50/50 between the federal government and the non-federal sponsors. The South Florida Water Management District (SFWMD) is the primary non-federal sponsor.

WRDA 2000 authorizes four pilot projects totaling \$69 million, and 11 initial projects totaling \$1.1 billion. WRDA 99 authorized two additional pilot projects at a cost of \$27 million. Also included in the 2000 authorization are programmatic authority, assessment and monitoring funds, assurance language, programmatic regulations, and reporting requirements. CERP projects not authorized in WRDA 2000 will require specific Congressional authorization in future WRDAs.

Where are we now?

A \$712 million design agreement with the SFWMD was signed on May 12, 2000. The design agreement covers all aspects of design, including construction plans and specifications. It covers 56 components, pilot projects, and program level activities. Negotiations are under way with other sponsors for design agreements on the remaining components. In addition, a Master Program Management Plan (PMP) approved last year will serve as a guide to the Corps and SFWMD for managing, scheduling, and monitoring progress on 45 projects they will implement together, as full partners, in this massive restoration effort.

“The CERP is not business-as-usual for the Corps,” Flowers said. “It must be managed outside the normal stovepipe way of doing business to ensure continuity between projects, and must make effective use of the Project Management Business Process (PMBP) to integrate efforts across functional areas. The process requires a vertical matrix team concept that involves people from all levels, from the district to the Assistant Secretary of the Army for Civil Works.”

Matrix teams with mutually determined policy and procedures have been developed at Jacksonville District, South Atlantic Division, and Headquarters. These matrix teams and the Corps’ partners will streamline the management process and provide real-time policy and decision-making capabilities. A future *Engineer Update*

article will focus on “Team Everglades” and the functions, personnel, and responsibilities of the team.

A public Web site explaining the restoration plan is available now at <http://www.evergladesplan.org>.

Why can’t the restoration go faster?

Perhaps first and foremost, ecosystems do not respond immediately to specific hydrologic changes. Just as it took the ecosystem many years to respond to the negative changes made during the past century, ecological responses to the improvements also will take time. Second, time is needed to plan and design specific features. The pilot projects must be implemented to reduce uncertainty. Finally, an incremental approach to implementation allows the Corps and the non-federal sponsors time to assess performance and refine the plans to effectively meet restoration objectives.

Actually, the CERP covers a relatively short period. Environmental improvements will follow hydrologic changes. Some improvements will be visible during the first 10 years of CERP’s implementation. We should see gradual, but important, improvements during this time, but it will take several more years to obtain all the benefits that CERP will provide.

Where do we go from here?

Individual project management plans are being prepared for each of the 15 projects this year. A new reporting document called a Project Implementation Report (PIR) will then be prepared for each project to bridge the gap between the comprehensive plan and detailed project design.

The 10 projects specifically authorized in WRDA 2000 were each conditionally authorized, subject to approval of a PIR by the Secretary of the Army and passage of resolutions by the House Transportation and Infrastructure Committee and the Senate Environment and Public Works Committee.

Other PIRs will be forwarded to Congress for specific authorization in a future WRDA.

“The CERP offers the Corps an opportunity to showcase its capabilities,” Flowers said. “The entire Corps of Engineers needs to know what’s going on with this project. Everyone needs to be excited about it. This has to be an absolute team effort. Our challenge at Headquarters is to support the field and make sure the Corps at all levels is set up for success.”

Regulatory Program

Protecting the Nation's Water Resources



Regulators have big, tough mission

By Kathy Rea
Huntington District

The U.S. Army Corps of Engineers has regulated activities in the nation's waters for more than 100 years, protecting and maintaining the navigation capacity of our channels. The Corps has one of the oldest Regulatory programs in the federal government and, in recent years, the program has expanded to include protecting all surface water resources.

Regulatory is a big, complicated program, but it can be defined in a few words – if anyone wants to move dirt into a wetland or body of water anywhere in the U.S., they must have a permit from the Corps.

The law

The program operates primarily under Section 10 of the Rivers & Harbors Act of 1899, and Section 404 of the Clean Water Act of 1972.

Section 10 prohibits obstruction or alteration of navigable waters of the U.S. without a permit. A permit is needed for any work performed in, on, over, or under navigable waters of the U.S. (not including building bridges or causeways, which are handled by the U.S. Coast Guard).

In the mid-1970s, the Corps received responsibility to regulate fill in wetlands under Section 404. Section 404 prohibits discharge of dredged or fill material into waters of the U.S. (including wetlands) without a permit.

There is a third authority that the Corps Regulatory Program operates under – the Marine Protection, Research, and Sanctuaries Act, also called the Ocean Dumping Act. The Corps issues 100 permits or less per year under this authority.

Big program

According to John Studt, Chief of the Regulatory Program in Corps Headquarters, the Corps issues about 90,000 permits annually, authorizing the fill of about 30,000 acres

of wetlands, and requiring creation or repair of about 45,000 acres of wetlands.

About 1,100 Corps people work nationwide in the Regulatory program, with the largest group (about 80 people) in Florida. About 70 percent of the Regulatory employees have natural science degrees, the largest group of natural science people outside of the park rangers.

Typical district

Huntington District has a typical Regulatory permits operation. From mountaintop removal to wetland fills, the district's Regulatory Branch is intimately involved with highly visible and often controversial permit applications. The Regulatory staff reviewed more than 1,000 permits in fiscal year 2000.

They work with applicants, environmental agencies, and the public to make timely and legally defensible permit decisions. This may mean, at times, changing original designs so they conform to the rules and guidelines.

Huntington District maintains a list of 19 navigable stream sections. Regulated work includes dredging, building mooring cells, pile clusters, commercial docks, utility lines, recreational boat docks, submarine utility line crossings, intakes, and outfalls.

Wetlands

Wetlands are very much in the forefront. Wetlands are any area inundated or saturated by surface or ground water long enough and often enough to support vegetation adapted for saturated soil.

Wetlands include swamps, marshes, bogs, and similar areas, and they have definite value in the ecosystem. They provide ground water recharge, flood control, sediment removal, toxicant retention, nutrient removal, wildlife diversity and abundance, aquatic diversity, uniqueness, heritage, and recreation.

When talking to school children, Rebecca Rutherford of Huntington District's Regulatory Branch, puts it in more simple terms — "Wetlands act like a sponge soak-

ing up the water." They soak up rainwater and release it gradually. She further explains that wetlands also like kidneys — they act as filters to clean up water.

Three types

The Corps operates under three different types of permits – General permits (including Regional and Nationwide), Letters of Permission, and Individual permits.

General. Regional permits are developed by the district based on regional needs, like recreational boat docks. This type of permit is for individual owners only and can cover up to 50 linear feet. Despite their small size, even General permit verifications now take a substantial amount of time to review and establish proper mitigation.

Final revisions to Nationwide permits became effective in June 2000. At that time, six of the 40 Nationwide permits were modified and five new Nationwide permits issued. This type of permit is designed for minor work and has little effect on the environment.

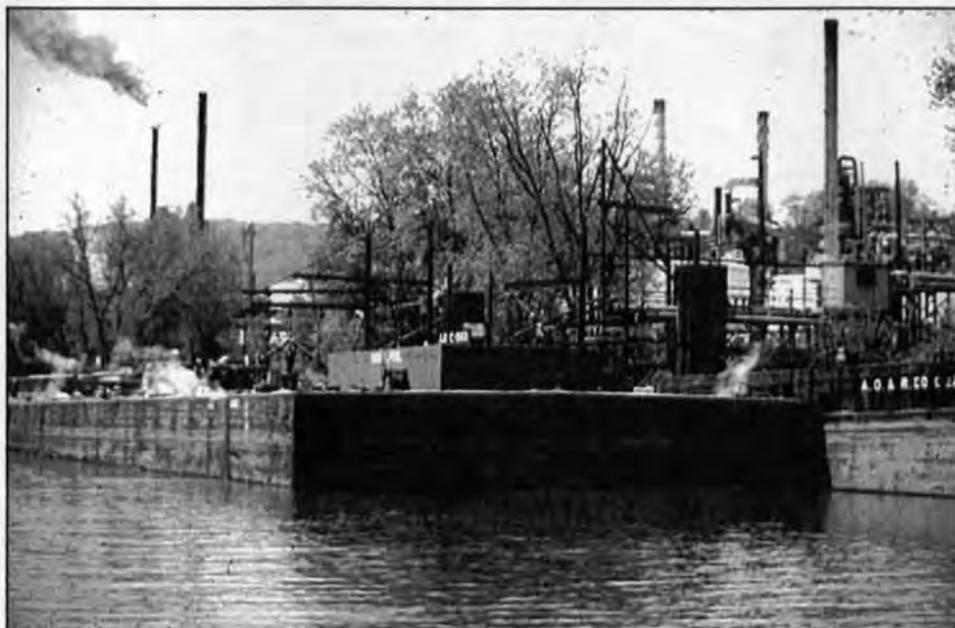
Because the framework for this type of permit was formulated at Corps Headquarters, it is uniform Corps wide. But districts and states have authorization to make restrictions. These permits include minor road crossing fills, submarine utility line crossings, minor wetland fills, small floating recreational docks, and minor bank protection projects. The basic limits of the new and modified Nationwide permit are half an acre of water of the U.S., including wetlands.

Letters of Permission. Letters of permission are used in Huntington District for Section 10 activities only. An example would be a 100-foot recreational floating dock. To approve this type of permit, the Corps coordinates with the state and the U.S. Fish & Wildlife Service.

Individual. Individual permits are used when an activity doesn't meet the criteria of either the Regional or Nationwide permit, or Letter of Permission.

For example, when the city of Huntington applied for a

Continued on page six



The challenge facing the Corps' Regulatory Program is balancing the needs of development with the need to preserve the nation's wetlands and other water resources. (Photos courtesy of Huntington District)

Flat, wet Florida

Largest Regulatory staff works in state that's 25 percent wetlands

By Patricia Davis-Williams
Jacksonville District

Manatees are lumbering, lovable creatures that live in Florida's warm waterways. They spend their days leisurely navigating their natural habitat, oblivious that they have an impact on the humans who also enjoy Florida's tropical environment.

Manatees are only one of Florida's 100 or so endangered species that contribute to the challenges that Jacksonville District's Regulatory staff tackles every day. Florida is also the seventh fastest-growing state. Wetlands cover up to 25 percent of the state. Lawsuits are filed almost monthly about protection of the environment.



The manatee is just one of Florida's more than 100 endangered or threatened species. Protecting the species' habitat challenges Jacksonville District's Regulatory staff. (Photo by Capt. Larry Campbell, Aquamarine Images)

Lawsuits

Endangered and threatened species concerns are not unique to Jacksonville District, but these issues present recurring challenges to the staff. In 2000, an environmental group sued the U.S. Army Corps of Engineers and other government agencies over protecting the manatee.

This litigation lasted for more than a year.

John Hall, Regulatory Division chief said, "We processed all permit applications as far as we could. Because of the litigation we couldn't complete action on about 650 applications."

"Once a settlement was reached in early 2001, we quickly completed more than half of the pending permit applications," Hall added. "The rest are awaiting formal consultation from another federal agency."

The backlog posed a huge temporary challenge to the staff.

"Our workload keeps growing, but our staff does not," said Hall. "Our challenge is to find ways to do a good job and keep up with the growth with the staff we have."

Biggest Regulatory staff

It's a big job. Jacksonville District's 86-member Regulatory staff is spread out in

Florida, Puerto Rico, and the U.S. Virgin Islands. They complete nearly 13,000 permit-related actions each year, operate a program in a state where the population increases by about 850 people every day, and where more than 100 endangered or threatened species live.

With hundreds of people moving to Florida daily, the need for housing, shopping, and jobs is increasing as well. This results in about 400 acres of land development every day.

EIS

In Southwest Florida, the state's fastest growing area, the cumulative impact of permitting is a constant concern. Therefore, the Southwest Florida Environmental Impact Statement (EIS) was initiated to improve the Regulatory process in the area. The EIS describes issues defined by a citizen/agency group, compares effects on issues of five future landscapes resulting from potential permits and other decisions, and contains a proposed set of maps where wetlands fill has high potential to affect certain natural resources.

"We were concerned about the magnitude of growth in Southwest Florida," Hall said. "We wanted to compile existing information and have it in one place so we

could make better decisions. We also want to share this information with local planning officials so they can use the information when updating their plans."

Dialogue

The state requires all Florida counties to have comprehensive plans, which are used to forecast infrastructure needs and zoning requirements associated with predicted future growth. Therefore, when the state wanted to build a university in Southwest Florida, the site-selection process was regularly reported in the local news media. The publicity highlighted the potential adverse effects to wetlands that future development surrounding the new university would have. Public dialogue grew from the high-profile stories. The issue required the direct involvement of the district leadership, and more than 25 meetings with county commissioners, builders, and interested civic groups.

"We were already seeing recurring issues with cumulative impacts of permit applications before the university permit," said Bob Barron, Southwest Florida EIS project manager. "The public awareness brought by the university permit was just a stepping-stone to the EIS process."

To identify possible cumulative impacts throughout the region, the district facili-

tated 12 meetings of an Alternative Development Group (ADG) of citizens, landowners, non-government organizations, developers, agencies, and other stakeholders who were asked to identify issues important to the community.

Barron said the concept of gathering concerned citizens to discuss a community-wide concern is not new. "What's unique to our effort is that Regulatory pulled this group together to discuss how their community issues and visions could be affected by future permitting. We essentially looked to this group to tell us what the issues are, how to measure them, and to identify where permitting could support their vision of the community."

The ADG identified 16 areas of concern. Corresponding overlay maps were created to identify potential land uses. The maps will help the Corps determine cumulative impacts when issuing specific individual permits.

One unplanned benefit of the EIS process was heightened public awareness. "This process energized the community," Hall said.

Barron noted, "We provided a forum for a dialogue, feedback, and clarification between people who build houses, people who raise cattle, people who enjoy hiking, and those who issue permits. I recall one early ADG meeting when, at the completion of a group exercise, we discovered we had an immense amount in common. We were not only able to prepare a more comprehensive document, but this process improved the communication in subsequent permit reviews and in other forums."

'Bully for you!'

One Florida citizen who followed the EIS process sent a note to Hall saying that since the start of the complex EIS process more interest and effort had been put in place locally to determine future issues.

"It is not about the product, it is about the process and the people pondering the issues. Bully for you!"

The next step in the process is to establish a Record of Decision which will give the district and state and local agencies a tool for comprehensive planning. In the district, it will be used to make informed decisions during the permitting process.

Everglades

Hall also talked about the Comprehensive Everglades Restoration Program (CERP). "Our staff is working closely with the CERP team to integrate regulatory issues and concerns into the CERP process. We need to look ahead to ensure that we don't lose sight of what CERP is about."

Hall said all these challenges have forced the district's Regulatory staff to improve the permitting process while balancing the needs of development and wildlife.

"We're trying to be more proactive by working with state agencies and counties to identify sensitive areas," Hall said. "If we can accomplish large-scale outlooks, we'll make better decisions and streamline our processes."

Big mission

Continued from page five

permit to develop a technical park along Fourpole Creek, it applied for an Individual permit. Under the Individual permit process, a public notice is issued, giving individuals, agencies, or groups 30 days to respond. A public hearing is sometimes requested. All comments are reviewed and considered before the Corps makes a decision.

Other examples of Individual permits include the sand and gravel dock near the Buffington Island battlefield site, and the coal docks along the West Virginia and Ohio shorelines. Because these permits can be more involved, processing time can take 150 days or more. If an Indi-

vidual 404 permit is required, the permit cannot be issued until the appropriate state approves water quality certification under Section 401 of the Clean Water Act.

Process

What happens when a permit application is received? The first thing is to determine whether the Corps has jurisdiction. If so, a determination is made whether it falls under Section 10, Section 404, or both. The application is then reviewed to see if it falls under the guidelines for a General permit (Nationwide or Regional).

When a completed application is received, it is assigned a number. The application is reviewed, balancing the need and expected benefits against the probable impact of the work, taking into consideration all comments received, as well as other relevant factors.

Always changing

Rutherford said that the permits program is always changing as a result of litigation, such as the Supreme Court ruling against the Corps last October in the Solid Waste Agency of Northern Cook County vs. the U.S. Army Corps of Engineers (see article on page seven).

High court decision just the beginning

By Homer Perkins
Headquarters

"Take it to the U.S. Supreme Court. That'll settle the issue once and for all."

That's what most of us think when an issue makes its way from a local case through the legal system and finally reach the U.S. Supreme Court. But as the recent ruling in a Chicago area landfill case dramatically shows, a Supreme Court ruling may be only the beginning.

The Supreme Court case in Solid Waste Agency of Northern Cook County (SWANCC) vs. U.S. Army Corps of Engineers was decided last October. But the fallout continues for regulators, conservationists, and developers as they analyze how the decision will affect wetlands.

The lawsuit was filed after the Corps denied a permit to SWANCC (a consortium of suburban Chicago municipalities) that wanted to develop a solid waste disposal site in an abandoned sand and gravel quarry. SWANCC proposed to build a "balefill" where solid waste would be compacted and bound into even rectangular bales.

The abandoned quarry had reverted to a forested area with permanent and seasonal ponds. The permit was denied because the project would destroy 31 acres of ponds that provide habitat to migratory birds. The Corps asserted jurisdiction over these ponds under the Clean Water Act.

However, in a 5-4 decision, the Supreme Court held that the Corps could not use its "Migratory Bird Rule" as the basis for regulating these ponds.

Some experts interpret the decision narrowly, maintaining that it only applies to "non-navigable, isolated, intrastate waters" where the only interstate commerce connection is use or potential use by migratory birds.

Other experts take a more expansive view, saying the decision applies to all traditionally non-navigable waters, and waters not physically connected to navigable waters.

It's up to the Corps and the Environmental Protection Agency (EPA) to interpret the Supreme Court's ruling and issue new regulations and guidelines.



Although the court held that the Corps' application of the "Migratory Bird Rule" in SWANCC exceeds the authority granted under Section 404(a) of the Clean Water Act (CWA), it did not strike down any other component of the regulations defining "waters of the United States."

While the Supreme Court's actual holding was narrowly limited to CWA regulation of "nonnavigable, isolated, intrastate" waters based solely on the use of such waters by migratory birds, the court's discussion ranged widely. For example, the court recognized the CWA's assertion of jurisdiction over traditional navigable waters, their tributaries, and wetlands adjacent to them. The court also declined to address certain other aspects of the scope of CWA jurisdiction. As a result, the court's opinion has led to questions concerning the effect of the decision on other waters within the definition of "waters of the United States" in agency regulations.

In a memo to the Corps field offices, Corps' Chief Counsel Robert Anderson, and EPA Chief Counsel Gary Guzy

said, "In light of the Court's conclusion that the 'Migratory Bird Rule' is not fairly supported by the CWA," field staff should no longer rely on the use of waters or wetlands as habitat by migratory birds as the sole basis for the assertion of regulatory jurisdiction under the CWA.

"The Court's holding was strictly limited to waters that are "nonnavigable, isolated, [and] intrastate," the memo continued. "With respect to any waters that fall outside of that category, field staff should continue to exercise CWA jurisdiction to the full extent of their authority under the statute and regulations, and consistent with court opinions."

Because of the Supreme Court ruling's limitations, most of the regulatory definition of "waters of the United States" are unaffected by SWANCC. Sections of the CWA that are affected include the definition of waters that could affect interstate commerce solely by virtue of their use as habitat by migratory birds. These waters may no longer be considered "waters of the United States." The court's opinion did not specifically address what other connections with interstate commerce might support the assertion of CWA jurisdiction.



Regulatory

Andersen and Guzy said, "The Supreme Court's decision in SWANCC provides an important new limitation on how and in what circumstances the EPA and the Corps can assert regulatory authority under the CWA. However, this decision's limited holding must be interpreted in light of other Supreme Court and lower court precedents, unaffected by the SWANCC decision, which precedents broadly uphold Clean Water Act jurisdictional authority."

The discussions continue between the Corps and EPA. Additional guidance is being developed for use by the field offices. In the meantime, Corps regulators continue to do their job regulating the waters of the U.S.

Legal process 'appealing' to public

By Martha Chieply
Mississippi Valley Division

The Regulatory Program of the U.S. Army Corps of Engineers has the dual responsibilities of protecting the nation's waters, and facilitating the legitimate use of private property. The Administrative Appeals Process allows applicants and landowners to appeal denied permits, permits containing requirements unacceptable to the applicant, and/or jurisdictional determinations.

The "appealing" part of the Administrative Appeals Process is the Corps' policy to promote and maintain a process that is independent, objective, fair, prompt, and efficient.

The Corps' mission to protect navigable waters began with the Rivers and Harbors Act of 1899, Section 10. Landmark court cases and legislation, notably the 1977 Clean Water Act, broadened the Corps' scope to regulate wetlands and other waters of the U.S. The dual focus of the 1990s was enhancing environmental protection, and managing the Regulatory program.

The goals of the Regulatory program are:

- Protect the nation's aquatic environment, including wetlands.
- Enhance the efficiency of the administration of the Corps' Regulatory program.
- Ensure the Corps provides the regulated public with fair and reasonable decisions.

One approach for such streamlining was the Corps' Administrative Appeal Process. The Corps published the final rule establishing an administrative appeal process for permit denials and declined permits. That rule became effective Aug. 6, 1999. On March 28, 2000,

the Corps established an administrative appeal process for jurisdictional determinations.

Generally, the Corps' district offices make permit and jurisdictional determinations. The request for an appeal of such decisions is made to the Corps' division offices. Each division office has an Administrative Appeals Review Officer who assists the division engineer in reaching and documenting his decision on the merits of an appeal.

Requests for appeal must be furnished to the division office within 60 days of the decision. A site visit and an appeal conference may be conducted during the appeal process. A decision on the merits of the appeal is normally made in 90 days. The division will either uphold the district decision or send the case back to the district with direction to make a new decision.

To take one division as an example, since inception of the program there have been 12 administrative appeals in Mississippi Valley Division from St. Paul District to New Orleans District. There have been 45 administrative appeals nationwide. One-third of the completed appeals had merit, one-third did not. The remaining cases are pending, have been withdrawn, or were not accepted.

If an appeal is found to have no merit, the final Corps decision is the district engineer's letter advising the applicant that the appeal had no merit.

But if an appeal *does* have merit, the final Corps decision is the district engineer's decision, pursuant to the remand of the appealed action. No affected party may file a legal action in federal court based on a permit denial or a proffered permit until a final Corps decision (after the appeal) has been made.



Site visits are an important part of the appeals process. (Photo courtesy of Mississippi Valley Division)



The bald eagle is recovering from endangered status, and may soon be removed from the list.



American alligators were listed as endangered species in 1967, and de-listed in 1987.

Reg program also protects endangered species

Article and Photos
By Wade Eakle
South Pacific Division

In the past decade, the most significant factors influencing the U.S. Army Corps of Engineers' Regulatory program in the western U.S. has been threatened and endangered (T&E) plants and wildlife, and increasingly complex compliance with the Endangered Species Act (ESA).

In 1980, the U.S. Fish & Wildlife Service (USF&WS) and National Marine Fisheries Service (NMFS) had only 281 plants and animals on their list of T&E species. By 1990, that number had grown to 596, and by 2000 to 1,244. In 1994 126 species were added. A total of 1,297 species have been listed since 1967, with only 28 species removed from the list due to recovery, extinction, or other factors.

Complying with ESA provisions is a critical component of the Corps' Regulatory program. When Congress passed the ESA in 1973, it charged all federal agencies with conserving T&E species and their ecosystems. Congress directed each federal agency to cooperate and consult with the USF&WS and NMFS to ensure that any action by the agency not jeopardize T&E species, or destroy or adversely modify habitat critical for the species survival.

In 1986, the USF&WS and NMFS published procedural regulations governing inter-agency cooperation under Section 7 of the ESA, the same year the Corps published final regulations for its Regulatory program. Federal agencies use these regulations for their interactions with the USF&WS and NMFS.

As we enter the 21st century, conservation has become an important objective for many organizations. Now, after more than 25 years of implementing the ESA, many recognize this landmark legislation as one of the best tools for conserving plants and wildlife.

So, what does this all mean for the Corps' Regulatory program in the western U.S., especially portions covered by South Pacific Division (SPD) and its districts?

At last count in June, California has 289 T&E species (110 animals, 179 plants), more than any other state in the lower 48. The Corps has a long history of protecting California T&E species, back to 1970 when the salt marsh harvest mouse, found in the wetlands of San Francisco Bay, was first listed by the USF&WS.

In 1990, when the winter run of chinook salmon in the Sacramento River was listed by NMFS, the Regulatory program in San Francisco and Sacramento districts began conducting Section 7 consultations with NMFS for routine activities like dredging in San Francisco Bay.

This is not just a West Coast issue in SPD. Texas has 91 T&E species (63 animals, 28 plants), Arizona has 56 (39 animals and 17 plants), Utah has 44 (22 animals and 22 plants), New Mexico has 41 (27 animals and 14 plants),

Nevada has 34 (26 animals and 8 plants), and Colorado has 33 (20 animals and 13 plants).

Recently, Brig. Gen. Peter Madsen, SPD's commander, suspended use of several permits in Arizona after a U.S. District Court order enjoined the Corps from authorizing projects under those permits until an analysis was completed on impact to the pygmy owl.

SPD's Regulatory workload pales in comparison with some divisions like South Atlantic. But T&E species protection and ESA compliance is a growing issue in the West, greatly influencing our ability to provide decisions to the regulated public that protect the aquatic environment.

To help address the frequent and contentious situations involving Corps regulated activities in waters of the U.S. and T&E species protection, Madsen and Michael Spear, former manager of the USF&WS's California/Nevada Operations (CNO) office in Sacramento, initiated an ongoing series of executive-level partnering sessions in 1999.

Initially, session attendance was kept small and manageable, and included the division and district commanders, key executives, the CNO manager, and the USF&WS field office supervisors in California and Nevada. Participation has expanded and often includes the district Regulatory Branch and Section chiefs, senior SPD Planning staff, and senior USF&WS biologists.

To date, most issues discussed at these partnering sessions focus on Regulatory program activities and ESA compliance. In particular, a major issue is the scope of analysis for ESA Section 7 consultations for large private residential developments where a relatively small portion requires authorization from the Corps.

Other issues include improving coordination and communication, more timely biological opinions, resolving staff conflicts at the local level, litigation-driven T&E species habitat designations, improving interagency coordination on landscape planning efforts, and the California energy crisis and expediting federal regulatory reviews for power projects.

We have expanded this initiative and partnered with the USF&WS regional office in Albuquerque, N.M., and also held annual Regulatory Coordination Conferences with other federal agencies and state partners in Colorado and California.

How is the nationwide effort to save threatened and endangered species going? The peregrine falcon was first listed in 1970 and removed from the federal list in 1999. The peregrine's recovery is an ESA success story, with many private/public partnerships helping to bring the falcon back from the brink of extinction.

The bald eagle received a similar level of attention and was proposed for de-listing in the lower 48 states in 1999. But the USF&WS has yet to finalize the eagle's removal from the federal list.

The Corps plays an important role in these ESA success stories, but what we have *really* accomplished in SPD is improved working relationships between the USF&WS and Corps, from the executive level down to the biologists and project managers.

Fish packs big punch

By Mary Beth Hudson
Tulsa District

A miniscule minnow packs a powerful punch in Tulsa District's Regulatory realm. The Arkansas River shiner, less than two inches long, can halt construction and heavy equipment.

Historically, the shiner inhabited most of the Arkansas River system. More than 80 miles of flowing water are necessary for the species to adequately complete its reproductive cycle, and recurrent natural flooding is important in maintaining its habitat.

Impoundments, channelization, elimination of riparian areas, declining flows, groundwater depletion, and surface water usage have threatened its existence. It is now on the endangered species list.

In November 1998, the U.S. Fish and Wildlife Service (USF&WS) listed the fish as threatened, and last April granted a critical habitat designation. In Tulsa District, more than 800 miles of rivers, including 300 feet on either shoreline, are affected.

Tulsa District spans from the New Mexico-Texas state line 480 miles east to the Arkansas-Oklahoma state line, and contains several major watersheds. The district has always had threatened species warranting special consideration, but this particular designation has an enormous impact on its Regulatory permit program.

In the past, designated critical habitat was limited to a few small locations, but due to the wide geographic coverage of the recent shiner designation, more activities will be subject to the requirements of the Endangered Species Act.

Any proposed construction in the designated area impacting the shoreline or water could harm the shiner. So all Clean Water Act Section 404 permits requested in the area must consider these effects.

"The critical habitat designation implies that you treat that area as if the species were occupying it, regardless of whether it's actually there," said Andy Commer, regulatory project manager. "We're required to be more cautious in authorizing a project to protect the species."

Any project involving discharge of fill material at those rivers is affected. "We can't authorize a project unless we can say there's no impact," said Commer. "We have to consider the impacts on endangered species and critical habitat and, if necessary, consult with the USF&WS."

Since the designation effects such a large area and so many permit requests, Tulsa regulators are working with the USF&WS to develop an evaluation process to anticipate the adverse effects of typical projects, and set forth actions to prevent them. This process will avoid delays in moving requests through the Regulatory process while protecting the minnow.

"Without this process, we'd have to consult with the USF&WS on every single project," said Commer.

"What we'd like to do is define a category of activity based on magnitude of effect," Commer continued. "Then, if the USF&WS will concur with the generic conditions, a list of provisions will be created to attach to the typical request."

By breaking things up into categories of activities, district regulators can readily deal with anticipated effects. Protection provisions can be agreed upon without every project going through a time-consuming consultation process.



This fish has a big impact on Tulsa District's Regulatory program. (Photo courtesy of Tulsa District)



District streamlines its Reg process

By Kerry Stanley
Galveston District

The regulated public often sees the U.S. Army Corps of Engineers' Regulatory program as a maze. But Galveston District has undertaken several efforts to streamline the process.

To decide where to start, district personnel felt that working with Texas on areas where federal/state duplication existed offered the greatest opportunity for streamlining.

Permits

One of the first areas of streamlining involved some of the district's existing Regional General Permits (RGPs). For several years the district has had seven RGPs for oil field development in the Gulf of Mexico. These permits authorize building and maintaining structures for producing oil, gas, or other minerals on state-owned land.

The Texas General Land Office (GLO) also requires lease agreements for these types of projects on all state-owned lands. To streamline the permit evaluation process, the district and the GLO signed an agreement to transfer the review of permit applications for these RGPs to the GLO. This modification will allow the oil and gas industry to receive both program approvals through the GLO. It will also eliminate duplication of effort and provide more effective use of resources for the Corps and the GLO.

Another area that is receiving streamlining attention is transportation projects. Galveston District is currently working



A streamlined Regulatory process will help Galveston District preserve natural wetlands like these. (Photo courtesy of Galveston District)

with Fort Worth District and the Texas Department of Transportation to develop a RGP to streamline the authorization for transportation projects that have a minimal impact on the aquatic environment.

This RGP expedites authorization of minor recurring work, while maintaining provisions to protect the environment, including natural and cultural resources. This RGP will reduce administrative procedures and expedite decisions for routine transportation projects.

Group

Since May 1998, Galveston District has worked with the Permit Assistance Group (PAG), a multi-agency task force

under the Texas Coastal Coordination Council. They develop streamlining initiatives for the Corps' Regulatory program and corresponding state regulatory programs (i.e. Texas General Land Office, Texas Natural Resource Conservation Commission, Texas Railroad Commission, and Texas Parks and Wildlife Department).

The district and the PAG have developed a plan to establish a Permit Service Center (PSC) pilot program to serve as a one-stop Regulatory shop for the public on the lower Texas coast. The details of the PSC operation are currently being worked out and include having the center in place by Oct. 1.

After a review of the pilot program, a

second center is planned for the upper Texas Coast.

Ideas

The district is currently investigating other potential ideas to streamline the regulatory process and eliminate further duplication between federal and state regulatory programs. These areas include:

- Developing a RGP for oil and gas development in inland waters.
- Developing a RGP for Coastal Erosion Planning and Response Act (CEPRA) activities for erosion response projects.
- GLO assumption of an existing Corps RGP for authorizing residential piers built on state-owned lands.

Goals

Galveston District strongly supports the idea of streamlining regulatory processes and is making great strides. However, in all of its efforts to streamline the Regulatory process, the district has kept in mind that streamlining does not mean just shortening the Regulatory review process. Rather, the district has used the Regulatory program goals as its guiding principles in developing these initiatives.

Those goals are:

- To protect the nation's aquatic environment, including wetlands.
- To enhance the efficiency of the Corps' Regulatory program administration.
- To ensure the Corps provides the regulated public fair, reasonable decisions.

Innovative program decreases workload

By Christine Godfrey
and Joanne Barry
New England District

The Regulatory program of the U.S. Army Corps of Engineers is sensitive and complex, and it must be geared toward both efficiency and environmental responsibility. Nationwide, the Corps authorizes more than 40,000 projects a year. New England District (NED) accounts for about 5,000 of them. To be efficient, and to balance the needs of development with those of protecting important aquatic resources, the Corps must be resourceful and innovative. A good example is NED's successful Programmatic General Permit (PGP) program.

Since the early 1990s, NED has taken a new approach to PGP. The district decided to structure the reviews based on impact categories, to tie more closely into state regulatory programs where possible, and to administer PGPs in partnership with the state and federal agencies who we must coordinate with.

The result has been streamlined, simplified permitting which reduced processing times while increasing environmental protection compared to alternate approaches (a wide variety of regional and nationwide general permits and letters of permission).

There are now six comprehensive PGPs (one in each New England state) which cover all minimal impact work. The PGPs join up with state reviews to varying degrees depending on the similarities between the state and federal programs. In fact, several states changed their state laws and regulations to improve the overlap, which then enhanced streamlining.

In several states, applicants file with the state agencies. The Corps and federal agencies screen the state applications either at the Corps or directly at the state offices (state applications are accepted by the Corps). The Corps makes the determination of eligibility in consultation with the state and federal resource agencies.

The PGPs also maintain or enhance environmental protection because many more projects are quickly screened with opportunity for modification, mitigation, or individual permit. Most projects are approved, or modified to lessen impacts to the environment to gain approval, during the screening process.

The PGPs contain a number of special conditions to protect endangered species, historic resources, and other federal issues. They provide latitude in approving work based on impacts rather than activity type, and based on agency consensus decision of minimal environmental impact.

Since the PGPs are comprehensive and administered with our state and federal partners, the process is simplified and streamlined for the public. The PGPs have helped reduce or eliminate inconsistencies and confusion caused by differing state and federal processes, time-frames and decision making; made federal decisions more timely; and resulted in "one-stop-shopping" for the public.

However, maintaining the commitment to efficiencies and environmental protection demands a variety of

workforce expertise and a willingness to think "win-win." NED's project managers (PMs) come from many fields such as engineering, environmental science, biology, and ecology. A technical support section offers assistance to the PMs in difficult wetland delineations, mitigation plan approval, and suitability determinations for dredged material disposal in open water.

NED's Regulatory Division operates on the Project Management Business Process team approach. The Project Management determines the team, which includes the applicant, the state and federal agencies, and various in-house support staff, and leads the project through to the final decision. The PGP covers more than 98 percent of all permit work in each state in less than 30 days.

The PGP's flexibility has decreased the number of individual permits formerly processed by NED by more than 50 percent. (These projects are now covered by the PGP). This, coupled with the more efficient method of screening and approving minimal impact work, has resulted in a beneficial impact on NED's workload.

In times of increasing applications and level program funding, the efficiencies of the PGPs have kept the workload manageable, and processing times down.

NED was the first district to issue comprehensive PGPs replacing the existing permit schemes. Linking federal and state reviews, and/or administering the General Permit program in a coordinated, consensus-based fashion has resulted in a simple, predictable, consistent environmental permit program across the region.

(Christine Godfrey and Joanne Barry work at New England District's Regulatory Division. Godfrey is the division chief.)



Triage

Buffalo District applies medical concept to its Regulatory projects

By Katherine Koszuta
Buffalo District

When Lt. Gen. Robert Flowers took command of the U.S. Army Corps of Engineers, he initiated a "Just Do It" philosophy to empower every Corps employee. But the personnel of the Buffalo District Regulatory team had already taken that philosophy to heart well before receiving their "Permission Slip."

After months of frustration and a backlog of work, Fred Dieffenbach, Monitoring and Enforcement Section, and Kathleen Ryan, Application Evaluation Ohio Section, decided it was time to change the way projects were distributed and handled. Together they developed a new way to handle work within the Regulatory Branch.

Permit applications for smaller projects often had a turnaround time of several months, and were often pushed to the bottom of the pile in favor of larger endeavors and higher priorities. Ryan and Dieffenbach decided that the problem stemmed from poor workload management. The existing system gave little consideration to the number or size of projects a project manager had and, instead, simply distributed new projects to anyone.

So some project managers had 80 or more projects, while others were working on 20 or 30. With such a heavy workload placed disproportionately on the staff, morale suffered.

Eventually Ryan and Dieffenbach combined efforts to develop a more logical way to organize the permit process. Their system, based on the triage concept, simply organized applications from the oldest to the most recent in one database. (Triage is a medical term for sorting patients and allocating treatment, especially after a battle or disaster.) The Regulatory computer system required a project manager's name be assigned for each project, so they created a fictitious project manager, DEBOCQUES,



Kathleen Ryan and Fred Dieffenbach at work "triaging" Regulatory projects. (Photo courtesy of Buffalo District)

or "the box."

The triage process is engaged when DEBOCQUES is full or has reached about 200 files. During triage mode, each project manager spends one day a week working exclusively on DEBOCQUES files to reduce workload and keep it at a manageable level.

The program begins with the sorting process, conducted by a team of three project managers and a team leader, assigned on a rotating basis each week. This team coordinates the preliminary work for each permit application by

reviewing each file, entering basic information into the database, initiating appropriate agency coordination, and requesting additional information if needed.

With much of this preliminary information already gathered by the sorting team, the individual on triage duty simply processes the permit application. Team members often volunteer to perform this duty while awaiting information on their bigger projects.

The new system, plus the dedication of every team member to this process, has decreased the average turnaround time for permit applications from 12-16 weeks to about four weeks. The program identified slow spots and problems in the permit process as well. Many team members had felt a sense of ownership for their projects. By creating several steps in the permit process, the triage process eliminated the tendency for one person to work exclusively on each permit. Now, anyone can pick up a project and continue the process where another person left off.

Triage solved other problems as well. One was the constant search for applications when they were scattered around the Regulatory Branch, instead of having them all in one location.

Another problem was the uneven distribution of projects. The New York Evaluation Section has the highest number of applications, and only the team members in that section were working on New York permit applications. With the triage process, work is distributed across section lines so that each person has about the same number of projects.

Also, as an extra boost for employee morale, recognition is given to the individual who produced the highest number of permits at the end of each fiscal year.

The triage approach has contributed many benefits and solved a few problems for the Regulatory Program at Buffalo District. The program is still adapting and evolving, but overall it is a great success.

Corps/N.C. partnership restores streams

Article by Penny Schmitt
Photo by Robert Johnson
Wilmington District

A few years ago, Wilmington District's Regulatory Offices asked for wetlands mitigation to address streambed losses and degradation caused by construction.

"We were asking the Department of Transportation and other developers to replace apples with oranges," said Dr. Wayne Wright, Chief of Regulatory Division. "It's good to have more wetlands, but it's bad to lose the vital resources living streams provide."

Working with the North Carolina Department of Transportation (NCDOT), the State Wildlife Commission, and other agencies, the district has come up with procedures and agreements that will ultimately lead to restoration and enhancement of streams throughout the state.

The effort began in North Carolina's western counties, which are rich in small mountain streams that make the state the second most important trout state in the nation.

"Because of stream degradation, we revoked the nationwide permits from our 25 trout water counties," said Robert Johnson, Chief of the Asheville Regulatory Office. "But that would have led to an overwhelming number of individual permit actions. Instead, we've now added the North Carolina Wildlife Resources Commission in a review capacity where nationwide permit use is proposed in the trout counties. We've also developed stream mitigation requirements that offset impacts to trout resources. Generally that means two linear feet of stream restored for every one linear foot consumed by a project."

This 2:1 ratio, now being implemented in a massive road-building project on Interstate 26 in the western part of the state, will reclaim 26,000 feet of stream as the project eats up 13,500 feet. "We're looking at this as the standard," Johnson said.



Signs like this give participating farmers credit for their work to restore streams.

"As a result of this road project, the North Carolina Division of Water Quality has implemented a strong, effective stream mitigation program of their own throughout the state. Other agencies expect these mitigation standards to be applied to all projects," he said.

"The NCDOT dove in with both feet to implement the mitigation," Wright said. "We're excited about it! We're seeing more positive benefits from this approach than from any other single initiative we've taken for years. The public will get back natural channels that work."

In fact, Wilmington District and North Carolina are setting a trend for others to follow. "Bob Johnson of our Asheville office, and Micky Clemmons of the N.C. Wildlife Commission, have talked to a lot of other state representatives about what they're doing," Wright said. "Colorado, for example, was impressed with the results we got

using the streambed geomorphology Micky learned out there to upgrade our state's streams."

Plans are under way for a publication that explains the basics of streambed mitigation. "We're promoting this in the Corps to our own engineers and planners," Wright said. "We have projects being planned for Charlotte and Roanoke that can benefit from what we've learned."

Some techniques used are far less expensive than typical solutions like rip-rap or gabions (wire-caged rock blankets). The newer methods include:

- Planting trees and other vegetation to shade the water and protect its oxygen levels.
- Installing rock vanes (large rocks to divert flow to the center of the channel) to create a meandering channel, or to form plunge pools.
- Stabilizing banks using natural materials like logs.
- Fencing cattle and other farm animals out of the stream.

The low cost helps gain the cooperation of developers and agencies that build projects. "We discovered on the I-26 project that DOT and the Wildlife Commission could pool their talents and create a streambed relocation for just \$30,000," said Stan Hyatt, resident engineer on the I-26 project. "The original contractor proposal would have cost \$600,000, and we think we did a better job!"

Work with other agencies, like that National Resource Conservation Service has helped draw the cooperation of private landowners, many of them small farmers.

"There's virtually no limit to the supply of streams out there that could benefit from this program," Johnson said. "We can make a lasting contribution to the health of our waterways and their wildlife."



Regulatory work is delicate balance

Virtually every project Savannah District takes on is a balancing act between helping the customer accomplish the mission and protecting the environment. Sometimes the outcome is predictable; sometimes it's a cliffhanger.

The predictable

At Fort Stewart, Ga., wetlands stood in the way of expanding the firing ranges and maneuver areas. The installation is one of only three armor and artillery training areas in the nation with adequate land (279,270 acres) to train troops in maneuver exercises that simulate real battle conditions.

Because of this, Fort Stewart has active training throughout the year. But the current ranges and maneuver areas were designed in the 1950s when the range of tank cannons did not exceed 700 meters (765.5 yards). The weapons on tanks and other armored fighting vehicles in service today can shoot more than 5,000 meters (3.1 miles), and can fire accurately while the vehicle is moving at more than 40 mph.

Savannah District's Regulatory Branch knew Fort Stewart's long-range expansion plans would impact wetlands under their jurisdiction, and worked with the post to establish a mechanism to mitigate future unavoidable impacts.

"Unavoidable impacts to wetlands must be compensated by restoring or enhancing wetland resources elsewhere," said Mark Padgett, a biologist in Regulatory Branch. "Due to projected long-term impacts to wetlands on Fort Stewart, developing a mitigation bank was the only reasonable approach to comply with the 'no net loss' federal policy."

A wetland mitigation bank is a site where wetlands are restored, enhanced or (in exceptional circumstances) preserved or created to compensate for the authorized destruction of similar resources.

"The project to site, design, permit, build, and operate a wetland mitigation bank evolved about four years ago, and it has taken until now to do the studies to establish the appropriate site, and to go through the regulatory channels to get ap-

proval," said David Coleman, chief of Planning Division's Environmental Resources Branch. "We wanted to keep the site on the installation if at all possible, and Fort Stewart was fortunate that Canoochee Creek Reservoir was there. It provides the mitigation credits necessary to satisfy projected wetland losses, and it is both cost-effective and environmentally sound."

The Canoochee Creek Reservoir (Pond 4) is a 1,080-acre impoundment at the installation. In the 1960s, Fort Stewart created Pond 4 by building an earth dam across about half a mile of the Canoochee Creek floodplain to support a tank trail to Red Cloud Range.

"By simply lowering the water level to original elevations we can, in effect, convert about 1,000 acres of open water habitat back into a hardwood bottom swamp," said Padgett.

Fort Stewart now has an approved wetland bank site and will get about 1,080 credits out of the bank, but not all of it up front. Converting open water back to a bottomland hardwood swamp will take time.

"We started lowering the lake last year and it's down about 90 percent now," said Coleman. "This year we'll put in culverts to rehydrate some of the areas and also modify the water control structure. This should help take the lake down to near pre-project levels. The area is already repopulating itself with trees and shrubbery."

The first project requiring mitigation (Red Cloud Alpha Range upgrade) is being built with advance credit from the bank. It impacts 18 acres of wetlands.

The cliffhanger

The project to expand the dangerous cargo parking area at Pope Air Force Base, N.C., affects wetlands under Savannah District's jurisdiction, and two opportunities to mitigate the impact had fallen through, so for a time it seemed that the project would not go forward.

The 43d Airlift Wing at Pope AFB provides contingency airlift to the 82d Airborne Division and other special units at Fort Bragg right next door. For years the 43d has done the hazardous cargo part of



George Harris (left), Fort Stewart environmental protection specialist, and Mark Padgett, Savannah District biologist, visit the Pond 4 mitigation bank site to see the effects of the drawdown. This summer the old Canoochee Creek channel reappeared from the drained pond. (Photo by Jonas Jordan, Savannah District)

this mission on four aircraft parking spots at the south corner of the airfield. Fort Bragg's deployment requirements justify up to 12 parking spots, but explosives safety zone requirements limited real estate reduced expansion possibilities.

Through detailed coordination and planning, the Air Force developed a site plan that would replace the four parking spots with an apron (2,025x730 feet) large enough to handle six C-5 aircraft (or

many smaller airplanes) and comply with the explosives safety criteria. The project would not only increase loading capacity by 50 percent, but also enhance mission capability by including a 600 gallon-per-minute aircraft hydrant fueling system to serve each parking spot, alleviating the need for fuel trucks.

About 19 acres of wetlands would be displaced permanently or temporarily during construction of the parking apron. The impacted acreage includes part of Tank Creek, an active stream on Pope AFB that supports a diverse ecological environment and is a major drainage channel for storm water run-off from Fort Bragg.

The Air Force had the lead in securing the environmental approvals and clearances from North Carolina (Section 401 water-quality permit) and from Wilmington District's Regulatory Branch (Section 404 wetlands mitigation permit).

Savannah District was the design and construction agent, working with the customer and regulators during planning.

Initially, the installation team considered restoring or enhancing degraded wetlands at Pope. Second, they sought to buy wetlands mitigation credits from an approved mitigation bank in the same watershed as the impact area.

But as the Air Force/Savannah District efforts proceeded, it became apparent that sufficient acreage did not exist on Pope.

Further, a detailed evaluation of the only approved mitigation bank revealed there was no available mitigation acreage of the same type of wetlands. Because wetland mitigation requirements call for 2-for-1 in-kind mitigation, the mitigation bank credits were also unacceptable. Without suitable mitigation, the new aircraft parking apron project could not proceed.

"It became clear that we had to look outside the parameters that had been considered," said Pete Oddi, Chief of Military Programs & Project Management Branch. "That's when we learned that North Carolina has a Wetlands Restoration Program (WRP) where they plan, design, and execute wetlands restoration within the state for a fee."

This new mitigation opportunity surfaced during a meeting that Savannah District facilitated between the North Carolina Department of Water Quality, the Air Force environmental staff, Corps regulators, and the design team.

Ongoing information exchange between Pope and Fort Bragg environmental staffs confirmed that Fort Bragg had plans to restore degraded wetlands and enhance wildlife habitat at a site on Nursery Road (a 130-acre tract north of the installation), but adequate funding had not been provided for the restoration. North Carolina WRP was open to taking new wetlands restoration projects in Cumberland County, and viewed this as a partnership opportunity.

WRP and Wilmington District evaluated and accepted the Nursery Road site as suitable for mitigation. This led to a win-win arrangement for Pope AFB, Fort Bragg, the North Carolina WRP, and Savannah District. The project achieved the required wetlands mitigation, Fort Bragg accelerated its Nursery Road project, and Pope AFB received credit for the mitigation.

Both Bragg's restoration/mitigation efforts and Pope's Dangerous Cargo Apron project are under way and are either on or ahead of schedule. The \$23.5 million dangerous cargo apron project will be completed no later than February 2004.

(This article was written by Mark Padgett and Craig Harrell.)



Rip-rap and environmental fencing protect Tank Creek during construction work at Pope Air Force Base in Fayetteville, N.C. (Photo by Jonas Jordan, Savannah District)

Floods lead to faster permit process

By Steve Wright
Huntington District

You could say that 1996 was a vintage year for flooding in West Virginia. Four floods fueled by snowmelt and rainfall caused property damage throughout the state. Streams and rivers choked with debris spilled into communities and cut new channels through farm fields.

These devastating floods gave Huntington District's Regulatory Section the chance to devise a new way to issue permits for post-flooding stream restoration in West Virginia.

In the aftermath of this widespread flooding and massive property damage, the West Virginia Department of Environmental Protection waived its Section 401 authority to expedite emergency watershed protection work. During this time, local government agencies and individual landowners worked in streams without benefit of required permits. Clear excesses occurred with environmental damage and poorly engineered stream restoration and flood protection projects.

A graphic example of environmental damage and poorly designed, unsafe flood control efforts occurred in Webster County in central West Virginia. County officials received \$80,000 in state funds for work on the Elk River. The county rented bulldozers, excavators, and backhoes and put them to work in a quality trout stream. They rerouted a mile of the Elk River, stripped riparian vegetation from the banks, and moved 400,000 cubic yards of stream sediment. The flood control features included building stone cobble levees without regard to design, safe engineering, or construction processes.

"What they've done is to stack up huge piles of loose, smooth cobble from the riverbed, expecting that those piles will hold back the high-velocity flows you get during a flood," said Mike Spoor of Huntington District's Geotechnical Branch in an interview with the *Charleston Daily Mail*. "In essence, they've stacked a bunch of marbles and expect to form a watertight levee."

Responding to the Webster County work and other reported problems, Huntington District's Regulatory staff developed an expedited permit process to properly restore streams after flooding. Working with Pittsburgh District, the Environmental Protection Agency, U.S. Fish and Wildlife Service (USF&WS), and West Virginia agencies including the Soil Conservation Agency and departments of Natural Resources, Highways, Environmental Protection, plus private interest groups, Huntington District developed two post-flood regional permits for stream restoration.

First permit

The first regional permit issued by the district under the authority granted by Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act was for stream restoration by the West Virginia Conservation Agency. It authorizes debris and deposition removal, bank stabilization, and channel restoration, tasks the Soil Conservation Agency has experience with and is uniquely capable of accomplishing.

Concurrently, the West Virginia Division of Environmental Protection granted state 401 Water Quality Certification to the Soil Conservation Agency subject to onsite review during site investigation and project design.

Armed with these permit authorities, the Soil Conservation Agency can rapidly restore streams in counties



This portion of Elk River in West Virginia was relocated without a Corps permit. The road was the original channel. County officials hired workers to move 400,000 cubic yards of material. The earth and rock cobble dike has since failed. (Photo courtesy of Huntington District)

declared disaster areas by the governor. A condition of the regional permit is that the Soil Conservation Agency give five-day notice to the resource agencies (USF&WS, and the state divisions of Environmental Protection and Natural Resources) before initiating work. This notification is an invitation for the agencies, including the Corps, to evaluate the restoration site.

Second permit

The second regional permit allows landowners to restore streams by doing work that may include excavation of deposits, reducing sand and gravel bars, bank stabilization, channel restoration, and maintenance of previously approved work.

This work also is granted state 401 water quality certification.

Individuals doing stream restoration under this regional permit must obtain technical assistance from the state Soil Conservation Agency. The agency will develop a plan for proposed work, and the landowner's restoration work must conform to the plan and the conditions of the regional permit.

Again, the Soil Conservation Agency has the ability to develop proper plans to help landowners restore streams, and the regional permit allows both the agency to provide this assistance, and the landowner to carry it out.

Also, the regional permits are similar in that resource agencies are invited to be part of the site evaluation team.

Lance Tabor, Executive Director of the state Soil Conservation Agency, said the number of applications for individual permits demonstrates the program's success.

"We have a reasonable system, and the proof of that is the tremendous number of applications we receive," Tabor said. "The regional permit has resolved a lot of the hostility of the individual landowners. Now they can come to us and have a workable plan developed that meets the guidelines."

Russ Campbell of the Soil Conservation Agency works directly with the regional permit program. He points to a 30-day turnaround from an application by the landowner, to a permit to restore the stream with an approved plan developed by the agency.

"The program is working well," Campbell said. "We've had 525 applications since the regional permit was approved in 1998."

Mike Gheen, Chief of Huntington District's Regulatory Section said that non-permitted work after the 1996 flood underscored the need to find a workable interagency solution to flood restoration. The two regional permits meet this requirement.

"The Soil Conservation Agency has become a one-stop shop," Gheen said. "They look for a solution to stream restoration problems within the criteria established by the permits, then move ahead. They notify all agencies involved in a timely manner and everyone has the opportunity to be part of the solution."

More important than repairing the damage after the 1996 floods is the effective interagency approach to prevent future problems. The keystone of this cooperation are the regional permits. The permits cut through red tape, give authority to a capable agency, allow resource agency oversight, and gets the job done in a safe, technically sound, and environmentally responsible manner.

Regulatory Program

Protecting the Nation's Water Resources



Wildlife management

Special hunts help animals, people

By Patty Bates
Vicksburg District

Throughout the nation, millions of acres are controlled and administered by the U.S. Army Corps of Engineers. One of the Corps' most important missions is managing natural resources, which covers an array of activities from forestry to fisheries to wildlife management.

Managing wildlife on project lands is a rewarding yet labor-intensive endeavor. Certain wildlife populations can quickly increase when lands are designated no-hunting areas and the region has few natural predators. Occasionally, when situations like this occur, wildlife populations can exceed the capacity of the land. This results in disease and starvation among the wildlife population.

In the absence of natural predators such as wolves or mountain lions, the most effective method of thinning overpopulated wildlife is controlled hunting. A number of Corps projects use this method to control their wildlife populations and ensure their health and survival.

For example, Arkabutla Lake, a flood damage reduction project in northwest Mississippi, faced this problem. The lake's natural (undeveloped) area covers more than 1,000 acres which were designated a no-hunting area due to its proximity to project recreation sites.

During the years, the natural area's resident deer herd grew until, in the late 1980s, the herd exceeded the land's ability to provide enough food during the winter. In 1990, browse lines could be readily seen even when supplemental food plots were established throughout the area. (Browse lines are the boundaries visible when deer strip vegetation and leaves as far up as they can reach.)

Disabled hunt

The lake staff needed to reduce the size



Volunteers help a handicapped hunter prepare to travel into the woods. (Photo courtesy of Vicksburg District)

of the deer herd. After considering several options, a controlled hunt in the natural area seemed to be the answer. This led to the lake's first hunt for persons with disabilities. The event reduced the size of the deer herd, and allowed hunters the chance to participate in a recreation that most people take for granted.

The lake staff established shooting zones and stands for safety, and recruited a small army of volunteers to help the hunters get in and out of the woods.

This special event has become an important part of the lake's wildlife management plan. Not only does it help manage the deer population, it is also therapeutic. Every year there are new participants who are still adjusting to their handicaps, and old veterans of the hunt show them that life goes on.

This year's event, the 10th, drew 47 participants who harvested 36 deer. Forty-five volunteers donated 1,191 man-

hours, resulting in another successful program.

Archery

While the physically challenged hunt has been a huge success, the deer population was still higher than acceptable. In 1999 the lake staff decided to establish a public archery draw hunt during the last two weeks of the Mississippi archery season.

The event occurred for the first time in January 2000. Open to all legally licensed Mississippi archery hunters, this additional management tool has the same objectives as the physically challenged hunt. It also gives a large group of taxpayers a chance to enjoy public land.

This year, 172 archers applied for 100 slots. Five deer were harvested, which will help maintain a manageable herd of healthy whitetail deer.

Raccoons

The lessons learned from managing the deer population spilled over into managing raccoons. In 1994 the raccoon population at Arkabutla Lake was booming. Nature's little bandit could be seen everywhere throughout the park. As quickly as the sun went down or the crowds started to leave, they were plying their trade. These creatures are highly skilled at removing garbage can lids when searching for food left behind by the lake's two million annual visitors.

But this time nature intervened. A disease called distemper nearly erased the raccoon population from Arkabutla Lake's Natural Area. After the disease took its toll, the Arkabutla Lake Field Office, in partnership with the Northwest Mississippi Coon Hunters Association (NMCHA), decided to manage the raccoon population to prevent a disease from ravaging the species again.

Youth hunt

This cooperation gave birth to the Arkabutla Lake Youth Raccoon Hunt, which has been very successful. The number of animals harvested helped maintain a viable population. In addition, it helps train young sportsmen in firearm safety, dog training, and the natural resource management rules established by the Corps.

Since the inception of the program, many of the adults now leading hunts started out as youth participants, and are passing along invaluable knowledge to the next generation of hunters.

The wildlife management practices in place, plus these hunts, bolster public support for Arkabutla Lake. All parties involved understand each other's role in maintaining a viable, sustainable wildlife population for viewing, education, and hunting.

Dredged material builds football field

By Elizabeth Slagel
Huntington District

Siltation trapped in Fishtrap Lake has found a new home at no cost to the government. Instead of clogging a lake, the silt will be playing football.

Resource manager T.C. Music said that the Pike County School Board dredged 260 truckloads of material from the Lick Creek area to form a 10-inch base for a football field at the county's new high school.

Board employee Lloyd Fields approached Music about the school board paying to remove fine-grain material from the lake to use as topsoil for East Ridge High School's football and soccer fields.

"I really didn't know how to make it happen, but I knew it was a good idea," Music said.

He took the idea to Arlie Bishop, Chief of Technical Support Branch, who bounced the idea around and later got the idea of a no-cost contract from Real Estate Division's Gary Bennett.

Bennett said, "It's simply a win/win situation. Currently I'm pretty sure this is the only one we have in the district. I knew it could be done, and had heard of it



Dredged material will build the playing surface at East Ridge High School. (Photo courtesy of Huntington District)

being done before."

The plan began with employees at Fishtrap writing specifications for the work. Contracting specialist Jim

Nutter put together the contract. He also ensured that the safety plan was acceptable, and that the school board had a certificate of insurance to cover all workers, according to JoAnna Black, Chief of Contracting Division.

To be safe, specialists from the Water Quality Section tested the soil for contaminants before removal. Within seven days, 9,100 cubic yards of material were scraped from the Lick Creek area providing better access to the boat launch ramp.

Music said that siltation in this area is a recurring problem, but the project simply doesn't have the money to deal with it.

"We now have better access to our launch ramp," Music said. "It would have been very expensive for us to do this."

Contracting Division estimates that this job could have cost the Corps up to \$300,000. Instead, it didn't cost anything and East Ridge High School is now that much closer to completion.

The contract extends until next March, and the board has plans to return to the site in the fall to get more material for the soccer field. The school will open in the fall of 2002.

Economist balances old job, new call

By Judy Marsicano
Fort Worth District

At that moment, she didn't look like an economist who works for an engineer outfit.

Lanora Wright looked down from the pulpit with a smile that illuminated the room. With open arms, she delivered her message with the warmth and sincerity of a close personal friend. The story was of slavery and freedom, of pride and prejudice, and the right of a people to equality. Next time, the topic would be different, but it would be communicated with just as much conviction, charisma, and enthusiasm.

Wright, an economist with Fort Worth District, has given a lot of sermons as associate pastor and director of education at St. Andrews United Methodist Church in Fort Worth, Texas. But her life changed dramatically when she heeded the call to go deeper into the mission of the church. Two years ago, Wright enrolled at Brite Divinity School at Texas Christian University in Fort Worth.

"I never felt like I was missing meaning in my life, or had some kind of tragedy that turned me to God, like some people might think. I was at the top of my game," Wright said. "I started seminary so I could complete the education requirement for ordination in the church, because I wanted to learn more about my Christian heritage and belief system and gain more credibility."

Wright feels her job with Fort Worth District as a project manager and economist has given her opportunities to help many people improve their quality of life.

"I witnessed the aftermath of the flooding caused by Tropical Storm Charley in Del Rio, Texas, and the deplorable conditions people were living in following the flooding in Dallas in 1989 and 1990," Wright said.

"Seeing the devastation and meeting the victims face-to-face helped me gain a new perspective on the meaning of suffering, and gave me a vision of hope," she continued. "Without a vision, development of a solution is impossible for a project manager. People work harder



Lanora Wright greets a member of the congregation after one of her sermons. (Photo courtesy of Fort Worth District)

when they have vision and a sense of hope."

Recognized again and again for her keen technical abilities, her procedural knowledge, negotiations, and motivation skills, Wright has led the way in solving flooding problems for a large number of low-income communities, always lending that sympathetic ear so important in public service.

"Now, with my seminary training, I can help meet the needs of others on the spiritual as well as the physical level," she said.

Wright's economic analysis enabled Fort Worth District to formulate, receive approval, and build the district's first nonstructural buy-out of 11 homes along a creek in a Fort Worth suburb. Because of her involvement and the trust she instilled in city officials, she was asked to take

part in dedication ceremonies when the project was completed in 1997.

And she has the respect of her peers.

"Lanora is a team player and has very high expectations of others, but not any higher than those she places on herself," said Jerry McCrory, Chief of Civil Branch, Programs and Project Management Division. "She is the district's resident expert on the Corps' Flood Damage Assessment program and the senior economist on all our projects. Not only has she been able to maintain her expertise as an economist, but she has been able to continue in her divinity studies."

Balancing all the missions in her life has been a challenge for Wright. Working full-time, and attending school full-time while maintaining a 3.5 grade point average, plus serving in the church, leaves little time for anything else. But having family members also involved in her church provides much-needed support.

"My husband sings, ushers, and teaches in the church, and he's an excellent sounding board for preparing my sermons and lesson plans," said Wright. "My daughter, brother, sister, and mother also work in the church and wholeheartedly support my ministry."

Wright's supervisors have been supportive as well, allowing her to attend divinity classes during workdays when necessary.

"My 15 years with Fort Worth District has prepared me for leadership in the church," said Wright. "I was encouraged early in my career to join Toastmasters International, the Federal Women's Program, and to serve as the district's Black Program manager, and I've learned to communicate with people of all ages, cultures, and backgrounds."

"I'm blessed to work with a group of people who are as dedicated and committed to helping people as I am," she added. "No one placed in a leadership role can do the job alone. It takes the caring attitude of the whole team."

Wright plans to leave Fort Worth District on July 31 to work full-time on her master of divinity degree at Brite.

Railroad watches are fascinating hobby

Article and Photo
By Bill Peoples
Nashville District

A leathery hand tugs on a chain and pulls a gold watch from a pocket. The locomotive engineer quickly glances at it, then nods to a black-clad man down on the platform.

"Aaaall aboooard the ten-oh-five bound for Chicagooo," the conductor calls.

A scene that happened throughout the country in the late 19th and early 20th centuries, a story made possible by a precision instrument designed to keep trains on time and to avoid deadly accidents.

Many clocks and watches deserve fascination, but none more so than the railroad pocket watches of 100 years ago. Many people today collect these watches for their value, distinctive style, and rich history. One collector is Nashville District team member Carl Olsen, a project manager in Regulatory Branch.

"Railroad watches are unique," said Olsen. "Not only were they designed for accuracy to prevent railroad accidents, but were designed to be used as tool by railroad workers. Railroad watches come in many different styles, but I limit my collecting to about three different categories — railroad watches, fancy dial watches, and solid gold or multi-colored gold watches."

Railroad watches are unique because



Five examples of traditional railroad watches show the particular details required of these precise timepieces.

they are designed to be set and inspected by a watch repairman at regular intervals, usually weekly. The railroads had a detailed set of standards for their watches — lever set, precise to 30 seconds a week, at least a 19 jewel movement, and an open

face with Arabic numerals.

Olsen started his watch collection both as a hobby and as an investment.

"I've been collecting for about five years," said Olsen. "I was looking around for a good investment opportunity that had

good earnings potential for retirement. At about the same time, I got interested in railroad watches and found that selected types are a good investment."

Although time and resources restrict some of his collecting activities, Olsen has amassed several hundred railroad pocket watches, which range in price from under a \$100 to more than \$1,000.

"It's fascinating, because you never know what you're going to find next," said Olsen. "I look for watches on the Internet, in magazines devoted to collecting, and at auctions. Usually, you look at a lot of watches before you find one that catches your eye. I look at how much a watch is currently worth and what are the chances of it going up in value."

Each watch is unique, whether it is the case, the face, or the design. The worth of the watch is determined by its condition and the rarity of its design and features.

"All the watches I collect are antiques, but to me it's much more interesting than, say, collecting coins, because you're not only holding an antique but a piece of history," said Olsen. "You can look at one of these watches and imagine a conductor or engineer pulling it out and checking to see if the train was on time, and with a sure nod slipping it back into his pocket."

Steam gushes from the locomotive whistle, sending a long piercing wail ringing through the station. The train starts to move and the conductor leaps aboard...

Around the Corps

General officer news

Maj. Gen. Hans Van Winkle moves from Deputy Commanding General for Civil Works, to Deputy Chief of Engineers/Deputy Commanding General, report date to be determined.

Brig. Gen. Randal Castro moves from Commander of Pacific Ocean Division to Assistant Commandant of the U.S. Army Engineer School and Deputy Commanding General of Initial Entry Training at Fort Leonard Wood, Mo., report date to be determined.

Brig. Gen. Robert Griffin moves from Commanding General of Great Lakes and Ohio River Division, Deputy Commanding General for Civil Works, report date to be determined.

Brig. Gen. Steven Hawkins moves from Deputy Commanding General for Military Programs to Commanding General of Great Lakes and Ohio River Division, report date to be determined.

Brig. Gen. Ronald Johnson moves from Assistant Commandant of the U.S. Army Engineer School and Deputy Commanding General of Initial Entry Training at Fort Leonard Wood, Mo., to Commander of Pacific Ocean Division, report date to be determined.

Brig. Gen. Peter Madsen moves from Commanding General of South Pacific Division to Commanding General of South Atlantic Division, report date to be determined.

Brig. Gen. Carl Strock moves from Commanding General of Northwestern Division to Deputy Commanding General for Military Programs, report date to be determined.

Col. Robert Davis moves from Chief of Staff, Corps of Engineers, to Commanding General of South Pacific Division, report date to be determined, and Senate confirmation required.

Col. David Fastabend moves from Executive Officer to the Vice Chief of Staff of the Army to Commanding General of Northwestern Division, report date to be determined, and Senate confirmation required.

Allison response

The Corps is aggressively supporting flood recovery activities in Texas and Louisiana in the wake of heavy rains and flooding left by Tropical Storm Allison.

A number of Corps response and recovery teams have deployed from throughout the nation and are on the scene. The president has issued disaster declarations for 28 counties in Texas and 23 parishes in Louisiana.

At the request of the Federal Emergency Management Agency (FEMA), the Corps activated Emergency Support Function 3 (Public Works and Engineering) in the FEMA Regional Operations Center in Denton, Texas, shortly after the storm struck in early June.

As of June 19, Southwestern Division (SWD) had distributed 99,000 sandbags in response to flooding. By that date, FEMA had also given SWD mission assignments totaling \$1.65 million for supplying emergency power, temporary housing, debris removal, dewatering, debris monitoring, and one unusual \$1.1 million mission for power support at the Texas Medical Center in Houston.

As of June 19, 74 Corps personnel were directly involved in flood-recovery work, with 45 actually deployed to the stricken regions. Scores more are supporting the efforts from their home stations.

Brewerton Channel Extension

Construction began April 12 to widen the Brewerton Channel Eastern Extension in the Port of Baltimore. The 450-foot channel will be widened to 600 feet to lessen the time ships spend getting in and out of the port, lowering the operating and pilotage costs.

The Brewerton Channel Eastern Extension is five miles long and runs roughly east-west across the Chesapeake Bay. It connects the port to channels to the Chesapeake and Delaware Canal. A study by the Waterways Experiment Station showed that widening the channel would make it safer than its current width. Pilots from the Asso-

ciation of Maryland Pilots ran simulations navigating ships under various weather and tide conditions. The results showed that a channel 600 feet wide reduced mishaps.

The project will remove about 2.5 million cubic yards of clean dredged material and place it at the Poplar Island Environmental Restoration project site. The project will restore of an island in the Chesapeake Bay that had eroded almost completely away. The work is scheduled for completion later this summer.

Water safety photo contest

The Corps' National Water Safety Committee is sponsoring two Corps wide photo contests focusing on water safety. The first contest will cover the spring/summer recreation season, and the second will cover the fall/winter season. The contests are open to all Corps employees.

Both contests have the same categories:

- Boating, both commercial and recreation.
- Visitors at Corps facilities and waters.
- Corps employees in action.
- Special events.
- Scenic.

Submissions can be either 35mm slides or digital images on CD-ROM or zip disk

Submit contest entries to your Division Water Safety Committee representative. Include the photographer's name, project, date taken, and category.

Deadline for spring/summer entries is Aug. 15; deadline for fall/winter entries is March 30.

Lewis and Clark Web sites

There are two Web sites for information about the 200th anniversary of the Lewis and Clark expedition.

Within the Corps, there is an Intranet site at w3.nwk.usace.army.mil. The site is updated quarterly.

Nationwide, the National Council for the Lewis and Clark Bicentennial has a site at www.lewisandclark200.org. That site has a calendar of events by date and location, a bibliography, and general information about the expedition.

New river walk

City, state, and federal representatives, plus about 200 members of the public recently opened the Canal Walk Upper Extension in Indianapolis. The Downtown Canal Walk is about three blocks long. The extension is the result of a partnership among Indianapolis, the White River State Park Commission, and Louisville District.

The district coordinated the extension construction. The extension adds several new features to the Canal Walk, notably a new waterfall powered by two wells that pump about 1,750 gallons of water per minute through the historic Holton Gates. The gates were once used to control the flow of water to downtown. Other new features include a boat ramp, landscaping, and an amphitheater built with blocks of Indiana limestone.

Corps Engineer of the Year

The National Society of Professional Engineers (NSPE) recently selected Claude Strauser, Chief of Hydrologic and Hydraulics Branch in Louisville District, as the Corps' Federal Engineer of the Year. The top 10 finalists in the 2001 Federal Engineer of the Year Program were honored at the 22nd Annual National Engineers Week luncheon at Fort Myer, Va.

The Federal Engineer of the Year Award program recognizes outstanding engineers in the federal government. Strauser was one of 10 finalists; an engineer from Health and Human Services was picked as the Federal Engineer of the Year.

"Over the last three decades, Strauser has led a team of engineers and scientists and created what we believe to be a new field of engineering, appropriately called 'Environmental River Engineering,'" wrote Brig. Gen. Edwin Arnold, Jr., Mississippi River Division Engineer, who nominated Strauser.

Concrete Institute honor

Dr. Bryant Mather, Director Emeritus of the Structures Laboratory and one of the nation's foremost experts on concrete, recently received the Arthur R. Anderson Award from the American Concrete Institute (ACI). The award was bestowed "in recognition of [Mather's] countless contributions to the knowledge base for cement and concrete technology, and the effective transfer of this knowledge to others through professional papers, presentations, and standards development activities."

Power plant permit

On May 26, New York District granted a federal permit to Athens Generating Company, L. P. to build a 1,080 megawatt gas-fired electric generating plant in the Athens, N.Y. This is the first new power plant construction in New York in a decade.

The area is rich in scenic, cultural, historical, and environmentally sensitive resources, but through extensive federal and state permit reviews the project has been modified to avoid or minimize impact. The plant will be built about two miles from the Hudson River, but includes an intake/outfall structure in the west bank of the river. Less than one acre of wetlands would be permanently lost, with temporary impact to 4.14 acres wetlands and waterways.

The plant will use a relatively new technology called combined-cycle turbines, which produces a tiny fraction of the air pollution from older plants. It will use dry cooling, a more expensive method of cooling turbines that uses only 185,000 gallons of water daily.

Renovated officers' quarters

Recycling isn't necessarily limited to paper and soda cans. Witness the newly renovated unaccompanied officers' quarters at Schofield Barracks. Honolulu District managed the project.

The temptation was strong to demolish Bldgs. 784, 786, and 788 and start over, but they were sound enough to warrant renovation, and it was significantly cheaper to do so. The 39 dark, damp old rooms have been transformed into modern apartments.

The \$3.75 million renovations included new roofs, windows, doors, keyless entry locks, cable TV, and air conditioning. The units were rewired, have new plumbing, full carpets, and a kitchen. Each building has its own laundry room that is accessible with an apartment key card, and the quarters are walking distance to the post exchange and commissary.

Value engineering awards

Three Corps people and offices were honored during the DoD 2001 Value Engineering/Value Management (VE/VM) Achievement Awards ceremony on June 6 in the Pentagon Auditorium.

William Brown Sr., Deputy Director of Military Programs, received the Outstanding Program Management award. Military Programs has saved more than \$101 million in the past two years. Last year's work on barracks has the potential for up to \$1 billion in better use of funds during the next seven years, while offering larger quarters and better amenities for soldiers.

Eugene Degenhardt, St. Louis District's Value Engineering Officer, received the Outstanding Value Engineering Professional award. He has led the district's VE/VM Program for 19 years, documenting more than \$130 million in cost savings. He has conducted more than 130 workshops, studies, and seminars, and taught VE/VM methods to more than 2,200 students.

Chicago District received the Outstanding Installation Award. Col. Mark Roncoli, District Engineer, accepted the award. The district successfully uses VE/VM to address issues that have not been resolved to their customers' satisfaction. By using VE/VM methods, Chicago District has netted more than \$40 million in cost savings and avoidance.

Fisher Foundation honors Corps work

In a landmark partnership between Fisher House Foundation Inc., and the U.S. Army Corps of Engineers, the first Fisher House built outside the U.S. was dedicated in Landstuhl, Germany, on June 18. The foundation honored the Corps with their Legacy Award for the project.

The 28 Fisher houses in the U.S. (and now Europe) are comfortable, temporary homes for the families of hospitalized service members. They are built near medical facilities so family members can stay nearby when their loved ones are undergoing medical care. The charge is about \$10 per night.

The houses are a refuge for "families in crisis," according to Gen. Montgomery Meigs, Commander of U.S. Army Europe (USAREUR).

"One of the difficult things for the chain of command is reaching out to the family when they have to deal with this sort of crisis," said Meigs. "This facility will make that process more capable and efficient."

Before the Fisher House was built, families stayed in billeting at Landstuhl Regional Medical Center or a hotel in the German community. The Landstuhl Fisher House is located between the hospital and on-post housing. It is a 5,600-square-foot home with eight rooms serving up to 16 family members. Two rooms on the lower floor are handicapped accessible. Each room has a bath. There is a common dining room, living room, and laundry facilities.

The Fisher House Foundation pays for construction of the houses before giving them to the U.S. government. The houses are run by local staff and volunteers who do whatever they can to help families. The Landstuhl facility marks the second house opening since the death of noted philanthropist Zachary Fisher who began building the houses with the support of his wife, Elizabeth. Zachary Fisher died on June 4, 1999.

The plaque above every Fisher House reads, "Their gift is dedicated to our greatest national treasure...our military service men and women and their loved ones."

During the dedication ceremony, Arnold Fisher, President, Chairman, and



Sgt. Steven Geniuk and his wife Nancy are one of the first families staying at the Fisher House near the Landstuhl Regional Medical Center. While U.S. military personnel are undergoing medical treatment, Fisher Houses provide their family members a comfortable, inexpensive place to stay. (Photo by Alicia Gregory, Europe District)

CEO of the Fisher House Foundation, presented the Fisher House Legacy Award to the Corps. Maj. Gen. Milton Hunter, Deputy Chief of Engineers, accepted the award. The Legacy Award was created after Zachary Fisher's death to honor organizations demonstrating a tradition of outstanding service to the quality of life of U.S. military service members and their families.

This was only the second time the Legacy Award has been presented. The first time was on Sept. 26 at the Fisher Foundation's annual Founders Day dinner in Washington, D.C. There the award was presented to the medical departments of the Army, Navy, and Air Force, and to the Under Secretary of Veterans Affairs for Health.

"As you know, we in the Fisher House are builders," Fisher said as he presented the award to Hunter. "But this Fisher House is different from its 27 predecessors because, for the first time since the program began 10 years ago, we've built a house with a partner, the Army Corps of

Engineers. To the members of the Corps, we acknowledge your professionalism, expertise, and knowledge. I'm not saying we couldn't have built the house without you, but you certainly made our job a lot easier. On behalf of our construction team...we say thank you to the men and women of the Corps of Engineers, from the Headquarters in Washington, D.C., to the field office here in Germany."

"Receiving the Fisher Foundation's fifth Legacy Award is a *big deal*," said Hunter. "It shows how well the partnership between the Corps and the Fisher Foundation worked. The Fisher Foundation's generosity to America's service members and their families is overwhelming. I'm glad the Corps of Engineers is able to play a role in such a good cause."

Landstuhl was already on the Fisher House Foundation's list of building sites when the terrorist attack on the *USS Cole* last October once again thrust Landstuhl Regional Medical Center into the public spotlight as a treatment center for American military casualties. Fisher saw an



Arnold Fisher, CEO of the Fisher Foundation, presents the Legacy Award to Maj. Gen. Milton Hunter, Deputy Chief of Engineers. (Photo by Alicia Gregory, Europe District)

immediate need to speed up the building of Landstuhl's Fisher House.

After the groundbreaking last November, completion of the Landstuhl Fisher House took half the time expected, only about six months.

The success was due to the teamwork between Fisher House Foundation and Corps officials working on the project, according to Ray Flock, chief of the Project Management Section of the U.S. Army Engineer Group.

"To pull this together, USAREUR had to find a site, the money to fund that site, and get the approval to build the house itself," said Flock. "It pulled together all the team members—engineers, legal, and contracting."

"I'm really proud of Europe District," Hunter commented. "It took a phenomenal effort to complete this project in just six months."

(USAREUR press release. Alicia Gregory of the Europe District Public Affairs Office, and Bernard Tate of Headquarters, also contributed to this article.)



Fisher Houses are designed to provide a comfortable, homelike environment. (Photo by Arthur McQueen, USAREUR Public Affairs Office)



The mission of Fisher Houses is clearly displayed above the main entrance of each house. (Photo by Alicia Gregory, Europe District)