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St. Paul District

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A photograph of a worker in a white hard hat and dark hoodie working on a large metal structure, possibly a lock gate, with yellow safety railings. The worker is wearing sunglasses and gloves, and is holding a tool. The background shows a chain-link fence and other industrial equipment.

Upper St. Anthony
Falls lock dewatered

Senior leaders examine paths to regional programs and personnel

By Col. Mike Pfenning
District Commander

As I reported in the December 2004 *Crosscurrents* editorial, last November's Mississippi Valley



Division senior leader conference, the regional command council (Brig. Gen. Crear, the command general's

deputy, the district engineers and senior executive service directors) laid out five steps to actualize a division-wide regional business center in accordance with USACE

2012. USACE 2012 is the path the Corps of Engineers will take to the future. (The web site is <http://www.hq.usace.army.mil/stakeholders/Index.htm>.)

Briefly, **step one** was essentially a contingency plan for operating in fiscal year 2005 under a congressional continuing resolution, had congress not approved the fiscal year 2005 budget. Fortunately, that plan is moot.

Step two is an income-based regional work force plan – the primary focus of this article – more on that in a bit. **Step three** is the development of the regional business model for the division (no later than Feb. 28, 2005) followed by **step four**, development of an implementation plan for division to begin operating within the new model (no later than March 31, 2005).

Regional business center model options range from the current command structure to having management arranged by sub-function; e.g., say having all structural engineers within division report to one chief, all real estate personnel within division report to one chief – you get the picture. **Step five** is creating standard operating procedures for operating regionally (no later than May 31, 2005).

Back to the income-based regional work force plan.

In order to accomplish this plan, each major functional element within division broke out current and estimated fiscal year 2006 full-time equivalent by sub-discipline. The major functional elements are programs and project management, planning, construction, contracting, operations, real estate, engineering and administrative support.

Two possible funding scenarios were developed for fiscal 2006 - fiscal 2008: 1) the president's budget only, and 2) the president's budget plus a percentage of the average fiscal years 2002-2004 congressional "adds" (75 percent, 60 percent and 50 percent for fiscal years 2006-2008 respectively).

Using conservative funding levels in income-based planning helps reduce the likelihood of districts over hiring. (Of special note, we were able to leverage the income-based work load planning that the district successfully completed in fiscal year 2004 as a baseline for the regional effort.)

These division income projection scenarios were then broken out by major functional element using historic division-wide spending patterns. The major significant product of this planning effort is the first-ever division-wide estimate of affordable full-time equivalents for three years out – determined the same way from district to district. This plan was completed in early February 2005 and was used as input to step three, the development of the regional business center model for division.

Of course, income projections remain a "moving target" and will need annual reevaluation. Other ongoing region-wide work force planning efforts include:

- work load leveling for fiscal year 2005;
- developing a long-term (three-year) work load-leveling process; and
- position management with succession planning – all while preserving our district-level and regional core capabilities in order to stay relevant to our customers.



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St. Paul District

Crosscurrents

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Upper lock drains dry for major maintenance

by Shannon Bauer

The St. Paul District emptied nearly eight million gallons of water out of Upper Saint Anthony Falls lock and dam in December 2004.

This downtown Minneapolis lock and dam, the deepest lock and dam on the entire Mississippi River, will remain empty until March, allowing the district to perform major maintenance on it, while the navigation season is on hold for the winter.

On average, around 1,500 tows, 2,500 recreational vessels and 1.5 million tons of cargo pass through this lock each year.

Major maintenance happens every 15 to 20 years on each Mississippi River lock and dam. Upper Saint Anthony Falls has not been dewatered since 1979.

Scheduled maintenance of the lock during the dewatering includes vertical concrete joint and surface repair on the walls, horizontal concrete repair on the floor and corner protection armor replacement near the downstream miter gates of the lock chamber by a contractor, Engineering and Construction Innovations, Inc., from St. Cloud, Minn.

At the same time, the Corps' maintenance and repair section from Fountain City, Wis., will repair or replace parts of the miter gates, tainter valve guides, bubbler system and staff gages, as well as sandblast and paint the miter gates.

The St. Paul District operates and maintains 13 locks and dams beginning at Upper St. Anthony and ending at Lock and Dam 10, Guttenberg, Iowa.

Photo by Shannon Bauer

Cover photo



Photo by Shannon Bauer

Tim Taybery, a lock operator at Lock and Dam 1, Minneapolis, is working with maintenance and repair unit on major maintenance at Upper St. Anthony Falls Lock and Dam, Minneapolis, this winter.

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EMP partnership works regionally to accomplish program and project goals

By Peter Verstegen

This is the first of three articles illustrating regional projects, programs and communities of practice.

The Upper Mississippi River, flowing from the headwaters in Minnesota to the open river at Cairo, Ill., has challenged the Corps of Engineers to work regionally, both within its own organization and with the other river stakeholders. The Corps' Environmental Management Program, designed to protect and restore the river ecosystem, offers lessons in how a wide-ranging community of practice works across agency, geographic and political boundaries for the goal of environmental stewardship.

For many years, Mississippi River navigation pools created by the locks and dams in the 1930s to provide a nine-foot navigation channel, supported a wealth of fish, wildlife and aquatic habitat.

But by the 1980s, the system was showing signs of decline. The ecological health of the Upper Mississippi River system was being stressed by erosion, sedimentation, diminished aquatic plant beds and declining habitat diversity.

Congress, acting in response to the public and stakeholders, passed legislation authorizing the EMP in 1986. The legislation recognized the Upper Mississippi River as both a nationally significant ecosystem and a nationally significant commercial navigation system.

The EMP initiated a system-wide regional management program for the river. Rock Island District, centrally located on the upper river, became the central dispatcher for overall program management. They also coordinate

EMP, continued on Page 5



Inset photo, St. Paul District; aerial photo by Bill Thrune, U.S. Fish and Wildlife Service

The above photo shows a bulldozer shaping Spring Lake Island from the discharge of the Dredge Iowa on the Mississippi River in November. The background photo is an aerial view of the island during construction.



Photo by Tony Batya, U.S. Fish and Wildlife Service

From left are Randy Urich, forester; Kurt Brownell, natural resource specialist; Sharonne Baylor, Environmental Management Program coordinator with the U.S. Fish and Wildlife Service; and Bob Drieslein, Fish and Wildlife Service Winona district manager (now retired), at Spring Lake Island in Pool 5 near Buffalo City, Wis., in November. The group was inspecting progress and discussing construction of the island.

EMP, continued from Page 4 system-wide meetings, hold regular conference calls and develop beneficial relationships with states and other federal stakeholders.

“We come to the table and talk hard issues for betterment of the river,” said Roger Perk, EMP program manager, Rock Island District.

“Nowhere else in the country does a waterway serve as both a system of major national wildlife refuges and a commercial navigation system,” said Perk. The program is designed to protect and balance the resources of the Upper Mississippi River basin and guide future river management.

“The priorities of the program focus on both the rehabilitation and enhancement of existing habitats

as well as long-term monitoring of the river,” he said. “EMP was the first watershed ecosystem program within the Corps and has broken ground for all the others that have come since.”

Regional work processes

Perk’s interaction with district EMP managers reflects regional processes. With input from each of the Upper Mississippi River Corps’ districts, he develops consolidated budget and funding requests; reports program financial execution to Mississippi Valley Division, Vicksburg, Miss.; monitors and manages the long-term monitoring resource program; facilitates meetings of the EMP coordinating committee; and consolidates work plans, funding

priorities and contract award recommendations to division.

The EMP team has learned to work regionally. “There is not much territorial turf protection,” said Mike Thompson, St. Louis District EMP project manager. “We work together to make the program a success. The team focuses on the whole system. Collectively, we determine the higher priorities and move money from one district to another for a project.”

Engineer districts in St. Paul, Minn.; Rock Island, Ill.; and St. Louis, Mo., with oversight by the division, coordinate with a variety of federal and state agencies, associations, the public and non-profit natural resource agencies, such as the Nature Conservancy and Audubon Society.

Restore and protect the river

EMP has two major components: long-term resource monitoring and habitat rehabilitation and enhancement projects. Both work to restore and protect the river. Habitat projects restore islands, control flow, manage water levels, stabilize shorelines and deepen backwaters.

The U.S. Geological Survey, a regional partner in La Crosse, Wis., oversees the collection of data on water quality, vegetation, fish, sediment, aquatic insects and land use for long-term resource monitoring. The USGS Upper Midwest Environmental Sciences Center analyzes the data to assess the health of the river and forecast future trends as part of its long-term resource monitoring. The USGS receives about one-third of the EMP budget.

“As a research agency, the role

EMP, continued on Page 6



Fish and Wildlife service photo by Melissa Gulan, St. Paul District

The Corps coordinates with the U.S. Fish and Wildlife Service on EMP priorities. Out inspecting the construction of Spring Lake Island 2 in Pool 5 on Dec. 8 are Lisa Reid, wildlife biologist; Tony Batya, acting Winona district manager; Sharonne Baylor, EMP coordinator; and Eric Nelson, refuge biologist, all with the U.S. Fish and Wildlife Service. Baylor worked for the St. Paul District prior to becoming the EMP coordinator with the service.

EMP, continued from Page 5 of USGS is to act as an unbiased science advisor for the partnership,” said Barry Johnson, chief of the aquatic sciences branch, USGS Upper Midwest Environmental Sciences Center, La Crosse, Wis. “We work with the partners to design effective monitoring plans and to conduct analyses that will increase our collective knowledge about how management actions affect the ecology of the river. The LTRMP is the largest and most comprehensive river monitoring program in the country and probably the world. It takes considerable regional and system-wide cooperation among state and federal partners to pull it off.

“A large part of the funding that comes to USGS is passed on to

state-operated field stations in the five Upper Mississippi River border states to conduct the annual field sampling and participate in data analyses. Just managing the data collected is a big job. The fisheries database alone has more than 3 million lines of data.”

Challenges

Said Johnson, “One of the challenges for the partnership is to integrate habitat rehabilitation projects with long-term monitoring. We know that habitat projects can provide a variety of local benefits almost immediately, but their effects at larger scales, like pool-wide or regionally, take longer to develop and are much more difficult to detect. Only a program like the LTRMP that operates at large spatial scales and over a long

time period can provide the data needed.”

Successful program execution is an outcome of regional coordination.

“The success of the program so far is a testament to the dedication and cooperation of all the various agencies involved,” said Johnson.

Wildlife refuges

Regional coordination and project management extends to wildlife refuges operated by the U.S. Fish and Wildlife Service.

The Upper Mississippi River National Wildlife and Fish Refuge was established by act of Congress in 1924 to provide a refuge and breeding ground for migratory birds, fish, other wildlife and plants.

The refuge encompasses approximately 240,000 acres in four states in a more-or-less continuous stretch of 261 miles of Mississippi River floodplain from near Wabasha, Minn. to near Rock Island, Ill. Other refuges in the Upper Mississippi complex include Trempealeau, Wis. and the Driftless Area, a collection of small, scattered tracts near McGregor, Iowa.

Fingers entwined

Dick Steinbach, manager of the Mark Twain wildlife refuge complex headquartered in Quincy, Ill., said, “Our fingers are pretty well entwined with the Corps out on the river in meeting overall federal responsibilities for this multi-use resource.” The Mark Twain complex includes four wildlife refuges: Middle Mississippi River, Marion, Ill; Port Louisa, Wapello, Iowa; Great River, Annada, Mo.; and Two Rivers, Brussels, Ill.

Said Don Hultman, refuge

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manager, Upper Mississippi River National Wildlife and Fish Refuge, Winona, Minn., “EMP has proven to be a critical tool in restoring fish and wildlife habitat on the Upper Mississippi River National Wildlife and Fish Refuge and our other river refuges. Before EMP, we could do little but stand by and watch the habitat decline. As much as anything, EMP has restored both hope and optimism.

“EMP has also been a catalyst for improving working relationships with the Corps and the states and finding the common ground among agencies with often different missions and purposes on the Mississippi,” Hultman said. “There is nothing quite as powerful as bringing people together to work side-by-side on projects, which make a difference for fish and wildlife, and the public who enjoys them.

Warts and imperfections

“Obviously, any program of this size and duration has its little warts and imperfections, such as maintenance costs we bear as a sponsor for most projects, the monitoring of projects, differences of opinion on design and operation with the states,” Hultman continued. “On the Upper Miss Refuge alone, 26 projects have been completed affecting more than 40,000 acres of habitat. Eleven projects are in various stages of planning, design and construction. The creation of the refuge and the authorization of the nine-foot navigation channel forever linked the service and the Corps. EMP has helped turn that linkage from one of conflict to one of mutual benefit.”



Photo by Jon Hendrickson

An EMP project team inspects flood damage at the Island 42 habitat project in 2001. From left to right are Bob Drieslein, Winona district manager for the U.S. Fish and Wildlife Service (now retired); Don Powell, EMP project manager for the St. Paul District; and Jeff Janvrin, EMP coordinator for the Wisconsin Department of Natural Resources. The island is on the Minnesota side of the river.

An EMP coordinating committee meets four times a year to keep check on projects and the program. Although the Corps is the primary manager, the coordinating committee provides oversight. Participants include the Corps; Fish and Wildlife Service; USGS; the Environmental Protection Agency; the Upper Mississippi River Basin Association; and representatives from the states of Minnesota, Wisconsin, Iowa, Missouri and Illinois. “Typically, the committee meets four times a year, once each in St. Paul, Rock Island, St. Louis, Mo., and rotates the fourth, usually in La Crosse, Wis., or Peoria, Ill.,” said Don Powell, EMP project manager in St. Paul.

Regional management extends beyond the coordinating committee to technical teams. Project delivery teams of technical specialists, such as biologists and engineers, from the three upper river Corps’ districts, gather at workshops every

other year to exchange lessons learned and discuss other project and program information. “It started in 1998,” said Thompson.

Said Perk, “Mississippi Valley Division provides the overall program coordination with the districts, states and other federal agencies and interest groups, as well as co-chairing the coordinating committee. The division oversees overall program execution and review, approval of all budget documents, funds allocation, approvals of schedules, costs and approval of definite project reports. MVD [the division] coordinates all program issues, guidance, Congressional items and funding with Corps’ headquarters.”

“Rock Island District has been given the overall management responsibility for the program,” said Powell. “St. Louis, Rock Island and St. Paul districts

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develop the habitat project programs within their respective boundaries and coordinate with each other to execute the overall program. The districts share project design information through workshops, periodic meetings and collaboration on a design handbook.

“Future project selection will use a process that looks at projects from a reach and system-wide perspective, rather than just individually with the districts,” continued Powell. “This could also have impacts on the allocation of funding for each district.”

Program constraints

Budget and geographic constraints have challenged the team. “A large number of projects, which are in different phases of development, would be capable of expending the full EMP authorization each year,” said Perk. “However, due to numerous budget priorities, the funding allocations have not come near to the full authorization amount for the program.”

“The overall EMP has a continual authorization of \$33.52 million per year,” said Perk. “In fiscal year 2005 the allocation was \$17.5 million, with nearly full funding in the recently released president’s fiscal year 2006 budget of \$33.5 million.”

“Individual districts do things differently, depending on the location of the district on the river,” said Thompson. “There is not a lot of standardization, and we are trying to standardize reports.”

Said Powell, “It is also important to maintain program flexibility and the individuality of each district in order to be responsive to all the stakeholders.”

Holme inspects projects – in Iraq

By Mark Davidson

Dennis Holme, engineering and construction, did what any good manager would do for his projects – he made regular on-site visits. The difference with Holme’s projects is that they were in the combat environment of Iraq.

Holme, a physical scientist with the engineering and construction water control unit, was in Baghdad June 6 to Oct. 10, 2004. He went through training and briefings at Fort Bliss, Texas, before deploying to Iraq.

“I was a sector manager on the UPO team in Baghdad,” said Holme. UPO is the acronym for U.S. Agency for International Development (USAID) project office. UPO serves USAID in Iraq under an agreement and provides construction oversight of reconstruction contractors.

“The 11 electric power rehabilitation and new construction projects I was responsible for were located all over Iraq,” said Holme. “I worked with the Bechtel contractor, the Iraqi Ministry of Electricity, the U.S. Army’s First Cavalry, and the Army Corps of Engineers project management office in overseeing the work of Corps’ and Iraqi quality assurance inspectors and doing site inspections,” he said.

Holme’s work environment was dangerous but helpful to the Iraqi people, said Lt. Col. Randy Westfall, the deputy district commander for the Corps’ Gulf Region Division Central District.

“Dennis Holme assisted USAID complete project work that is now in service to the Iraqi people and is providing a much improved quality of life for them,” said Westfall. “Holme enabled the UPO to efficiently process more than twenty modifications totaling more than \$100 million in infrastructure restoration,” he said.

Westfall said that Holme “always kept the mission in mind and did what the mission required, regardless of the very dangerous and life threatening distractions around him.”

Holme’s family, friends and fellow Corps workers were happy to see him return safely from Iraq. This is Holme’s last hurrah in the Corps of Engineers since he will be retiring in March 2005.



U.S. Army photo

Dennis Holme (above) worked as a project manager in Iraq from June to October, 2004.

News and Notes

District donates school supplies

St. Paul District employees donated more than 525 pencils, 396 pens, 160 t-shirts, 72 spiral notebooks, 40 calculators, 28 folders and 19 backpacks, as well as 32 miscellaneous items, this winter to its adopted school, Washington Middle School, St. Paul, Minn. The district's Special Emphasis Program Committee's diversity subcommittee sponsored the collection.



Photo by Peter Verstegen

Preparing the school supplies for transport are: LeeAnne Eshom and Annette Vogel, contracting; Lisa Grant, social worker at Washington Technology Middle School, and Kevin Burns, parent and community liaison at the school.

Position Selections

Jim Peak, engineering division, was reassigned as chief of construction branch mid-February.

Greg Frankosky, engineering division, was reassigned as chief of physical support, starting in April 2005.

Announcements

Crosscurrents receives two journalism awards

Two St. Paul District employees received recognition in the 2004 Corps of Engineers' Herbert A. Kassner Journalism Contest. **Shannon Bauer**, public affairs, received first place in the stand-alone photo category for a cover photo of Dan Boone in April 2004. **Dan Krumholz**, channels and harbors, received third place in the contribution by a stringer - print category (this is a category for non public affairs specialists) for an article on the Dredge Thompson published in November 2004.

As a first place winner, Bauer's photo will now compete at the Army level.

Gordon Construction receives district safety award

The St. Paul District presented **Gordon Construction** of Mahanomen, Minn., the "2004 Construction Safety Award" for its work on the Corps' Crookston Stage II Flood Control Project built in Crookston, Minn.

The Crookston flood reduction project began in September 2002 and was substantially completed in October of 2004. The project involved excavating approximately 123,000 cubic yards of material for the construction of a high flow cutoff channel, placing 8,300 linear feet of earthen levee, reconstructing 2,000 linear feet of street for two road raises and constructing five pump stations.

The project presented a wide variety of safety challenges to include river work, deep excavations, extensive dewatering, haul operations and working in residential areas and in cold weather conditions. When constructing the high flow cutoff channel, Gordon Construction worked within two feet of the Red

News and Notes, continued Page 10

Wanted: Your news!

PAO seeks information about special events in you life (e.g., births, deaths, marriages, engagements). If you would like to share these items, please contact Public Affairs at 651-290-5202, -5108 or 5201 or send an e-mail to: cemvp-pa@mvp02.usace.army.mil.

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Lake River, requiring the use of personal flotation devices, buoys and a small boat.

The kind of local soil in the area caused extensive dewatering when unexpected seepage filled several deep excavations, or holes.

To protect local citizens, Gordon Construction backfilled the excavations, while dewatering plans were being designed. They also operated in confined residential areas and near historic buildings, as well as overcame numerous obstacles when floods threatened the area in 2003.

"I am grateful for the efforts put forth, by both the project superintendent and the employees of Gordon Construction, to act in a safe manner and quickly correct any safety issues," said Perry Tobin, Corps' quality assurance representative.

Retirees eligible for flu shots

Retirees are now eligible to receive the flu vaccinations administered by the Federal Occupational Health nurse. "While it is later than usual to receive the vaccination, the vaccination is still effective since late outbreaks and peak season may occur as late as March and April," said Mark Koenig, acting safety officer.

The remaining flu vaccine is available on a first-come, first-served basis. Call Mary Jane Hilsgen, federal occupational health nurse, at 651-290-3051, to schedule an appointment at the Federal Building in St. Paul, 316 N. Robert St. Office hours are 7:30 a.m. to 4 p.m.

Jean Schmidt: December Employee of the Month Schmidt arms district with information

Bonnie Greenleaf, project management, nominated Jean Schmidt, information management, for going above and beyond the call of duty to provide excellent service in her capacity as the St. Paul district librarian.



Photo by Shannon Bauer

Jean Schmidt

Schmidt captured valuable information that had escaped an internet search.

"I was working on a hurricane study in which a category 3 hurricane hits Oahu, Hawaii, and had done some searches on the internet," said Greenleaf. "At the last minute, I asked her whether she could help follow-

up on some of the references. She very cheerfully did extensive research, found even better sources of information, followed up with other libraries, and even got libraries across the country to fax chapters from books in their collection," said Greenleaf.

Greenleaf learned of the disadvantages of tent cities and why to avoid them in disasters. She also learned gender differences impact decisions to evacuate during emergencies. "Mothers and women make decisions to evacuate," she said.

"The materials have proven to be invaluable, and I have shared the information not only within the district but also with others in Florida, Hawaii, and Colorado.

"The district is very fortunate to have someone so knowledgeable in her field who, without hesitation, will do whatever she can to assist others. We should all strive to be as helpful and considerate as Jean Schmidt," said Greenleaf.

Lewis and Mosner judge National Engineers Week Future City Competition

Corby Lewis, engineering and construction, was an in-school mentor for Holy Trinity School in South St. Paul, Minn., for the 2004-05 National Engineers Week Future City Competition in Crystal, Minn., Jan. 29. The Minnesota Society of Professional Engineers was a local sponsor. **Jim Mosner**, engineering and construction, participated in the competition as a judge. Judging included a computer simulation portion, an essay portion and special award categories. "Washington Middle School in St. Paul, where we have some involvement in the Adopt-a-School program, had two teams of students participate," said Mosner.