



US Army Corps
of Engineers
St. Paul District

Crosscurrents

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Diversity Week events educate and entertain



Photo by Peter Verstegen

Kim Jones, chief of Budget, standing at right, personifies the Diversity Appreciation Week (DAW) theme, "Learning from the Past to Discover your Future." She represents Harriet Tubman in the presentation "Stories of American Women," produced by *Celebrate Women!* for DAW. Tubman led 300 of her people, including women and babies, to freedom on the Underground Railroad without getting caught once. Tubman also served the Union Army as a spy during the Civil War. Jones and 11 other women from the district gave life to "Stories of American

Women" to a standing room only crowd. The district's EEO office planned over 20 events and films for DAW, February 14-18. "DAW is geared to educate employees about the diversity of various groups in our society and to promote appreciation for such diversity among employees," said District Commander Col. James Scott. "It is our goal, and our mandate, that each individual will be treated with respect and dignity in this organization. Diversity education supports this goal." Nearly 200 people attended DAW events this year.

Safety awards reflect careful work habits

By Ron Scott, safety officer

You might recall that the Rochester Office and Edward Kraemer and Sons, the contractor for the Rochester project, were honored last year with safety awards for the Best Resident Office and Best Contractor in the North Central Division (NCD).

What you might not know is how challenging it was to earn the engraved plaques those two awards represent.

For one, the contractor worked aggressively to provide safe working conditions for its employees and the public. The Rochester Stage 2A construction contract involved blasting, excavating, and hauling earth and rock and moving construction materials throughout the project. The contractor operated motor vehicles over 200,000 miles. (If you averaged 15,000 miles per year in your car, it's like driving for over 13 years without a mishap.) Employees had over 86,000 person-hours of exposure. From October 1992 to September 1993, there were no lost-time mishaps and only three minor, non-lost time incidents (cuts and bruises).

Also, the Rochester Resident Engineer Office had a formal Partnering agreement with the contractor. In the spirit of the agreement, the contractor worked with quality assurance personnel to prevent mishaps. The agreement intertwined the successes of the contractor and the resident office. The Rochester Resident Office worked with the contractor to establish safe working conditions for all employees and the public.

Two goals in the partnering agreement highlighted safety issues. The first established "a safe working environment with zero lost time accidents." The second was to "establish and maintain positive public

relations and safety."

The program worked. Personnel in the resident office had an estimated 15,000 hours of construction exposure and over 20,000 motor vehicle miles exposure with no accidents.

There are six award categories within NCD. Other categories include Best District Program; Best Contractor; Best O & M Project; Sustaining Award; and Safety Champion of the Year (an individual). The commander of the North Central Division presents the awards annually.

Our goal is to be recognized for having the Best District Program in NCD. Wait until next year's awards!

Safety in numbers

By Ron Scott, safety officer

All right, you say. The district had a government frequency rate of 1.69 mishaps in 1993 and a contractor frequency rate of 0.77 in 1993. So what?

Well, let's take a brief look at the story behind the numbers.

Frequency rates have been around for a long time and were conceived as a way to compare apples and oranges, or St. Paul District to Rock Island District.

Simply stated, a frequency rate is the number of accidents reported for every 200,000 hours worked. So when the district worked 200,000 hours, we also experienced 1.69 accidents. (The Corps term for accident is "mishap.") Actually, we worked over 1.4 million hours and experienced 12 mishaps — arriving at the same figure, I hope.

Regardless of the numbers, our goal is to prevent mishaps. In the area of safety statistics, the safest number is zero.



Photo by Randy Ulrich

With a height of 63 feet, a crown spread of 90 feet, and a circumference of 136 inches, this championship birch dwarfs Keith Flury, a stay-in-school student at the Mississippi River Area Office. "The Wisconsin Department of Natural Resources confirmed that the birch was, indeed, a champion," said Flury. The tree is on Corps property south of La Crosse.

Hello newcomers

Construction-Operations Division
Michael A. Emmons, sandblaster
Roland R. Olson, chief electrician
Engineering and Planning Division
Gregory A. Johnson, landscape architect
Programs & Project Management Division
Roselyn A. Atkins, secretary

Good-bye

Construction-Operations Division
Frank F. Carravetta, civil engineer (retired)
Elizabeth Hafenbrack, secretary (retired)
James E. Nicholson, supervisory civil engineer (retired)
Engineering and Planning Division
Gary L. Erickson, civil engineer (retired)
Luann S. Nelson, student trainee
Human Resources Division
Lucaina C. Kelly, office automation clerk
Information Management Office
Kevin E. Ford, computer clerk
Candy L. Stelflug, office automation clerk

District takes lead on multi-state floodplains assessment

Fifty Corps personnel from the district and around the Midwest gathered in St. Paul on February 9 to brainstorm and plan a \$4 million multi-state floodplain assessment.

St. Paul is leading the 18-month Corps of Engineers assessment of the floodplains impacted by the Flood of 1993. The district is assessing the current uses and identifying and assessing floodplain management options of the Upper Mississippi and Lower Missouri river floodplains, including major tributaries. Congress authorized the assessment in response to disastrous flooding in these floodplains in 1993.

While St. Paul is the lead district, the Rock Island, St. Louis, Kansas City and Omaha districts are making substantial contributions. These districts have flood control and emergency response missions for the two river systems.

A second meeting, held February 22, included nearly 40 representatives from state and federal agencies, and from private organizations around the Midwest. Nearly 30 Corps personnel attended.

Five people from the St. Paul District are being assigned to the assessment team on a full-time basis. Dave Loss, Engineering and Planning Division (PE), is the assessment manager. Curt Meeder, a regional economist in Planning Branch, is heading the economics workgroup. Gary Nelson, a sociologist, is managing public involvement. Terry Birkenstock, a wildlife biologist, is directing the workgroup on environmental issues and geographic information systems (GIS). Scott Jutila, a hydraulic engineer, is leading the workgroup on hydrology issues.

Assisting this core group with plan formulation are Bill Spychalla and

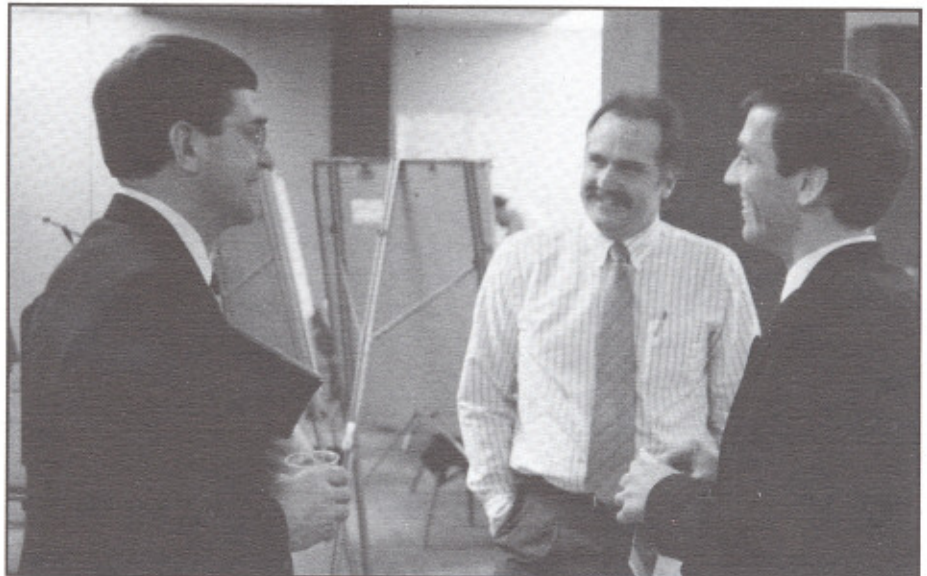


Photo by Ken Gardner

Left to right are Dave Loss, assessment manager; Gary Freeman, the liaison with the Scientific Assessment Strategy Team/Waterways Experiment Station (SAST/WES); and Chuck Moeslein, Office of the Chief of Engineers.

Wayne Knott; on floodplain policies, Terry Engel; on cost engineering, Mike Osterby; Greg Eggers on hydrology; Larry Joachim on Real Estate; Ed Williamson on data control; and Ken Gardner on public affairs. Angie Peterson is the administrative assistant for the group. These are part-time assignments for the next 18 months.

The assessment will focus on the following general objectives:

1. Describe the existing land and water resources and make projections about future condition along the two rivers;
2. Identify the desires of interested parties within the assessment area to reflect the diversity of opinions and interests;
3. Describe alternative uses of floodplain resources and the impacts of those alternatives, including possible changes in policy;
4. Describe the forces impacting on the use of land and water resources;

5. Evaluate and prioritize alternative land and water resource actions based on consultation and coordination with affected federal, state and local entities through a series of public workshops or meetings;
6. Prepare a report to document the assessment efforts, present conclusions regarding potential actions and alternative future floodplain uses, and recommend subsequent studies.

The Corps is coordinating the assessment with the Interagency Floodplain Management Review Committee, headed by Brigadier General Gerald Galloway. This Administration-initiated review is a shorter term effort analyzing all federal policies and programs relevant to floodplain management. The Corps will incorporate the findings of the Galloway effort in its assessment.

Corps and local sponsors win with Project Management



St. Paul District photo

Project Manager Marsha Risch briefs a guide and Japanese guests of the City of St. Paul regarding the St. Paul Project.

By Peter Verstegen
Public Affairs specialist

"As a result of project management, we've been more of a partner with the Corps on the Souris, the Sheyenne and Baldhill Dam projects. Previously, we've sensed a feeling of aloofness by the Corps. Now, the project management process has provided a focus on projects and on serving the needs of local sponsors."

This is how David Sprynczynatyk, North Dakota state engineer and secretary to the North Dakota State Water Commission, describes his experience with project management. He oversees the state and local portion of the district's flood control projects in

North Dakota, which have a total federal and non-federal price tag of over \$200 million.

Sprynczynatyk's view illustrates how the project management process has helped to keep projects on schedule, within budget, and environmentally friendly. The projects help prevent flood damage and lead to more efficient use of tax dollars. The process has also benefited local sponsors in Rochester, St. Paul and Houston, Minnesota.

WRDA '86

The reason for the positive outlook is "WRDA '86," otherwise known as the Water Resources Development Act of 1986. The Corps developed its project management system to meet the needs

of WRDA '86. The district formed its Programs and Project Management (PPM) Division in 1989. The division has two functions — Project Management (PM) and Programs Management (PO). The goal of the system is to provide a closer working relationship with the local project sponsors and to implement projects on schedule and within budget.

The law changed the way potential new projects were studied, evaluated, cost shared, and funded. The law established local cost sharing on studies and projects and a method for local input on projects. While cost sharing stretched federal tax dollars, it halted some studies that were too expensive for smaller communities. Local sponsors now had to pay 50 percent of the cost of a feasibility study and at least 25 percent of construction costs.

Before WRDA '86, projects began in Planning Division, were handed off to Engineering Division, and then taken up by Construction Division. Projects often changed substantially with each transfer. This meant that local sponsors had to express concerns at three major stages.

"Under the old way," said Project Manager Mark Gmitro, "projects had several managers, each with their own personality and agenda. Also, without a team approach, each designer on a project tended to go in a different direction. Under project management, the project manager focuses the direction of the project and insures that everybody works toward the same goals."

Said Gmitro, "Having one point of contact is much easier on local sponsors. A project manager provides continuity and consistency when a project has a number of stages, like Rochester, which has 11 stages."

St. Paul project

Local sponsors quickly learned the advantage of having a single point of contact and a project manager as their advocate.

In early 1989, the local sponsor on the St. Paul project, the City of St. Paul, requested that recreation be added to flood control as a project purpose. Project Manager Marsha Risch worked over the next two years to incorporate the city's request into the general design memorandum. She flew to Washington, D.C. to advocate the change to Corps headquarters officials and to garner their approval. "Recreation is an asset to the project. The project provides access to the river as never before. It provides a walkway, bike trails and is aesthetically pleasing," said Risch. The district awarded the first construction contract in September 1991.

Said Risch, "The project management process requires us to know where everybody's coming from. We must learn the objectives of the people we work with and ask whether there is another less costly way to accomplish the overall goal — which is a safe, environmentally friendly project. We must demonstrate to the local sponsors we have taken their concerns into account."

"The strength in project management comes from its customer focus, team orientation, big-picture outlook, and position as liaison between a complex organization and the customer on the outside. They do not let minor details derail the project," said Chuck Crist, former chief of Project Management Branch.

Objectives

"The projects are the central focus under project management," said Lou Kowalski, deputy district engineer for Project Management and chief of Programs and Project Management



Photo by Ken Gardner

For the St. Paul Project, the City of St. Paul requested that recreation be added to flood control as a project purpose. A walkway between the old floodwall to the left and the new floodwall on the right provides scenic access to the river and is part of the city's plan to develop the riverfront. The above photo was taken during the Flood of '93.



Photo courtesy City of St. Paul

Stage 3 of the St. Paul Project will extend along the Mississippi River from the far left to the right. Groundbreaking for stage 3 construction is scheduled for April 4. Raising the flood wall will provide 588-year protection and allow additional development along the riverfront.

Division. "The project managers strive to maintain costs and schedules and to plan, design, and construct quality projects. They also maintain open communications within the Corps and with the local sponsors. They're very

careful to manage expectations and to allow the participation of partners in project development."

Project Management manages the more complex, controversial, environmentally sensitive or

congressionally important projects. Through 2003, Project Management is responsible for 18 flood control projects worth \$1.1 billion, including \$450 million in major maintenance and major rehabilitation.

The environment

Project management has helped to minimize the controversy and cost that are associated with recovery of hazardous waste. Such was the case for the St. Paul project.

“We knew about petroleum-based contamination before we started construction,” said Risch, manager of the St. Paul project. Risch coordinated among the interested offices and agencies in handling the waste. “We worked out an agreement with the Minnesota Pollution Control Agency

that we would excavate the project area and measure any contamination present and then determine how it should be handled. The effort ended up costing the project less than \$4,000.”

In North Dakota, project management helped to construct environmentally friendly projects on the Sheyenne and Souris Rivers.

The Sheyenne project provided for fish migration, preserved a historic North Dakota cottonwood tree, and restored native grasses. “Compatibility with the existing and natural environment was a prime consideration during project design and construction,” said Project Manager Bill Spychalla.

“The design for the Souris River project in North Dakota addressed both flood control and fish and wildlife,” said Bruce Heide, project manager. The Souris River makes a 358-mile loop from Saskatchewan, Canada through North Dakota and into Manitoba. “The project includes seven water control

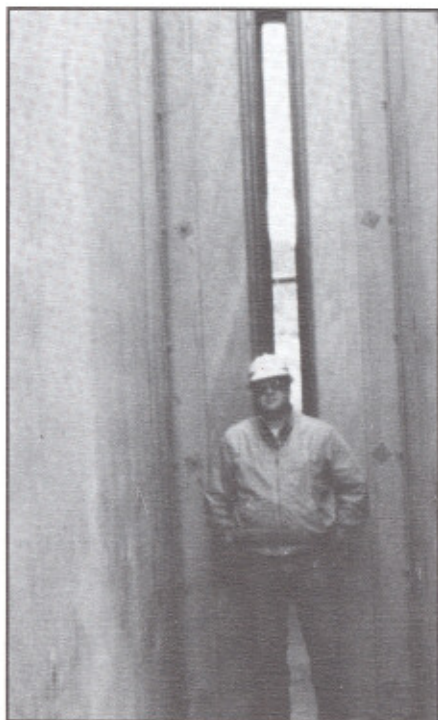
structures in two national wildlife refuges. We rehabilitated the seven structures as part of the Souris project.” The total cost for the Souris project exceeds \$128 million. The overall project is nearly 80 percent complete.

Saving time and money

In 1993, the project management concept saved \$12.7 million at Rochester and kept projects at Sheyenne, State Road Coulee and Lake Darling under budget. State Road is in La Crosse, Wisconsin. Lake Darling, just north of Minot, North Dakota, is a feature of the larger Souris project.

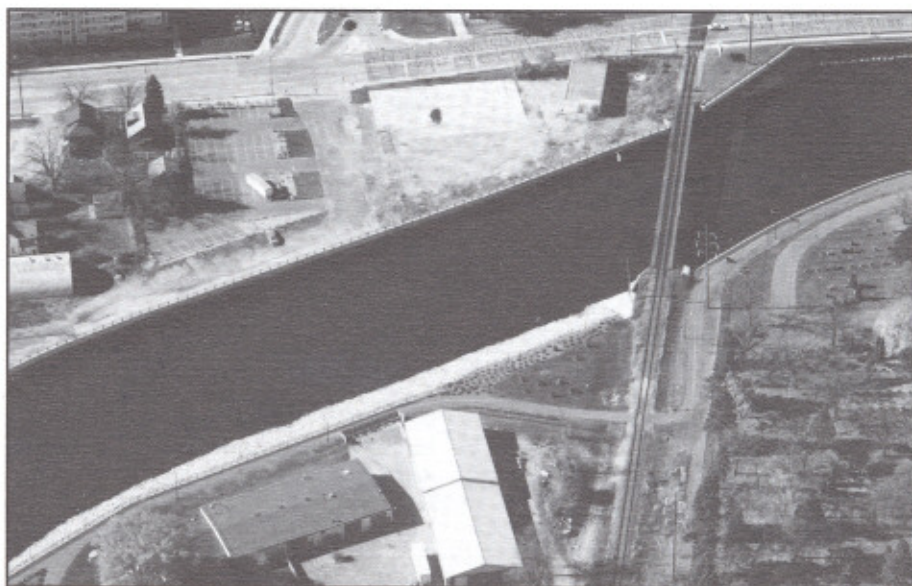
The process is also working to save construction time. The district and its contractors completed the Sheyenne River project three months ahead of schedule and advanced completion of the Lake Darling feature of the Souris River project by 14 months.

“We liked the project management style and we’re satisfied with the Sheyenne



St. Paul District photo

A fish passageway built for the Sheyenne River Project surrounds Dick Sundberg, the resident engineer in Fargo, North Dakota. The passageway allows fish access through the project during high flows.



St. Paul District photo

Stage 1B3 of the Rochester Project involved the environmental cleanup of coal tar and cancer-causing PCBs from the Zumbro River in the City of Rochester. The cleanup zone is in the top-center and to the left of a railroad bridge and next to the river channel.

project," said Jeff Volk, an engineer with Moore Engineering and the engineer for the Southeast Cass Water Resource District. "With last year's floods, we've saved a fair portion of our local contribution already." The water resource district acted as the local sponsor for the Sheyenne project.

Although satisfied, Volk urged improvements in the project management methodology and in providing local project engineers "authority to make decisions fast enough to react to schedule changes in the field."

Rapport with sponsors

"A major benefit for us was to have a single point of contact in managing the Souris project," said Lee Fredlund, project coordinator for the Ward County Water Resource Board, the acting local sponsor. Bruce Heide was the project manager who worked with Fredlund and his board. "A single point of contact has saved us a lot of time and effort," Fredlund said.

A project manager also listens with a sympathetic ear when local officials face Corps-imposed setbacks. Such was the case with the \$6.5 million project for the City of Houston on the Root River in southeast Minnesota. The project will extend and upgrade an existing system of levees. City officials gave Risch a book to acknowledge her support after the city endured the setbacks. The book, "Remembering Old Times," covers the history of the town.

But the rapport established between the local sponsor and the manager may undergo shock when a project manager is promoted or transfers. "Our biggest challenge is dealing with changes in project managers," said Fredlund. The Souris project will soon have its third project manager. "The project managers are given the opportunity to go elsewhere and improve their prospects. Otherwise, our experience with the



St. Paul District photo

The above illustrates a refuge control structure at Souris Project. The project included rehabilitating seven refuge water control structures in two national wildlife refuges in North Dakota.

project management concept on the Souris River project has been really good."

"We've had a good experience with the Corps' project management system," said Gary Neumann, assistant city administrator for the City of Rochester. "The Rochester project is the largest single public works project we've done. The system provides an advocate for the city's point of view to affect changes. Second, it's hard for people in St. Paul to see the local point of view. Having an understanding of local issues, the project manager can be more of an advocate for the city." The total project cost for Rochester is slightly over \$105 million with an estimated non-Federal cost of nearly \$28 million.

Overcoming obstacles

Project management principles served the district and the State of North Dakota well for the Baldhill Dam Safety Project Cooperation Agreement (PCA). The Corps restructured the Baldhill PCA when North Dakota officials objected to the basis and the

price tag for local cost sharing. The dam and Lake Ashtabula reservoir are on the Sheyenne River in eastern North Dakota about nine miles north of Valley City.

Bill Spychalla, the project manager, worked with the Assistant Secretary of the Army for Civil Works to facilitate the PCA through a governmental obstacle course created by a change in federal law. The overall cost of the Baldhill Dam project plus major rehabilitation is nearly \$25 million, with over \$18 million allocated for dam safety work. Construction is scheduled to start in fiscal year 1995.

The PCA was executed in January 1994 and allows the Corps to proceed with urgently needed safety modifications of the dam. The PCA culminated three years of challenging negotiations with the State of North Dakota.

Observed Sprynczynatyk, "The process has provided us a much better working relationship with the Corps. The local sponsors in the state feel much better about working with the Corps."

Bits and Pieces

Presentations fill Engineers Week

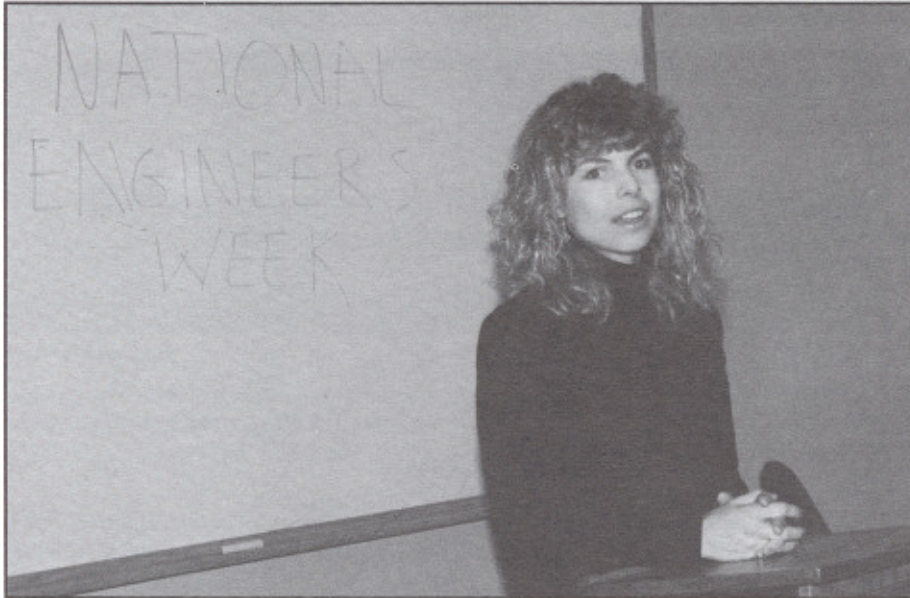


Photo by Georgia Stanonik

Terry Williams (above), a civil engineer in Design Branch, presided at the Engineers Week awards ceremony, February 22, where honorees received rings for the Order of the Engineer; Tom Sully was recognized as the Society of American Military Engineers Engineer of the Year; and 18 performance awards were presented. Don Powell, PE-P; Neil Schwanz, PE-GH; Nathan Kathir, PE-D; Dave Christenson, CO-EM; Dean Peterson, CO; Mark Meyers, PE-GH; Tom Crump PE-P; and Dave Himmerich, PD-D, gave brown bag presentations on subjects ranging from the Environmental Management Program to computer-aided design.

Headquarters releases vision statements

This February, Headquarters released a wallet-sized vision statement and brochure for all Corps employees. "Our Vision" is:

- A Vital Part of America's Army;
- Proud of our past;
- Building for the future;
- Providing quality, responsive engineering services;
- To support the nation, in peace and in war.

The brochure expands on each item.

Spring flooding likely

Preliminary predictions indicate that the Minnesota River Basin and its tributaries, the Sheyenne River Basin and Devils Lake, and the Red River of the North have a significant potential for flooding. In general, rivers are flowing at two to three times normal rate of flow. Water Control Section continues to monitor the potential for flooding.

ATM cash advances now available

The Corps of Engineers has received approval to use automated teller machine (ATM) cash advances for official travel. This is a feature of the new American Express government travel card. The ATM cash advance allows cardholders to withdraw funds to pay for official travel expenses, and eliminates both the need for travelers' checks and for large amounts of cash. Cardholders will be charged a reimbursable fee of 2.75 percent of the amount of each ATM withdrawal. Call Debra Bertrand at 290-5465 for more information or an application.



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