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St. Paul District

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Strategic Vision: *Satisfy the Customer*

District officials take in public comments on Pine River dam safety project



St. Paul District file photo

The Pine River Dam (above) forms the Cross Lake reservoir. The district is proposing to upgrade the dam for

safety purposes. The dam is a high hazard dam due to its height, storage capacity and nearness to a populated area.

By Bryan Armbrust
Public Affairs specialist

Eleven representatives from the St. Paul District participated in a

public meeting on August 22 at the Crosslake, Minn., Community Center. Their objective was to present details of a dam safety assurance project for the Pine River

Dam at Cross Lake.

More than 200 attended the meeting that was requested by the City of Crosslake. The district is

Dam safety, cont. on page 4

Strategic Vision: Invest in People**'With any change, there is an opportunity'**

By Peter Verstegen
Public Affairs specialist

"With any change, there is an opportunity," said Col. Kenneth Kasprisin, St. Paul District commander. Kasprisin repeated this theme often as he interacted with 14 district employees in his first Brown Bag lunch on August 25.

"I sense that people are tired of the constant changes, the office downsizing, regionalization and

office relocations. It seems to me the many changes and recent move have tired out a lot of people."

He asked a number of those present for their assessment of district strengths and weaknesses. Strengths included the people of the district, the district's water resources mission, execution of the district's missions, sensitivity to the environment and strong partnership development. Weaknesses focused on marketing and internal inefficiencies. "It

comes back to how we do business when we get it," said Kasprisin. A third weakness, added Kasprisin, was "looking for money" to support projects.

"We want to be more efficient internally, learn to reach out and to execute effectively – especially with the new Planning, Programs and Project Management Division. We've got to make these changes successful and capitalize on the opportunities."

Strategic Vision: Invest in People**When it's 'Too Darn Hot'**

By Ron Scott
Safety Office

The summer of 1998 has already been a broiler in most parts of the country – with triple digit temperatures in many places. We need to look no further than our newspapers of recent days, to note that five children recently died when becoming locked in the trunk of a automobile. Approximately 500 people die from heat-related problems every year and in the severe heat wave of 1980, nearly 1,700 people lost their lives.

It is essential that we understand the effects that extreme heat can have on the body and the means of minimizing the risks.

There are a number of ways that body responds to an increase in temperature. Heat rash is very basic and more uncomfortable than harmful. The most common bodily

response is heat stress, accompanied by thirst, tiredness, dizziness, even trouble seeing. A brief break away from the heat and drink water or fruit juice (never alcohol) is recommended. Heat cramps are painful muscle spasms in the arms, legs or intestines, caused by losing salt while sweating. Again, cooling down and replacing fluid are important. More serious and fairly common is heat exhaustion. A person who suffers from heat exhaustion may feel dizzy or weak, have chills accompanied by clammy skin and profuse perspiring. They may also have a headache, feel sick to the stomach, or suffer several of these reactions simultaneously. Going at a slower pace, resting, and cooling until recovery will be necessary.

It is essential to recognize and respond to these stages of heat sickness so that it will never get to the state of heat stroke, which can cause permanent disability or death without immediate emergency treatment. At the point of heat stroke, perspiration and its cooling

action stop, and the skin may be hot and dry to the touch. A rapid pulse, dizziness, nausea, poor coordination, or even unconsciousness are among the possible symptoms. A doctor or ambulance must be called promptly and efforts to cool the victim must begin immediately. This may involve sponging or spraying the person with cool water, immersion in a tub or the like.

Obviously, it is worthwhile to know how to prevent heat sickness. Here are a few tips to reduce heat-related risks:

- Drink plenty of water, even when not thirsty. Avoid alcohol, coffee and tea, which contribute to dehydration;
- Accomplish as much "hot work" during the cooler parts of the day – morning generally being the coolest part of the day;
- Wear lightweight, loose-fitting, light-colored clothing;
- Use general ventilation (fans) and spot cooling as much as possible; and
- Learn to recognize the signs of heat sickness discussed above.

Strategic Vision:
Satisfy the Customer

District hosts visits to Devils Lake and Grand Forks projects

Spychalla briefs Devils Lake project

Bill Spychalla (in the above photo with chart) briefed the North Dakota congressional delegation and Army officials during a site visit on August 10.

Spychalla is the project manager for the flood control project in Devils Lake, North Dakota. Dr. Joseph Westphal, assistant secretary of the Army (Civil Works), is at center right.



Photos by Ken Gardner

The members of the group briefly turned to view work by the state on the crossing of nearby state highways 57 and 20. From Westphal, right to left, are: Col. Kenneth Kasprisin, St. Paul District commander; U.S. Senator Kent Conrad (ND); U.S. Senator Byron Dorgan, (ND); U.S. Representative Earl Pomeroy, (ND); and Myra Pearson, tribal

chairwoman of the Spirit Lake Nation. "My briefing was on the Devils Lake situation," said Spychalla. "I mentioned the magnitude of the flooding problems caused around the lake, the location of the proposed outlet from Devils Lake to the Sheyenne River and the location of the natural outlet and connection to the Stump Lakes."

Hedin briefs officials on Grand Forks-East Grand Forks project

"We were in Hal Gershman's back yard talking about the location of the levee," said Lisa Hedin, manager of the Grand Forks-East Grand Forks flood control project. Gershman is a local businessman whose residence is affected by levee alignment. Hedin is standing in the center of the photo with her arm out. Left to right, are U.S. Representative Colin Peterson; Dr. Joseph W. Westphal, assistant secretary of the Army (Civil Works); John O'Leary, director of Urban Development for City of Grand Forks; U.S. Senator Kent Conrad (in the dark jacket with his back to the camera); U.S. Representative Early Pomeroy (behind Conrad); Col. Kenneth



Kasprisin, district commander; Hedin; Ken Vein, Grand Forks city engineer; and Major General

Russell Fuhrman, director of Civil Works.



Photo by Doris Sullivan

This photo illustration shows a levee and path as it now looks at Pine River Dam site at Crosslake, Minn.

Dam safety, cont. from page 1
undertaking the project in order to assure the Pine River Dam and its associated structures comply with National Dam Safety Program standards.

Nanette Bischoff, the project's technical manager, began the meeting with a 30-minute presentation that provided details about how the district arrived at its plan. She described the coordination that the district conducted with local, state and federal agencies. Project Manager Bruce Tamte said that design team had strived to design the best solution.

Bob Post, chief of Engineering and Planning (PE), altered the meeting agenda in response to audience requests to take general questions from the public instead of dividing into breakout groups. In order to accommodate detailed questions, the Corps had setup and staffed four subject areas for breakouts:

- General information and cost;
- Design criteria and hydrology;
- Campground, main

embankment and spillway area; and

- Perimeter dike and environmental assessment.

Post, Kent Pederson, Neil Schwanz, Dick Beatty, Greg Eggers, and Dave Rydeen responded to general questions from the audience. Individuals asked about the district's plans to renovate perimeter dikes, to remove vegetation, and the need for an environmental impact statement (EIS).

The project plan proposes to remove 20 acres of trees and brush since root systems can undermine the integrity of dikes. Post and others explained that most of the work on the dikes will not be visible from the lake and will not modify the tree line adjacent to shore. Some members of the public are pushing for an EIS.

The district had conducted an "environmental assessment," which differs from the "environmental impact statement" in the level at which it is reviewed. The National Environmental Policy Act (NEPA) requires either an EA or EIS.

Pine River Dam Project points

- Originally constructed in 1886
- Modified in 1905
- Dikes completed in 1916
- Original purpose: aid to navigation on the Mississippi River
- Current purpose: flood control, recreation, fish and wildlife conservation
- Six inspections performed: 1972, 1976, 1981, 1986, 1991, 1996
- Resulting concerns: Concrete deterioration, seepage around spillway and two dikes, active piping at two dikes, brush and trees on all dikes



Photo illustration by Karen Nagengast

This photo illustration depicts a flood wall the district proposes for the same levee and path at Pine River.

Non-Corps dam failures result in 456 deaths

1972

Canyon Lake, South Dakota
238 deaths
\$60 million damage

1972

Buffalo Creek, West Virginia
125 deaths
\$400 million in damages

1976

Teton, Idaho
14 deaths
\$1 billion in damages

1977

Laurel Run, Pennsylvania
40 deaths
\$5.3 million in damages

1977

Kelly Barnes, Georgia
39 deaths
\$30 million in damages

Updating Pine River Dam to current standards

By Bryan Armbrust
Public Affairs specialist

Under guidelines developed by the National Dam Safety Program, many older dams are substandard, and pose a risk to surrounding areas if they should fail.

The St. Paul District has proposed to modify the Pine River Dam and its surrounding perimeter dikes to comply with updated dam safety standards. Contract documents will be completed this September. Construction is scheduled to start in the spring of 1999 and be completed in the fall of 2001. The total project cost is estimated at \$9.6 million.

The plan addresses unique qualities of the Pine River community and established national criteria. Instead of designing the project to the Probable Maximum Flood (PMF) standard (the 100 percent solution), the plan proposes a design (70 percent PMF) that satisfies national requirements and minimizes community impact. The Cross Lake reservoir will stay between the present levels of 1229.1-1229.6 ft.

The Pine River Project includes:

1. Increasing the existing spillway capacity to allow a release of the 70 percent PMF event.
2. Adding a three-foot wall to the top of the main embankment through the campground, instead of widening it by 18 feet.
3. Selective clearing of the embankment and dikes to comply with dam safety guidelines.

For additional information, log on the district's website at http://www.mvp.usace.army.mil/pp/info_papers/PINERIVE.HTM.

Editor's note: The Crosslake and dam safety articles are based on a news release which accompanied the public meeting.

Bits and Pieces



Photo by Ken Gardner

The above photo shows the Motor Vessel Mississippi at Lock and Dam No. 4 on August 17. Grouped in discussion are, left to right, Dan Krumholz, Waterways Section of the Mississippi River Project Office; Joe Dvorak, upper area lockmaster; Bob Post, chief of Engineering and Planning Division; Joe Lechner, Waterways Section and Dick Otto from the Natural Resources Office in La Crescent, Minn. Tom Langreck, lock operator at Lock and Dam No. 4, is in the background just to the left of the group. The MV Mississippi was headed down river. The MV Mississippi, based in the Memphis District, was on its annual low water tour of the Upper Mississippi River.

Bosse originals set for public display

"The first time ever, the originals of Henry P. Bosse's work will be on display at the Minnesota Museum of American Art," said John Anfinson, district historian. The Bosse album of historic photos of the Mississippi River is part of a larger "River of Dreams" conference scheduled in St. Paul from Sept. 24-26. The conference opens at 6:30 p.m. on Sept. 24 with Anfinson moderating a panel discussion at Landmark Center sponsored by the Ramsey County Historical Society and others. Landmark Center is at 5th and Market Streets in St. Paul. The Bosse album will be exhibited in the museum. Framed reproductions of his photography will be displayed on the center's first floor.

DAW November 17-20

Diversity Appreciation Week (DAW) activities will be held November 17-20. At least three workshops have been scheduled to address the requirements for Consideration of Others training. "DAW will have a keynote at the beginning and a capstone speaker at the end," said Linda Wiley, Equal Opportunity Opportunity (EEO) office. "We're also looking at a new format for the diversity food taste. The popular Mixed Blood Theater is making a return visit and there will be another theater troupe." The EEO office will provide more information when program details become final.



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