

# Crosscurrent

November 2011 Vol. 37, No. 9

*Serving the St. Paul District since 1977*

**Housing mission takes shape**

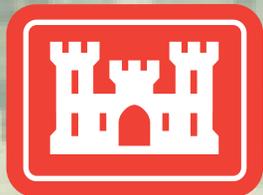
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**Corps helps rebuild along the Souris River**

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**U.S. Army Corps of Engineers**  
St. Paul District

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## On the Cover



Chris Botz, operations, manages a temporary housing site in Minot, N.D., as a quality assurance representative Oct. 13. Botz is a park ranger at Lake Ashtabula, near Valley City, N.D. This was his second tour to Minot this year.

Photo by Patrick Moes

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Views and opinions expressed in *Crosscurrents* are not necessarily those of the Department of the Army or the U.S. Army Corps of Engineers.

Articles and photography submissions are welcome and must arrive by the 15th day of the publishing month for consideration. Submissions can be mailed or e-mailed.

Submissions should be in Microsoft Word format for all written copy and photos should be no smaller than a 5 x 7 at 300 dpi. All photographs appearing herein are by the St. Paul District Public Affairs Office unless otherwise accredited.

The mission of *Crosscurrents* is to support the commander's internal information program for the St. Paul District and its stakeholders.

*Crosscurrents* also serves as the commander's primary communication tool for accurately transmitting policies and command philosophy to the St. Paul District community and its customers.

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Panoramic photo by Patrick Moes

## Next month's *Crosscurrents* issue includes:

- A look back at the diversion study
- Minot temporary housing mission is race against winter



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## Comments from the top



**Col. Michael J. Price**  
**U.S. Army Corps of Engineers**  
**St. Paul District Commander**

Team,

Two words emanated from the regional meetings held this past month – discipline and resolve. Maj. Gen. Michael Walsh, former Mississippi Valley Division commander, described the division's response to uncertainty in the fiscal year 2011 budget process and about the response to epic flooding across the region with these two words. The St. Paul District was a big part of fulfilling a disciplined process to our operational budget execution and a resolved response to flooding across the district. There is much left to be done as a result of the 2011 floods, and we continue to operate without an approved year-long budget.

The division commander challenged us to continue the commitment we showed in fiscal year 2011 for the upcoming fiscal year. I trust that we will excel as we continue to face new challenges and austere budgets.

One challenge the district has most recently faced is the suspected invasion of Asian Carp into our district. The Minnesota Department of Natural Resources has tested areas in the St. Croix and Mississippi rivers, near the

Twin Cities, and has found evidence of environmental DNA. That alone has set in motion a number of actions by the state. They have established a task force that is looking at what steps must be taken by state and federal agencies to prevent and mitigate the migration of Asian Carp into Minnesota waters; developed an action plan for the governor to enact; held public meetings; and petitioned Congress to alter our authorities, allowing us to shut down some of our locks for emergency conditions and to conduct a feasibility study to permanently close Lock and Dam 1 and the Upper Saint Anthony Lock and Dam.

The district reached across our boundaries and has asked the Chicago and Rock Island districts to assist us in developing our Asian Carp strategy. The district is a great steward of the environment and, we, too, do not wish for the invasion of Asian Carp. We operate within our authorities, and we strive to partner

with the other agencies in developing a comprehensive solution to aquatic invasive species. Some state and federal agencies believe that closing the locks is the only solution.

We do not think that at this time, and we will use science, not emotions, to develop a broad solution that involves industry, city, state and federal partners.

Please continue to do what you have been doing with discipline and resolve. We will watch our operational budget like we did last year. We will conduct our mandatory training as we did last year. And we will continue to coordinate and inform our local sponsors. Again, I stand proud alongside each of you as the district continues to accomplish great things. I am proud of the accomplishments of our diverse workforce and how that workforce works as a team to get things done. *Essayons!*

**BUILDING STRONG!**

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# Minot, N.D., housing mission beings to take shape



Photo by Shannon Bauer



Photo by Shannon Bauer

Story by Patrick Moes

The Federal Emergency Management Agency, or FEMA, tasked the Corps of Engineers to build infrastructure for more than 850 temporary homes following the catastrophic flooding along the Souris River this past summer. The infrastructure needed to do this includes water and sewer main lines and the laterals, or individual lines to each temporary home, and the electrical lines.

As of Nov. 20, the Corps has turned over more than 570 lots to FEMA for temporary housing placement.

Fifty of those units were built at a housing site in Burlington, N.D.; around 600 units are being built in Minot, N.D., near 55th Street; and the remaining 200 units are being built in northeast Minot.

Lisa Lund, operations and housing mission specialist, said, "The housing at least gives [displaced residents] some kind of permanent residence, even though its temporary, but its a place to call home."

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**Corps contractors begin temporary housing construction at a housing site in Minot, N.D., Sept. 9. The Corps is installing the infrastructure for more than 850 temporary homes in Ward County, North Dakota.**

1



Photo by Jeff DeZellar

2



Photo by Jeff DeZellar

3



Photo by Patrick Moes

(1) Temporary housing units arrive in Ward County, North Dakota, Sept. 11. (2) Corps contractors begin trenching electrical wire for temporary housing Sept. 15. (3) Corps contractors install culverts at a housing site Oct. 16. (4) Temporary housing arrives at a group site in Minot, N.D., Oct. 16. (5) A school bus drops children off after school at a group housing site Nov. 2.

4



Photo by Patrick Moes

5



Photo by Patrick Moes

# Corps helps rebuild areas impacted along Souris River

Story by Patrick Moes

In the five months since flood water threatened the Souris River Basin and flooded the cities of Minot, N.D., and Burlington, N.D., the St. Paul District, along with help from Vicksburg District and a few others, have been conducting recovery operations to help rebuild the impacted communities.

The Souris River crested at 1,561.7 feet above sea level in Minot, more than 12 feet above flood stage, June 26. The historic flooding caused more than 4,000 homes to suffer flood damage, and displaced nearly 12,000 citizens, or 25 percent, of Minot's population.

In the days following the crest, the Federal Emergency Management Agency, or FEMA, tasked the Corps with two mission assignments – temporary housing and debris removal, led by the St. Paul District, housing project recovery team and the the Vicksburg District debris project recovery team. To date, the St. Paul District has been authorized nearly \$60 million to complete these tasks and has executed 11 contracts.

The debris mission was further broken down to collecting residential debris from more than 4,000 homes that suffered water damage and removing temporary emergency levees that were installed along the river during the flood fight.

Lt. Col. Kendall Bergmann, St. Paul District deputy commander and flood fight commander for the basin, said driving through the communities after the flood was difficult. "They are shadows



Photo by Patrick Moes

**Barry Sullivan, debris mission manager and Vicksburg District employee, surveys a borrow site in Minot, N.D., Oct. 20. The Vicksburg District Debris Team removed more than 61,000 tons of debris following catastrophic flooding along the Souris River this summer.**

of their former selves," he said. "As people demolished parts of their homes, you could see through them." He explained that many residents had stripped their homes down to the frame and roof.

The removed material from these homes, from sheet rock to kitchen sinks, began to pile up and

up. Bergmann said, He remembered passing by homes where the debris pile would be more than 10 feet tall and reach from the roadside curb back at least 20 feet.

The mounds of debris created a unique challenge for the debris team, said Bergmann. Due to legal concerns, the Corps can only



Photo by Patrick Moes

**John Page, debris mission resident engineer and New Orleans District employee, surveys a borrow pit in Minot, N.D., Oct. 20.**

pick up debris in the public right-of-ways, which is within 10 feet of the curb. To deal with this problem, Bergmann said the debris team launched a communication effort to let residents know debris had to be moved toward the curb. Local volunteer groups also began assisting homeowners.

As of Sept. 26, the Vicksburg debris team completed the residential debris removal missions in the city of Minot and Ward County.

The team conducted four complete passes in both Ward County and Minot and hauled more than 62,000 tons of debris to the local landfills.

Robby Swayze, debris mission specialist from New Orleans District, said the debris collected, “roughly equates to a building the size of a football field 10 stories high or 16,000 dump

trucks.”

Removing the temporary emergency levees has also been a part of the recovery work within the basin. One truck at a time, the dirt placed along the river this summer to hold the river back is being removed. In downtown Minot, along Broadway Boulevard, these levees reached 18 feet in height and 50 feet wide. During the flood fight, the contractors used about 1.4 million cubic yards of clay to build the temporary levees. Barry Sullivan, debris mission manager from Vicksburg District, said the mission is now complete.

### **Rebuilding**

Along with the debris mission, FEMA tasked the Corps with constructing temporary

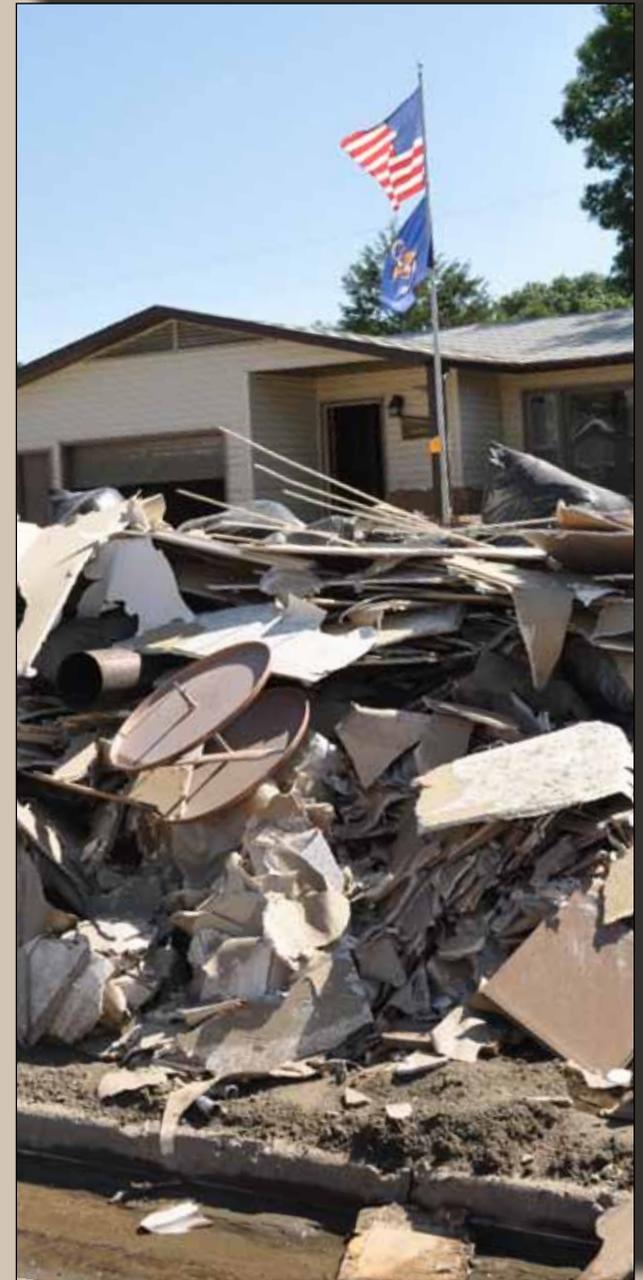


Photo by Shannon Bauer

**Housing debris is piled up outside a Minot, N.D., home following catastrophic flooding this summer.**

group mobile home parks. The Corps installs the infrastructure (sewer, water and electricity), constructs roads and grades the site for the mobile home to be placed on. The Corps then hands these sites over to FEMA to move in the mobile homes, hook up the utilities and move in the evacuees. To date, FEMA has tasked the Corps with constructing around 800 lots in Minot and 50 lots in Burlington.

Bergmann said, it's been difficult at times to try and construct so much before winter arrives in the region. "The unique piece in Minot is the winter," he said. "Normally, all water and sewer lines would be above ground with no insulation."

Due to the extreme weather conditions – the average winter temperature can reach minus 30 degrees – the district has to place the water lines 8 feet below ground to prevent the pipes from freezing.

Digging this deep created unexpected delays, said Bergmann. He explained that the contractors had to deal with water tables in certain areas and move a lot of material. He added that safety was a major concern due to the trench depth.

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This required the contractors to either

angle the trenches outward or build trench boxes to prevent any injuries.

While delays slowed the construction timeline, Teri Alberico, emergency operations, said, the utilities are all being built to local code and include fiber optic cables, power, sewer and

water lines. Natural gas is the only utility not being installed.

As construction continues in Minot and Ward County, Bergmann said, "Our goal is to have the group sites, or pads, turned over to FEMA as soon as possible."



*Photo by Shannon Bauer*

**Don Hocker, debris quality assurance representative and former Rock Island District employee, left, talks to Lt. Col. Kendall Bergmann, St. Paul District deputy commander, about the debris mission in Minot, N.D., July 20.**

# Corps reaches milestone in Ward County, North Dakota

Story by Patrick Moes

After nearly 100 days of work, the debris team has gone home. Led first by mission manager Lamar Jenkins, then by mission manager Barry Sullivan, both from the Vicksburg District, the team was assigned the jobs of removing debris from flooded homes and temporary emergency levees built during the 2011 spring flood fight within the Souris River Basin.

Sullivan, who normally works as the supervisor of the locks and dams and navigation for the Ouachita and Red rivers in Louisiana, said he knew the job would be challenging when he arrived. “We had quite a large amount of debris within [Ward County],” said Sullivan. “There was



Photo by Patrick Moes

**Barry Sullivan, debris mission manager and Vicksburg District employee, center, talks to his team about the debris mission in Minot, N.D., Oct. 20. The Vicksburg District Debris Project Recovery Team removed more than 61,000 tons of debris following catastrophic flooding along the Souris River this summer.**

[Click on the photo for the debris mission video.](#)

so much damage due to the flooding – in both the basements and the houses.”

As the debris piled up, so did Sullivan’s emotions. He said you can’t help but sympathize with the people affected by the flood. “Basically, everything they have ever accumulated was piled on the curb, waiting for us to haul it off.”

Despite the constant visual reminder of flood damage throughout Minot, N.D., and surrounding areas, Sullivan said he’s been very impressed with the resilience of the people in North Dakota. That resilience includes yellow signs popping up around town that say ‘I’m coming back’ and the most recent signs ‘I’m back.’

Looking back at the entire mission, Sullivan said he’s been overwhelmed by the support the team received. He said it was also extended to the temporary levee removal, which allowed residents to begin the rebuilding process.

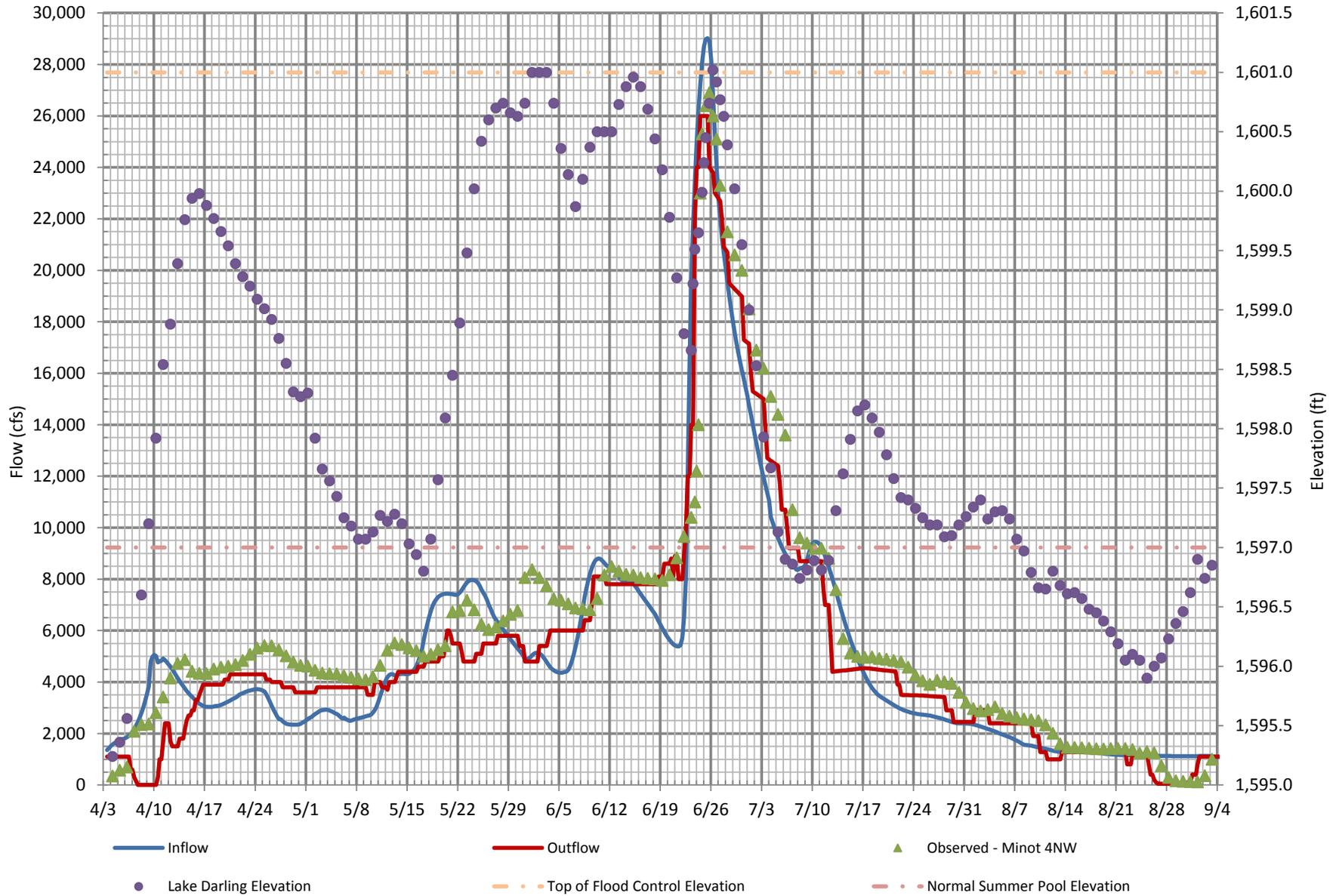
Sullivan said it was obvious a flood fight had occurred when he first drove into Minot from the airport. “You had earthen-dikes 20 feet tall, and they went between houses and up against bridge abutments, all along the roads,” he said. “It was fairly impressive to see the fight that was put up.”

With the clay no longer needed to hold back water, levee removal job began in earnest early August. The majority of this work was completed by the end of September, but an additional contract was awarded Sept. 29 to remove remaining temporary levees in Minot that the city originally did not want removed until floodwaters receded. The last remaining levees were removed Oct. 22.

Sullivan said his team goal for the levee removal job was to ensure no additional damage was created from the heavy equipment used to haul the clay back to the locations it was originally pulled from for the flood fight. “We’ve been able to [accomplish] our goal,” he said. “We had good working relationships with our contractors, the local governments and all the other federal agencies, and it took that collaborative effort to make this mission work.”

This is Sullivan’s fourth debris mission. He said each disaster is different, but they all have a massive affect on the people. “We never understand until a disaster has happened in our area or you have worked on one how much of an affect it has on the communities and the individuals,” said Sullivan. “You see it on the news, but until you have been on the ground and seen the devastation that occurs, it is really hard to grasp what this means to the community.”

# Lake Darling - 2011



Disclaimer: Unedited realtime data is used. All data contained herein is preliminary in nature and therefore subject to change. The data is for general information purposes **ONLY**. The user assumes all risk related to its use of this data.

# By the numbers: A timeline perspective on the Souris River flood

## Jan. 28:

Col. Michael Price, U.S. Army Corps of Engineers St. Paul District commander, declares a flood emergency to allow district personnel to initiate flood preparations in the Minnesota, Mississippi, Red and Souris river basins.

## February:

The Corps conducts in-house flood team and emergency operations center training in February to ensure the district's response teams are ready.

## Feb. 17:

The district participates in a flood teleconference call with the National Weather Service.

## Feb. 23:

The Souris River International Board declares a 1-in-10 flood event (or a 10 percent chance of a flood), and the Corps takes over operations of Lake Darling Dam. (There are two triggers that are looked at to determine if it is a 1-in-10 event. If the local 30-day volume at Sherwood Crossing is equal or greater than 30,000 acre feet or the 30-day unregulated volume at Sherwood Crossing is equal or greater than 175,200 acre feet then a 1-in-10 event is declared, and the Corps takes over operations.)

## March 2:

The Corps of Engineers begins weekly teleconferences with officials from counties and cities along the Souris River. The calls evolve into including the National Weather Service, the North Dakota State Water Commission, the U.S. Geological Service and, at times, officials from Canada and the North Dakota congressional delegation.

## March 28:

All three Saskatchewan dams are at or below flood storage level.

## End of March:

The snow pack above Lake Darling contains 4 to 6 inches of water. Based on the unregulated volume of water at Sherwood, N.D., the Corps drops Lake Darling down 2.3 feet below minimum operating level. [Normal summer conservation level of Lake Darling is 1,597 feet. Normal winter drawdown is 1,596 by Feb. 1 (1 ft). This year, the Corps drew down the pool to 1,594.7 (another 1.3 ft).]

## Early April:

Snowmelt begins. The Corps reduces outflow from Lake Darling Dam to zero for three days, starting April 6, while the local snowmelt runs off below the dam. Outflow is then increased with the goal of keeping the flow at the Minot 4NW gage below 5,000 cubic feet per second and the pool below the top of flood control.



Photo by Patrick Moes

**A North Dakota resident uses a canoe to cross a flooded driveway southeast of Minot, N.D., during spring flooding.**

## April/May/June:

Regular, significant precipitation events results in increased inflows to Lake Darling. Minot

receives more than twice the amount of rainfall this April, May and June compared to past years.

## April 10:

Inflow into Lake Darling peaks during spring runoff at 5,000 cfs.

## April 16:

The Lake Darling pool peaks at an elevation of 1,600 feet. Maximum outflow during spring runoff is 4,300 cfs. The City of Minot completes protection to accommodate 7,000 cfs in anticipation of potential future increased flows.

## May 8:

The pool reaches summer conservation level of 1,597 feet.

## May 20:

The St. Paul District begins daily, depending on the forecast, teleconferences with officials from counties and cities along the Souris River, the National Weather Service, the North Dakota State Water Commission, the U.S. Geological Service, and at times officials from Canada and the North Dakota congressional delegation.

## May 23:

Inflow at Lake Darling peaks at 8,000 cfs with a maximum outflow of 6,000 cfs. The Minot 4NW gage crests at 8,400 cfs. The City of Minot requests Corps assistance in raising its temporary levees.

## May 24:

The Corps awards its first contracts to raise or construct at least 12 reaches of levee throughout Minot and in an area between Burlington and Minot.

## May 27:

The Corps completes building emergency levees on the Souris.

Levees are raised or built to protect Minot to 9,000 cfs plus 1 foot of freeboard. Corps contractors continue to raise low spots in the levees for the next few days.

**May 31:**

The Souris River basin receives heavier than anticipated precipitation over a 24-hour period. The basin receives 3 to 5 inches, although it was predicted to receive 0.75 to 1.5 inches. Much of this rain falls outside the control of Lake Darling. Flows of 10,000 cfs are now expected, and the city declares a mandatory evacuation.

**June 1:**

Rainfall causes the Des Lacs River to rise 7 feet at Foxholm in 24 hours. Minot is told to expect 10,000 cubic feet per second. An estimated 10,000 residents are ordered to evacuate the city.

The Corps awards contracts for contingency levee work. The City of Minot develops plans for contingency levees and prioritizes the work so the critical sections are completed first. The pool climbs from summer conservation level, elevation 1,597 feet, on May 15 to the top of flood control level (elevation 1,601 feet) on June 1. Following this event, Corps water management lowers Lake Darling to one foot below the top of flood control before the next event occurs.

**June 2:**

Lake Darling receives peak inflows of 8,800 cfs, with a maximum outflow of 8,100 cfs. Minot 4NW crests at 8,500 cfs. The pool again climbs to the top of flood control (1,601 feet).

**June 4:**

The Mayor of Minot allows residents and businesses back into the evacuated areas between 8 a.m. and 10 p.m., but they cannot stay there overnight.



*Photo by Patrick Moes*

**The Sherwood Gage along the Souris River is the first gage within the United States.**

**June 6:**

Evacuation is now voluntary instead of mandatory. The Minot Mayor requests the Corps maintain flows at 6,000 cfs, and the agency complies. Based on the current operating plan and the five day Quantitative Precipitation Forecast, or QPF, the pool will be able to remain at or below 1,601 ft.

**June 8:**

The Corps opens outflow at Lake Darling to 6,400 cfs in response to rain during the past 48 hours. The Saskatchewan Watershed Authority cuts outflows at Rafferty and Alameda reservoirs to reduce inflows at Lake Darling.

**June 9:**

The Corps opens outflow at Lake Darling to 7,000 cfs at 3 p.m. and to 7,500 cfs at 7 p.m. in response to increased inflows from Canada. The Canadians reduced their releases to help the Corps, which will bring the Canadian reservoirs nearly to the top.

**June 11/12:**

Releases from Lake Darling were increased, measured by the USGS the previous weekend as 8,100 cfs vs. 7,500 cfs. The Corps cut its releases, and the USGS found the district to be releasing 7,800 cfs.

**June 13:**

The Corps releases 7,500 cfs from Lake Darling.

**June 14:**

The Corps releases 7,800 cfs from Lake Darling.

**June 15:**

The Corps maintains Lake Darling's outflows at 7,800 cfs with a pool elevation of 1,601 feet, and Minot crests a second time at 8,500 cfs.

**June 17/18:**

Inflow to Lake Darling is 4,500 cfs, when heavy rains begin to fall above the already full Canadian reservoirs.

**June 18:**

The Corps increases releases from Lake Darling from 7,800 to 8,100 cfs.

**June 19:**

Canada determines it needs to release 17,000 cfs from their dams (Alameda, Rafferty and Boundary) due to excessive rains in the past 24 to 48 hours in the upper reaches of the Souris Basin (up from 12,000 the day before). Lake Darling releases were increased to 8,400, and then 8,600 cfs. The Corps requests funds to raise the Minot levees for 11,000 cfs flows.

The daily teleconference with officials from the St. Paul District and counties and cities along

***“By next Saturday, June 25th, inflows from Canada at Sherwood are expected to be between 15,000 to 16,000 cfs. Today, Lake Darling ramped up releases to 8600 cfs, and they’ll go up to 8800 cfs by Monday, and hit 9400 cfs on Tuesday.” –KXMC-TV, June 19, 2011***

the Souris River is held at 1 p.m.

The Corps awards contracts to raise the main-line levees in Minot and the Burlington to Minot reach of the federal flood control project.

**June 20:**

The gates at Rafferty are pulled. Canada increases its releases to greater than 22,000 cfs. Inflows to Lake Darling are expected to peak at 27,000 cfs on or around June 28.

The daily teleconference with officials from the St. Paul District and counties and cities along the Souris River is held at 1 p.m.

The Corps maintains its releases at 9,000 cfs to allow for the orderly evacuation of Minot. The Corps requests and receives approval from the Souris River International Board to draw down Lake Darling an additional 3 feet. (The Corps was never able to draw it down but did achieve an elevation of 1598.6 feet.)

The Corps pulls its contractors in Minot back to working on the secondary levee on Broadway Avenue, critical infrastructure and schools.

Minot issues a mandatory evacuation order for previously-identified evacuation areas. Citizens in those areas are told they need to evacuate by 10 p.m. on Wednesday.

***“It is not a question of ‘if’ anymore...Minot will flood. It will displace thousands, shut down the heart of the city for weeks, and inundate thousands of homes in a way never seen before.” –KXMC-TV, June 20, 2011***



Photo by Patrick Moes

**More than 20,000 cubic feet per second flow from the Lake Darling Dam around June 24.**

**June 21:**

Canada increases its releases at Boundary and Alameda dams again, and the Corps is now expecting inflows of 29,000 cfs at Lake Darling by June 29. Minot is now expected to reach 21,000 cfs about June 29.

The daily teleconference with officials from the St. Paul District and counties and cities along the Souris River is held at 1 p.m. At this time, the stage at the Minot gage is 1,554.74 feet (up from 1,552.97 feet on the previous day) with flows approximately 9,420 cfs at the Broadway Bridge.

The Corps recommends moving up the mandatory evacuation order to noon on June 22.

The City of Minot decides to bump up the order to 6 p.m. on June 22.

The Corps reduces the outflows to 8,000 cfs today as the result of local rains experienced on the Des Lacs (an uncontrolled river flowing into Minot) during the last 24 hours. This reduced flow will be held until the next day to allow Minot residents time to evacuate and collect belongings.

The district has seven contractors working in the basin to protect critical infrastructure to include Minot’s Broadway Avenue, city hall, water treatment facility and schools. The city is working on

protecting some of its lift stations, well heads and pump stations.

**June 22:**

Temporary levees begin overtopping at 9 a.m. near Odds Trailer Park and across the river.

Mandatory evacuation enforced at 1 p.m.

The Corps increases outflows at Lake Darling to 10,000 cfs during the day and again to 12,000 cfs early evening.

The daily teleconference with officials from the St. Paul District and counties and cities along the Souris River is delayed until 3:30 p.m. in order to allow the NWS and Corps time to update its forecast and the USGS time to complete its measurements at the Sherwood gauge.

Nine Corps contractors continue working on levees to protect critical infrastructure.



Photo by Patrick Moes

Corps contractors and North Dakota National Guard soldiers help reinforce a temporary levee near Broadway Avenue in Minot, N.D., June 25.

**June 23:**

Levees in Minot continue to overtop.

The stage at Minot remains steady, because the attenuation of the water has moved over the levees and

onto the valley floor.

Flows from the Canadian reservoirs have traveled twice as fast through the system as expected in relationship to historical rates.

Corps contractors continue working on levees to protect critical infrastructure.

The daily teleconference with officials from the St. Paul District and counties and cities along the Souris River is held at 1 p.m. At this time, the stage at the Minot gage is 1,560.13 feet with flows approximately 17,600 cfs at the Broadway Bridge.

Ten Corps contractors finish work on critical infrastructure at the water treatment plant, schools and City Hall. Efforts have shifted to assisting with the levee raise to protect Broadway Avenue as a main thoroughfare. Contractors remain engaged on Broadway Avenue throughout the flood fight.

**June 24:**

Releases from Canada crest at Sherwood, N.D., at 34,000 cfs.

The pool at Lake Darling Dam is at 1,600.02 feet and climbing.

**June 25:**

Inflow into Lake Darling peaks at 29,000 cfs. Outflows peak at 25,000 cfs.

**June 26:**

The Souris River crests in Minot early in the morning at 1,561.7 feet.



Photo by Patrick Moes

An airboat is used during the flooding to check on temporary levees along the Souris River in Ward County, North Dakota.

**June 28:**

The Corps cuts outflows at Lake Darling from 21,000 to 19,500 cfs.

**July 5:**

Inflow falls below 10,000 cfs, and the pool is back at summer conservation level.

**July 12:**

The Corps cuts outflows to 4,500 cfs in order to reach the target flow of 5,000 cfs at Minot 4NW.

**July 18:**

Minot 4NW reaches the target flows of 5,000 cfs.

**Oct. 2:**

Minot 4NW gage is officially below 500 cfs, 230 days after rising above 500 cfs.

**Oct. 5:**

The Corps hands over the regulation of Lake Darling to the U.S. Fish and Wildlife Service.

# Disaster Zone Safety

Commentary by Barry Simmonds

Upon arrival in Minot, N.D., at the start of the flood recovery mission, I was greeted with standing water, debris scattered everywhere, traffic signals not working, roads flooded or blocked with emergency levees and the oppressive summer heat.

Both the housing and debris teams were either on site or arriving. The housing team was in search mode for suitable sites and didn't need much in the way of direct assistance. However, the debris team asked for a safety specialist to assist them in the areas they were working. This allowed me to begin coordinating our asbestos control plan with the Occupational Safety and Health Administration, or OSHA, and the Environmental Protection Agency, or EPA. We began setting up the reports to the district, the Mississippi Valley Division and to the Corps of Engineers' headquarters in Washington, D.C., and attended safety meetings with Corps personnel and contractors.

Some of the many hazards commonly encountered on missions like this include possible lead and asbestos exposure, noise, electrical and other utilities, sudden cave-ins from collapsing roads, flash flooding from rain, trenching and its cave-in hazards, heat injuries and vehicle accidents – to name a few. The Corps safety manual is the primary reference for these hazards and provides the basis for the contracts, which the contractors must abide by during their work.

The people who volunteer to act as quality assurance representatives, or QAs, for a mission like this are all professionals in their field, but most have very little safety training. The safety office gives guidance, direction and help developing specific procedures, which the QAs then employ.

By this time, hundreds of trucks and heavy equipment were in use throughout the county. Add to this the downed power lines, residents trying to clean up and gut their homes, curious children and normal residential traffic and it is a recipe for disaster. Everyone had to be watchful and extremely careful the entire time.

Early in the mission, Corps' headquarters expressed a concern about how we would deal with asbestos and the OSHA requirements. I had already been meeting with OSHA and EPA representatives, and we quickly coordinated a workable, legal and safe plan to deal with the

issue. (It went so well that I was tasked with submitting a briefing paper to the Corps' headquarters to help model a national agreement between the agencies for future missions.)

The reason asbestos was a particular concern was because a particular type of asbestos (vermiculite) was mined just 80 miles away and one of its common uses is for insulation in houses. Many of the debris piles the Corps dealt with had visible amounts of vermiculite, as well as other potential hazards. Some piles had lots of it, others had just a little. Regardless of the amount, it all had to be dealt with legally and safely. In the end, the mission was hailed by the EPA regional office in Denver, as well as the OSHA regional office in Bismarck, N.D., as being a model for cooperation.

With the debris mission underway, the housing group began building sites which would be used for the Federal Emergency Management Agency, or FEMA, trailers. In addition to the countless graders, dump trucks and excavators moving about, there was also the trenching hazards. Trenching is serious stuff and accidents are often fatal. Excavations deeper than 5 feet need more than just a competent person to say it's safe to work in. In some cases, the excavations were approaching 20 feet. This area also included some of the worst soil conditions many of the contractors have ever dealt with. However, with the safety and QA personnel working with the contractors and everyone staying vigilant, these projects were completed without a single injury being recorded!

The Corps prides itself on its safety record and tasking the safety office early on paid off in big ways. While the mission isn't yet complete, contractors and Corps personnel have now worked more than 212,000 hours without a recordable injury! Both our division and headquarters have commented on the weekly reports they receive and the great safety record our district has posted during this event. To date, the Minot recovery mission is the only disaster mission the Corps has responded to this year without a recordable injury, and we have posted the third highest work hours for these missions. It is an achievement to be proud of, and everyone involved played a huge role in accomplishing it!

# News & Notes

## Editor's Note

Do you have news you want to share with the district? Send your announcements of births, weddings, graduations, etc., to *Crosscurrents*. [cemvp-pa@usace.army.mil](mailto:cemvp-pa@usace.army.mil).

## Save the date

The St. Paul District annual Holiday Awards Ceremony and pot luck luncheon is scheduled for Dec. 16, from 11 a.m. to 3:30 p.m., at the Great Hall in St. Paul, Minn. The awards ceremony will follow the lunch in the James J. Hill Theater.

The celebration will also include a chilli cook-off. Sign-up sheets for the potluck and cook-off will be available Nov. 28.

Admission is free and the event is open to employees, family and retirees.

## Newcomers

**Zoe Garrison**, administrative assistant, engineering, district office

**Andrew Johns**, survey technician, Fountain City, Wis.

**Tina Schulze**, administrative assistant, command group, district office

## Congratulations

**Molly McKegey Hunt**, counsel, married Tim Hunt Oct. 8 in St. Paul, Minn.

**Kristin Moe**, operations, gave birth to a girl, Remi Lee Moe, Oct. 31. Name weighing in at 7 pounds, 9 ounces and was 19.75 inches long.

## Taps

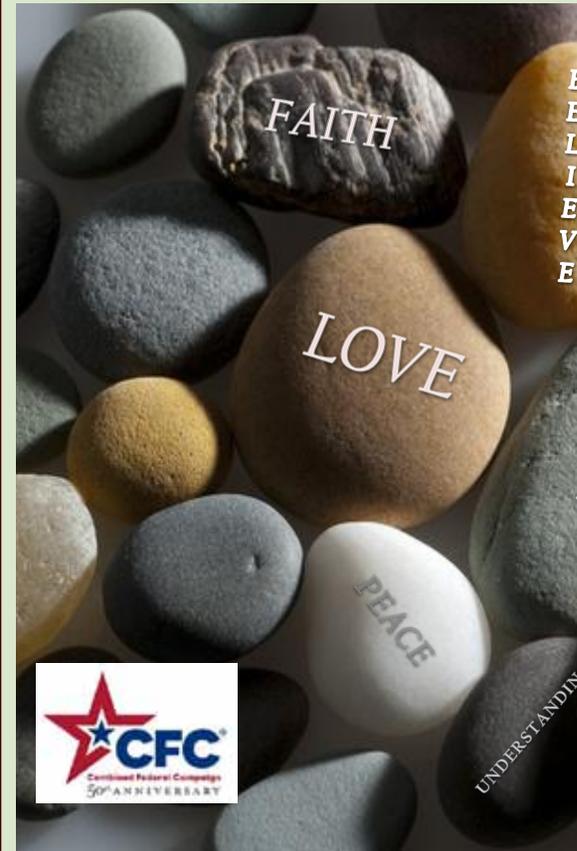
**Florence L. Nee Felix**, passed away Nov. 2.

Services were held at O'Halloran and Murphy Funeral Home in St. Paul, Minn.

**Lloyd C. "Bud" Tibor**, passed away Nov. 1.

Services were held at St. Mary's Catholic Church in Minneiska, Minn. Tibor was the head lock operator at Lock and Dam No. 5 in Minnesota City, Minn.

## Combined Federal Campaign is back



District personnel working within the Red River Valley can visit the Combined Federal Campaign website for that region at: <http://www.cfcredrivervalley.org/>. Individuals in this region are asked to contact Kathy Halverson or Virginia Regorrah for pledge sheets.

For district employees working in the rest of the district, pledge online by going to: [www.northernlightscfc.org](http://www.northernlightscfc.org) and clicking the "Pledge Online" button. Then choose "CFC Nexus" or "Employee Express" and follow the steps to register and pledge.

# News & Notes

## Equal employment office teaches new managers

Story by Larry Blackwell

For the Corps of Engineers to achieve its work objectives, we have to rely on the people we employ. Supervisors play a key role in creating a work atmosphere of equality, opportunity and the inclusion of every employee so they can focus their energies on achieving their work objectives.

These areas were the theme of the recent New Supervisors Equal Employment Opportunity Training session. The 6-hour training was delivered by the district's Equal Employment Office to nine new supervisors Oct. 19. The goal of the training was to introduce new managers to equal employment management concepts. All employees entering management are required to take and successfully complete this face-to-face course.

The trainers also discussed the district's Affirmative Employment Program, or AEP. This program highlights areas of our workforce that have low representations of women, minorities and employees with disabilities. The AEP process used by the EEO office, working in partnership with supervisors, to correct these issues is called "barrier analysis."

The analysis is an in-depth, joint investigation that is conducted by management and the EEO office to identify the causes of

low representations of target groups in our workforce. When the causes are identified, the EEO/supervisory team can develop an "action plan" to eliminate the barriers preventing the full hire, promotion or retention of these groups. Regular reports on the district's progress will begin in January. These reports will be available to supervisors and employees on the Intranet.

Another area discussed was the management of discrimination complaints. The discussion familiarized supervisors with the process for handling discrimination complaints. It also emphasized ways to improve the work environment by managing factors giving rise to these complaints. Improved two-way communication was at the top of the list for reducing conflict and discrimination complaints.

The district's Equal Employment Office office considers EEO for new supervisors to be continuing education throughout the supervisor's career. To that end, the EEO office is developing a regularly occurring information piece called, "Management Tips." This will be short, concise tips on EEO law changes, management activities and quizzes on managing EEO in the workplace.

**Click here for the video excerpt.**

## Employee receives award during retirement luncheon



*Courtesy photo*

**Pat Vickman, Eastern Area Office, received his 2011 Mississippi Valley Division Construction Management Excellence Award and the Commander's Award for Civilian Service during his retirement luncheon Nov. 8. Vickman is retiring after 25 years of federal service.**