

Finding Solutions Today
For a Secure Tomorrow

Spectrum

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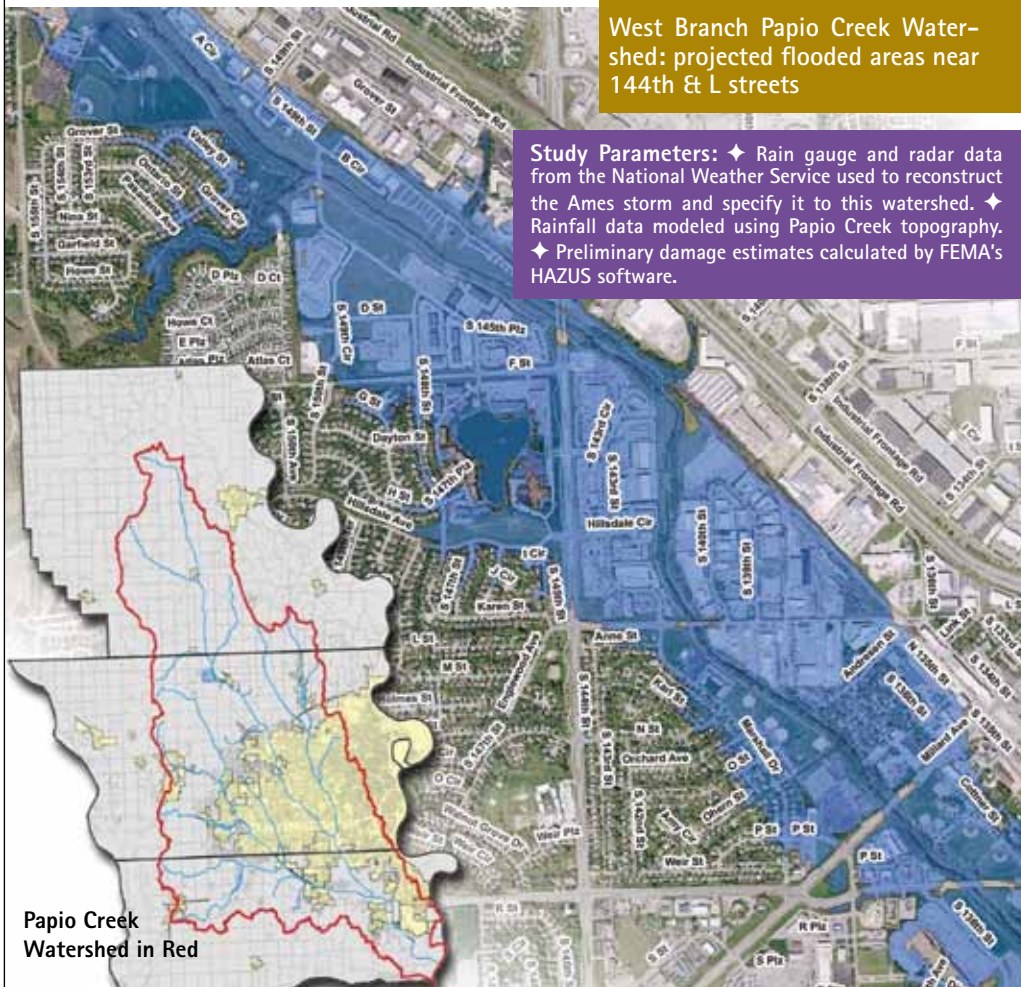
Papio-Missouri River Natural Resources District

Metro Area Flooding: If it could happen in **Ames,** it could happen **here**

Less than one year ago, Ames, Iowa was hit by a catastrophic 8-9 inch rain storm. Flooding overwhelmed the town. Damages to Iowa State University totaled \$30 to \$40 million and one life was lost. Because of the severity of the storm, and the similarity of Ames' weather patterns to the Omaha metro area, the Papio-Missouri River Natural Resources District studied what effect a storm of this caliber could have on our own Papillion Creek watershed.

The **results** of applying the Ames storm to the Metro area are astonishing.

- ◆ **Damage to buildings and structures would total an estimated \$490 million**
- ◆ **Roads and infrastructure damage would total a projected \$189 million**
- ◆ **Lost income: \$ 6 million**
- ◆ **Potential crop loss: \$2.5 million**



West Branch Papio Creek Watershed: projected flooded areas near 144th & L streets

Study Parameters: ◆ Rain gauge and radar data from the National Weather Service used to reconstruct the Ames storm and specify it to this watershed. ◆ Rainfall data modeled using Papio Creek topography. ◆ Preliminary damage estimates calculated by FEMA's HAZUS software.

Water would cover:
◆ **An estimated 1,558 acres of commercial land**
◆ **393 acres of residential land, 4100 acres of ag and civic land, railroad & roads.**

The Papillion Creek watershed contains several Papio Creek branches which join together near Papillion and Bellevue. Urbanization of the watershed means rainwater does not sink into the ground, but rather runs off the hard streets, parking lots and rooftops into the local creek systems, increasing the flood threat.

According to **John Winkler, NRD General Manager**, the need for continued flood control upstream of the metro area is absolutely necessary for the safety and viability of the urbanized watershed. The NRD, along with the Papillion Creek Watershed Partnership has a long-term plan for upgrading flood control for the watershed. Flood control projects planned upstream of the metro area are deemed the most effective in terms of cost and benefits.

The Papio NRD has bonding authority granted by the NE Legislature. A \$13 million bond is providing funds to begin work on some of the flood control plans. But as the area grows, so does the need for continued flood control.

"It is so important to continue our efforts," said Winkler. "We have a practical tool with the bonding for starting these efforts, and our work is cut out for us. It's a never-ending process as the watershed grows, but we are working on ways to minimize damage when the big storm hits."

Papio Creek Watershed in Red



ZEBRA MUSSELS.
“oh they’re so cute!”

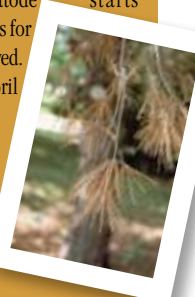
NOT!

Watch out for other invasive species

Pine Wilt

Have you noticed brown and dying scotch pine trees lately? “Pine wilt” is a disease that affects mainly scotch pines through a microscopic organism called the pinewood nematode. The beetle that carries this nematode starts to emerge in May. There are no known cures for this disease and infected trees can not be saved.

Removing and destroying the trees by April 30th helps slow the disease’s spread.



Emerald Ash Borer

The Emerald Ash Borer, or EAB, is native to Asia and is believed to have arrived in the United States on solid wood packing material sometime in the last 15+ years. The introduction of EAB to North America has resulted in the loss of millions of ash trees, in landscapes, nurseries, woodlots, and forests and financial losses are estimated in the millions of dollars. There is no known treatment. Emerald Ash Borer has not been found in Nebraska. The Nebraska Department of Agriculture is working to prevent EAB in Nebraska by inspecting nursery stock and firewood, and conducting trapping surveys.



Public Clean-up Date

May 7th - Zorinsky Lake Clean-up and Educational Event 8:00am - noon to help educate folks about zebra mussels and other invasive species.

Wehrspann Lake Fishing

Lake Wehrspann is ready for the extra anglers this spring and summer as Zorinsky is closed.

“The ice fishermen did well this winter. We have a normal pool (fill level) this spring, and our fishery is in great shape,” said Herbster.

“Just make sure your boats are clean before entering, and watch for hitchhikers!”



Grocery cart covered in mussels from a Wisconsin Lake.

ZEBRA MUSSELS. They are small clam-like creatures. But in freshwater lakes they can be incredibly damaging.

That’s why the Papio-Missouri River NRD is taking precautionary measures to prevent zebra mussels in the two metro-area lakes it owns and operates after the mussels were found this past year at Omaha’s Zorinsky Lake.

Zebra mussels are small mollusks which tend to congregate together and multiply exponentially. Often no larger than a finger nail, masses of mussels may colonize on water intake pipes and severely restricting the water flow to power plants, out of reservoirs or other municipal or private facilities that rely on fresh water. Zebra mussels also upset ecosystems in lakes and threaten native wildlife. And recreationally, zebra mussels can adversely impact fishing.

According to **Jerry Herbster, NRD Park Superintendent**, both Wehrspann Lake and the lake at Prairie View Recreation Area have not been affected by mussels. Staff from the Nebraska Game and Parks Commission regularly monitor local area lakes by seeing if any mussels are attached to tubes suspended in the lakes.

Zebra mussels will attach to almost any hard surface, either natural or man-made. On boats, they may attach to the hull, motor, or any item immersed in the water. Small zebra mussels may get into engine cooling systems, causing overheating and other damage.

And, boats can also unknowingly take the mussels to other lakes. That’s why the NRD and other local

lakes are monitoring the situation so the mussels do not spread. Signs have been posted at local lakes encouraging anglers and boaters to wash and dry their boats thoroughly after leaving one lake and entering another. Also, boaters need to look over their boats and engines for these aquatic hitchhikers.

The zebra mussels have been in the United States for several years, and are moving westwardly. It’s hard to eradicate the mussels; that’s why the US Army Corps of Engineers took a drastic step this winter by draining Lake Zorinsky. The premise: once the freezing cold temperatures hit the lake, the mussels and their larvae will dry out and freeze. Also, by lowering the lake levels, the experts will know where the zebra mussels were located and will be able to develop future monitoring and management plans.

Zorinsky Lake is slated to be empty all summer, and in the fall the lake will be allowed to fill. At that time the NE Game and Parks will restock the lake with large-mouth bass, walleye, crappie, bluegill and channel catfish.

Projects Update

Elkhorn & Platte River Access Sites

The NRD now operates 4 public access sites along the Platte and Elkhorn Rivers.

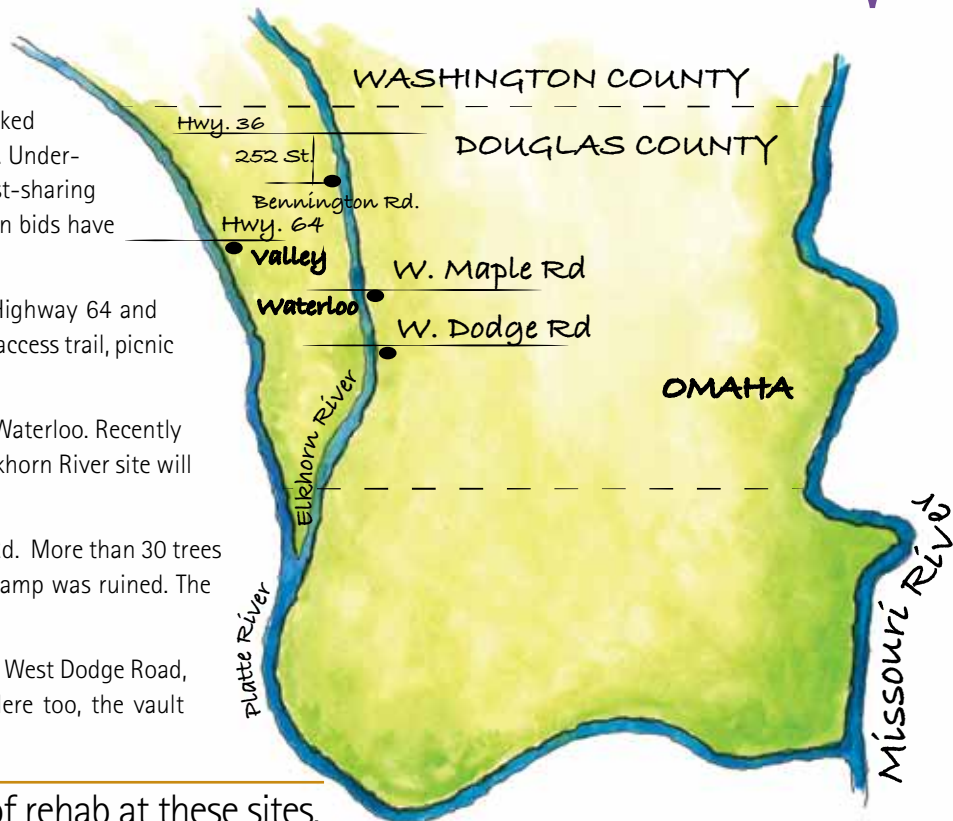
Flooding along the Elkhorn River last summer wreaked havoc on all three of the NRD's Elkhorn river access sites. Undergoing rehab is a long process, as federal emergency cost-sharing funds are needed for the costly rehabilitation. Restoration bids have been let and clean-up plans are underway.

OPEN: Platte River Landing along the Platte River near Highway 64 and Valley. This rustic site offers a concrete boat ramp, fishing access trail, picnic tables and vault toilets from 6 AM to 10PM.

Pending till May or June 2011: West Maple Road Site at Waterloo. Recently given to the NRD for operations and maintenance, this Elkhorn River site will be open later this spring. Hours: 6 AM – 10 PM

CLOSED For now: Elkhorn Crossing at 252 & Bennington Rd. More than 30 trees were downed, the site was covered in silt and the boat ramp was ruined. The elevated vault toilet was spared.

CLOSED for now: Graska Crossing. On the Elkhorn River at West Dodge Road, this site needs debris removal and a new boat ramp. Here too, the vault toilets were spared.



For more information on the progress of rehab at these sites, please stay in touch with the NRD: www.papionrd.org or via [facebook](#).

BLAIR BUILDING PROGRESSES

Progress continues on the new service center in Blair for the NRD and federal agencies who work with landowners and operators. Slated to open in June, this building will house the NRD's Washington County staff, USDA's Natural Resources Conservation Service, Farm Services Agency and the NRD's rural water staff. Called a "green building" this building will feature a vegetative roof, natural lighting, geothermal heating and cooling and other environmentally friendly features.



Metro Trails Growing

► Details on a four-mile trail project near Springfield are wrapping up; and the project will be bid this fall. This limestone trail will take hikers and bikers from Highway 50 to the Lied Platte River Bridge following Highway 31. It's already been approved for state funding at an 80% cost-share rate.

► Also, this summer, NRD staff will be working on details with the last segment of the Omaha side MOPAC trail which runs from Chalco Hills to Highway 50. Plans call for construction to start on this last segment this fall as well

Averting an Ice Jam Disaster



A diary of 2011 ice jams along the Platte and Elkhorn Rivers

Flooding caused by ice jams has caused major damage over the years to land, highways, railroads and residences in Sarpy and Douglas Counties. Stretches of the Platte and Elkhorn Rivers are prone to ice jam flooding, and abundant snowfall and cold temperatures in December and January set the stage for possible flooding because the area experienced some of the thickest ice seen in years..

The Papio-Missouri River staff consistently monitored the rivers, and had multiple plans in place in case the situation escalated.

Following is a diary of sorts from **Marlin Petermann and NRD staff** on the narrowly missed flood early this spring.

Ice jam flooding: Jams can occur when warmth and heavy rain cause snow to melt rapidly. As the river swells, the ice on top breaks apart and piles up downstream. This causes the river to overflow its banks.

► **December, 2010:** River Ice Observers Workshop. Meetings with NRD staff, ice observers and the Nebraska Emergency Management Agency.

► **January, 2011:** Weekly Ice Thickness measurements taken by NRD staff. Ice measured 20 inches in Feb; the thickest within the last 10 years and greater than the average thickness when flooding had occurred.

► **January, 2011:** Ice jam formation deemed a moderate threat by Omaha District Corps of Engineers

► **February 11, 2011:** Daily monitoring of river ice conditions from the ground; also staff monitoring from a Civil Air Patrol aircraft and an Omaha helicopter.

► **February 18 – 21:** Emergency Preparedness conference call between Douglas County Emergency Management Agency and NRD. 24-hour river watch of ice breakup.

Water levels within inches of overtopping access road/levees around Woodcliff in northeast Saunders County. Large ice floes - many ice chunks 30 inches thick - were the river to dangerously high levels along Union Dike levee in Douglas County.

A partially open channel was found on the Platte River from Fremont to Plattsmouth.

► **February 22:** An ice jam is naturally released around Union Dike. Pattern of ice and water flows is very similar to the pattern caused by a man-made explosion. No explosives are needed.

Close flooding calls were recorded near the Villa Springs development south of Springfield, Hawaiian Village south of Papillion, near Highway 64, Union Dike, Ginger Woods, Ginger Cove, Sokol camp near Blondo Street and other locations.

Lessons Learned:

Ice breakup on the Platte River below I-80 caused rapid and significant river fluctuations not normally seen; will investigate this for future solutions.

Ice and water flow from above North Bend brought very large ice pieces and significant problems.

Daily aerial photos of Platte and Elkhorn rivers provided by USACE were very helpful and should be continued.

The naturally occurring release of the Woodcliff/ Union dike ice jam with its water flow pattern shows that the NRD's method using explosives to release ice jams, when needed, is correct.

► Daily River Report:

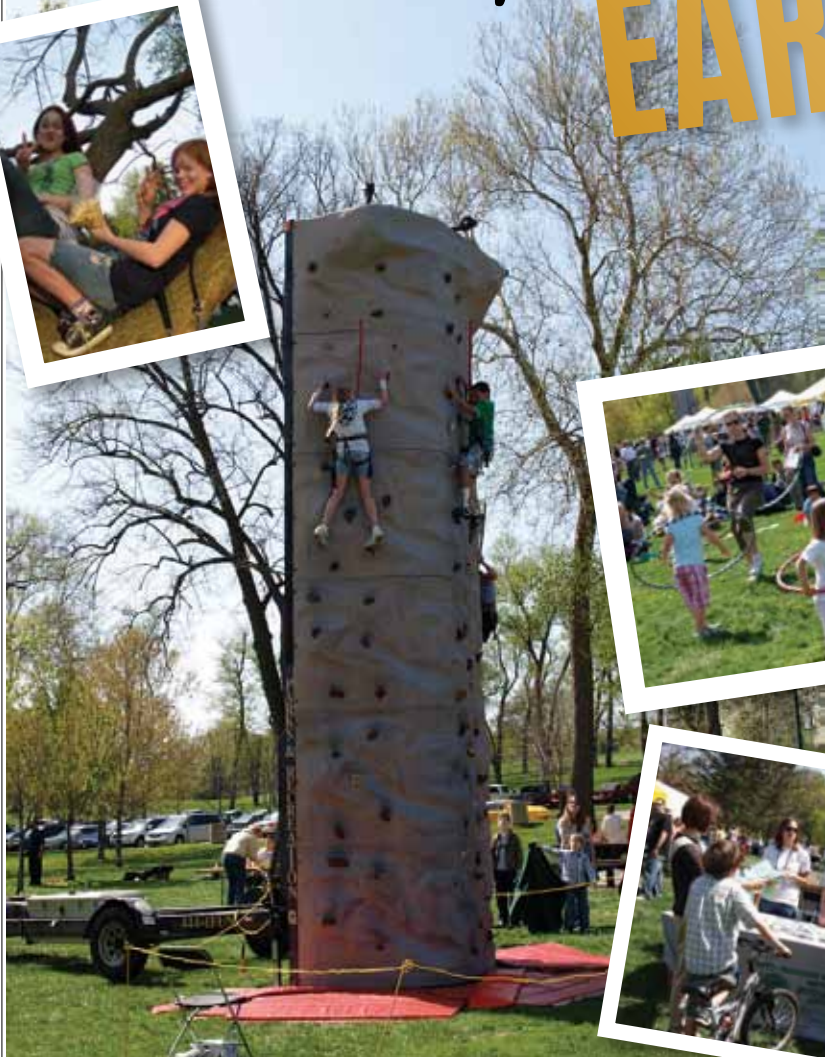
Special thanks to **NRD Director Rich Tesar** for his ongoing work with river monitoring. River updates are available by subscribing to his report: **DAILY_RIVER_REPORT@msn.com.**



Photo: Rich Tesar

Get Ready To Celebrate!

EARTH DAY 2011 OMAHA 2011 Earth Day Every Day



Join the FREE Fun!
Earth Day Omaha
Elmwood Park
Saturday, April 23

- ▶ **NRD CHILDREN'S TENT:**
Composting & free worms to take home
Demonstrations
Plant your own flower
Reusing materials from home
- ▶ **ALSO:**
Bands
Health/wellness demonstration area
Alternative energy vehicles for adults
Rockwall and face painting

▶ **VOLUNTEERS NEEDED**

www.earthdayomaha.com

▶ Envirothon Competition: BELLEVUE EAST Wins

Each year, the NRD sponsors a high school competition on the environment. This year, 18 teams competed from 19 schools - the largest Metro Regional competition to date.

Station winners: ♦ **Policy = Millard South** ♦ **Special Topics = Concordia A and OPS Zoo Partnership A** ♦ **Forestry = Burke A and Bellevue East** ♦ **Range = Bellevue West B and Bellevue East** ♦ **Soils = Bellevue West B** ♦ **Aquatics = Bellevue East** ♦ **Wildlife = OPS Zoo Partnership B**

NEBRASKA'S NRDS



Bellevue East won the overall competition

Bellevue East Team

Metro Area Treasure Hunt

The third, and last edition of the Metro Area's GO! Play Adventure booklet will debut at Omaha Community Centers on Father's Day weekend in June.

This adventure takes families across the metro area to 23 sites for fun and a post hunt. Books can be turned in for prizes.



NRD's Nature Playground

Next to Picnic Area A at Chalco Hills is a new nature playground. It's an area designed with children in mind, allowing space for discovery of the senses, and an explosion of the imagination. It will be filled with art, trails, water, trees, flowers, hollow logs, and sand piles and will grow with the children who explore it. The main idea is to get children playing with nature, not just in it.

Come ENJOY! This spring and summer more plants will be added.

Celebrate Trees: Grant Program With a New Leaf

Trees offer so many benefits: among them shade, beauty, habitat, fruit and oxygen.

That's why the NRD offers a tree planting grant program for cities, villages and towns. Celebrate Trees is a grant program for public entities looking to plant trees on public property and right of way where there is a great need. Recently, program guidelines have been revamped offering up to \$2,500 per site. While this year's spring grant deadline is over, consider getting your local town involved next year in applying for this grant.



Advice from the experts:
When planting trees:
think diversity in species!

\$ AVAILABLE for OLD WELLS

Properly sealing old abandoned wells continues to be an important practice in protecting our groundwater from contamination. The Papio-Missouri River NRD's Well Abandonment Program continues to provide financial assistance to property owners with these projects. The NRD offers cost-sharing assistance of up to 60% of the costs to properly seal and abandon old wells, not to exceed \$500 for drilled wells, \$700 for dug wells, and \$1,000 for irrigation wells.

Contact your local field office for more information.



EXCELLING ...

The Washington County Chapter of the Pheasants Forever recently received a special Conservation of Excellence Award and was named "Outstanding Chapter."

The local chapter has raised more than \$100,000 in contributions towards habitat improvement and conservation.

Terry Schumacher, NRD Field Rep in Washington County, helped establish this chapter and has been President of the chapter for three years.

WELL DONE! ✨

Richard Kolowski, PHD, Chairman

John Winkler, General Manager

Emmett Egr, Information/Education Coordinator

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The NRD Board holds its monthly public meeting the second Thursday of the month at Chalco Hills Recreation Area, 7 PM. The NRD is an equal opportunity provider.

Spectrum writer/designer: Jennifer Knight, Little House Publications



SPRING, 2011

Finding Solutions

8901 S. 154th St
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**PAPIO-MISSOURI RIVER
NATURAL
RESOURCES
DISTRICT**



RETURN SERVICE REQUESTED

