

# WEEKLY MEMO

**Date:** June 10, 2011

**To:** Mayor Lynn Stauss, Council President Craig Buckalew, Vice President Wayne Gregoire, Council Members Marc Demers, Ron Vonasek, Henry Tweten, Greg Leigh, and Mike Pokrzywinski.

**From:** Scott Huizenga

**RE:** Weekly Update

## **UPCOMING MEETINGS:**

*June 14, 2011 – 5:00 pm – Work Session – Training Room*

*June 21, 2011 – 5:00 pm – Council Meeting – Council Chambers*

*June 28, 2011 – 5:00 pm – Work Session – Training Room*

## **WEEKLY UPDATE:**

### **Campground could shut down**

I have discussed with the Minnesota Department of Natural Resources (DNR) the status of the Red River State Recreational Area (RRSRA) in the event of a state government shutdown. Thus far, I have been told that the RRSRA must shut down because it is a state facility. I have tentatively offered that the City could maintain operations solely with City resources in the event of a shut down, with full knowledge that state resources – including the reservation system – would be unavailable. State officials have not been moved by this offer. Maintaining consistency of operations is critical to the success of the RRSRA, even if the City must go it alone for an undetermined period.

Representative Deb Kiel will be at the work session on Tuesday to discuss the recent legislative session and the potential ramifications of a government shutdown. First and foremost, we support a resolution to the budget stalemate by both parties. We also seek state permission to simply maintain operations at our proud facility by any means necessary.

### **Northwest Street Network Steering committee**

A committee of staff, council members, and interested residents met on Thursday to begin the planning stages of the Northwest Street Network Steering Committee. The Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO), via a City staff committee, chose Alliant Engineering to lead the study. The study will explore feasibility on alternatives to several key intersections in East Grand Forks, especially 5<sup>th</sup> Avenue Northwest and Highway 2 as well as the Highway 2/220 intersection and the intersection of 17<sup>th</sup> Street/ 12<sup>th</sup> Avenue/ River Road Northwest. The committee will meet again in late July. The study is funded and staffed by the MPO as part of its biennial work program.

### **EERC Report**

The Water and Light Commission reviewed a proposal from UND's Energy and Environmental and Research Center (EERC) to study the City's water treatment plant energy saving and efficient treatment options including alternative disinfectant techniques. A copy of the EERC's

slide presentation is attached. The full agreement proposal is available in the Administration or the Water and Light office.

### **Street Improvements**

Residents will begin to see the familiar markings of the City's annual street maintenance program. Already, several minor resurfacing projects have occurred especially long 3<sup>rd</sup> Street Northwest by Sacred Heart School and on 4<sup>th</sup> Street Northwest including the parking lot of Fire Station No. 1. Several more projects will commence in the next several weeks.

## **DEPARTMENT REPORTS**

### **Police Department, Chief Mike Hedlund**

#### **HVAC System**

Work on the replacement of the PD Building HVAC system was completed this week. This is a significant project that will significantly enhance the quality and efficiency of the heating and cooling within the building. Employees have already commented that there seems to be better air flow within the building and that the air seems fresher.

#### **Traffic Safety – Watch out for Motorcycles!**

There have already been seven motorcycle deaths in the State of Minnesota this year. Please help keep our roadways safe for everyone and watch for motorcycles, bicyclists and pedestrians. Slow down and arrive safely!

#### **Marijuana Grow Operations Busted**

The Pine to Prairie Drug Task Force – made up of officers from the EGFPD, Polk County Sheriff's Office and Crookston PD – recently made arrests and seized over 18 pounds of marijuana and 19 guns at a rural Fosston residence. The marijuana had an estimated street value of \$139,000.00. A second bust occurred in McIntosh, MN where remnants of a grow operation along with various drug paraphernalia were seized.

#### **Art Fest – June 11 & 12, 2011**

The EGFPD will have a squad car on display near Cabela's during the Art Fest in GF and EGF this weekend. Various crime prevention material will be available for the public.

## **AGENDA ITEMS**

1. Representative Deb Kiel will appear at the work session to speak about the adjourned legislative session and the ongoing budget stalemate that could lead to a state government shutdown.
2. The City Council will consider a resolution to formally commence the Sherlock Forest Playground rebuilding process. Penny Pape has graciously agreed to once again co-chair fundraising and volunteer efforts along with Penny's daughter, Katie Nelson. The recommended co-chairs will discuss the early plans for the facility and efforts to procure donations and volunteers.
3. The City Engineer will seek formal approval to prepare plans and specifications for the approved Waste Water Interconnect Project. The design process is expected to take several months.
4. MPO and City staff will recommend approval for a new transit agreement with Northland Technical and Community College. The new agreement increases payments to the City from

NCTC by approximately \$2,000 – from \$4,500 to \$6,500 per year. MPO staff and NCTC student representatives negotiated the agreement.

5. Staff will present a final proposed agreement between the City and DNR to operate the Red River State Recreational Area (RRSRA) campground for five years. The draft is a result of several negotiating rounds between the City and the State, which included legislative leaders and proposed legislation during the 2011 session.
6. The State Council on Local Government Innovation is sponsoring a statewide program to coordinate local government benchmarks for cities and counties. The Council was created by the 2010 Legislature. The Office of the State Auditor operates the Council. The City could receive a small increase to its LGA allotment (approximately \$1200) and an exemption from potential levy limit legislation if the City participates in the program.

# EERC

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## ***Energy-Saving Opportunities in Water Treatment Distribution***

### ***East Grand Forks Water & Light***

**June 2, 2011**



Northern Great Plains Water Consortium®



UND  
University of  
North Dakota  
Grand Forks

## Northern Great Plains Water Consortium® (NGPWC)

- The Energy & Environmental Research Center (EERC) has managed a public-private partnership between the federal government and key regional stakeholders since 1996.
  - 1996 to 2007: U.S. Department of Agriculture-funded program focused on critical water issues in the Red River Valley
  - 2007 to present: U.S. Department of Energy (DOE)-funded program focused on the nexus of water and energy in the northern Great Plains region.
- Regional stakeholders:
  - Electrical power generation utilities
  - Oil and gas companies
  - Industry
  - Municipalities
  - State agencies
  - Other interested entities

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## Energy-Water Nexus

- Americans use more water turning on lights and running appliances each day than they do directly through washing their clothes and watering their lawns.
- Thermoelectric power generation requires large volumes of freshwater to operate.
- Thermoelectric plants contribute over 90% of the nation's electricity and account for about 40% of the nation's freshwater withdrawal and about 3% of the nation's freshwater consumption.

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Source: Carl Bauer, Director (retired), DOE National Energy Technology Laboratory (NETL), testimony to the U.S. Senate, 2009.

## Energy in Water Treatment

Energy use is a significant expense for water utilities.

- Studies have shown that energy costs can be as high as 35% of a water utility's operating and maintenance budget (second highest cost after staffing).
- Largest energy use associated with pump operation.
- Energy costs continue to rise.
- Current sustainability mandate from Minnesota Statute 216B.241d.1a(2) requires public utilities to:
  - Invest, expend, and/or contribute 1.5% of their gross operating revenues for energy conservation improvement from service provided in the state.
  - Reduce electrical consumption annually by 1.5% of kWh sales based on the average of the previous 3 years.

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## Background

- Red Lake River water has high levels of naturally occurring organic matter.
- Conventional disinfection using chlorine forms disinfection by-products (DBPs) that are regulated at low levels.
- Achieving compliance with DBP regulations has historically been a challenge.
- Alternative disinfection (ozone or ultraviolet [UV] light) may be a viable compliance option for East Grand Forks.

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## Proposed Scope of Work

- Task 1: Energy Assessment
  - Evaluate energy use at East Grand Forks Water Treatment Plant (EGFWTP) and establish baseline usage profile to identify potential energy-saving opportunities
  - Investigate and recommend modifications to equipment and operations
  - Utilize thermal imaging camera to provide infrared images of building envelopes to determine leaks as well as overheating issues in motors or electrical circuits
- Task 2: Treatability Testing
  - Two subtasks
    - a) Water quality survey
      - Establish baseline water quality for selected locations throughout the treatment process
    - b) Ozone and UV treatability experiments
      - Experiments using Red Lake River water to compare the effectiveness and assess the energy impacts of alternative disinfection methods (ozone and UV) to current chlorine treatment at EGFWTP to mitigate DBP issues

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## Treatability Test Methodology

- Testing on water samples collected from two locations at the EGFWTP
  - Following presedimentation
  - Following lime softening
- Testing to evaluate the effects of water temperature, disinfectant dose, and contact time on DBP formation
- Temperature range: 32° to 80°F to simulate seasonal water temperature
- Factorial test matrix to maximize data and information over the entire range of test conditions while conducting a minimal number of tests

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## Value to East Grand Forks

- Task 1: Energy Assessment
  - Identify potential cost savings through energy improvements
  - Costs associated with energy-related activities could be used to satisfy requirements of state statute
- Task 2: Treatability Testing
  - Establish a baseline water quality of water through the treatment process
  - Obtain necessary information to develop appropriate disinfection strategies (i.e., maintain current system or invest in new technology)

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## Contact Information

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