

City Council Agenda Items
and
Contracts, Leases or Agreements

12/18/2012

City Council Meeting Date
Agenda Items Only

David Jurgens
Submitted By

Utilities
Division

Utilities
Department

Action Required:

Approval of an agreement between the City of Fayetteville and Beaver Water District pertaining to protection of and nutrient reduction in the Beaver Lake Watershed.

\$ -		
Cost of this request	Category / Project Budget	Program Category / Project Name
Account Number	Funds Used to Date	Program / Project Category Name
Project Number	Remaining Balance	Fund Name
	\$ -	Water/Sewer

Budgeted Item

Budget Adjustment Attached

David Jurgens
Department Director

30 Nov 12
Date

Previous Ordinance or Resolution # 59-06

Original Contract Date: 3/21/2006

Original Contract Number: N/A

David B. Kelly
City Attorney

11-30-12
Date

Paul a. Bahr
Finance and Internal Services Director

11-30-2012
Date

Received in City Clerk's Office
11-30-12 P02:12 RCVD
USB

Don Man
Chief of Staff

12-3-12
Date

Received in Mayor's Office

ENTERED
11/30/12
PH

Donald Jordan
Mayor

12/4/12
Date

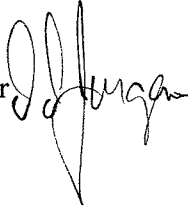
Comments:

www.accessfayetteville.org

To: Fayetteville City Council

Thru: Mayor Lioneld Jordan
Don Marr, Chief of Staff

From: David Jurgens, Utilities Director
Water/Sewer Committee



Date: November 29, 2012

Subject: Agreement with the Beaver Water District Pertaining to Protection of and Nutrient Reduction in the Beaver Lake Watershed

RECOMMENDATION

City Administration recommends approval of an agreement between the City of Fayetteville and Beaver Water District (BWD) pertaining to protection of and nutrient reduction in the Beaver Lake Watershed.

BACKGROUND

Because it is the sole source of drinking water for Northwest Arkansas, the City and BWD recognize that protecting the water quality in Beaver Lake is extremely important. Recognizing that there are both point and nonpoint nutrient sources within the watershed, both parties agree that there are substantial opportunities to protect Beaver Lake through nonpoint source pollution reduction projects. In 2006, the City and BWD entered into an agreement whereby both parties committed to actions aimed at achieving a net reduction of the Total Phosphorus (TP) load into the Lake. A few of the City's projects are below:

- Hired a consultant to develop a Nutrient Reduction Plan;
- Developed streambank protection and Low Impact Development ordinances;
- Maintained annual wastewater discharge phosphorus loadings to below 0.5 parts per million (ppm);
- Restored several river and stream banks; and
- Executed extensive public education.

The City's National Pollutant Discharge Elimination System (NPDES) discharge permit for the Noland Wastewater Treatment Facility (WWTF) allows a 1.0 ppm TP discharge into the White River. When we added the West Side WWTF, the total number of pounds we could discharge to the White River almost doubled, because our total allowable discharge volume increased from 12.6 million gallons per day (mgd) to 21.2 mgd. BWD objected, requesting the TP limit be reduced to 0.5 ppm, but withdrew their objections when we entered this shared agreement, as the actions performed would create a much larger reduction of TP into the watershed than would the more restrictive, and much more expensive, NPDES permit limit.

DISCUSSION

The benefits – both financial and environmental – of the work performed relating to the first agreement are substantial, and City Administration intends to continue these type efforts. The partnership between BWD and the City further increased the benefits; many of these projects were joint efforts. As the City's NPDES discharge permit is now being renewed, BWD also recognized the benefits, and requested the City enter a similar second agreement. While significant progress has been made, many opportunities remain to reduce the nutrient loading to the White River. This agreement is less restrictive than the 2006 agreement, but continues nonpoint source water quality improvements as well as restricting the annual wastewater discharge phosphorus loadings to below 0.5 ppm.

BUDGET IMPACT

None. In this agreement, the City commits only to use funds as identified within the 2013 – 2017 Capital Improvements Program.

RESOLUTION NO. _____

A RESOLUTION APPROVING AN AGREEMENT WITH BEAVER WATER DISTRICT RELATED TO PROTECTION OF AND NUTRIENT REDUCTION IN THE BEAVER LAKE WATERSHED

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1. That the City Council of the City of Fayetteville, Arkansas hereby approves an agreement with Beaver Water District related to protection of and nutrient reduction in the Beaver Lake Watershed. A copy of the agreement is attached to this Resolution as Exhibit "A", and incorporated herein.

PASSED and APPROVED this 18th day of December, 2012.

APPROVED:

ATTEST:

By: _____
LIONELD JORDAN, Mayor

By: _____
SONDRA E. SMITH, City Clerk/Treasurer

**Second Agreement between
Beaver Water District and the City of Fayetteville
for the Protection of the Beaver Lake Watershed**

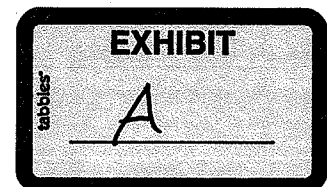
This Agreement is executed this _____ day of _____, 20___, between the City of Fayetteville, Arkansas, and Beaver Water District. The parties agree as follows:

Beaver Lake is the sole source of drinking water for most of Northwest Arkansas. The City of Fayetteville (the "City") and Beaver Water District (BWD) recognize that protection of this water supply is of extreme importance. The City has for many years taken a proactive role in minimizing the discharge of pollutants, especially phosphorus, into both the Beaver Lake and the Illinois River watersheds. BWD also has implemented a proactive source water protection program that emphasizes reducing the load of nutrients, including phosphorus, and sediments going into Beaver Lake.

In 2006, the Arkansas Department of Environmental Quality (ADEQ) proposed to issue a renewal National Pollutant Discharge Elimination System (NPDES) Permit for the City's Paul R. Noland Wastewater Treatment Plant (the "Noland WWTP") that would allow almost a doubling over time of the discharge of treated effluent into the White River approximately six miles upstream of Beaver Lake. Concurrently, ADEQ proposed a reduction in the NPDES Permit effluent discharge limitation for Total Phosphorus from 1.0 milligram per liter (mg/l) to 0.5 mg/l on a monthly average basis. That meant that while the volume of treated effluent discharged to the White River could almost double, the pounds of Total Phosphorus discharged would not increase.

The Noland WWTP had a demonstrated record of maintaining the Total Phosphorus concentration in its treated effluent below 0.5 mg/l. Operating the WWTP to ensure compliance with a more stringent Total Phosphorus limit in its NPDES Permit, however, would increase the operational costs. The City and BWD both recognized that significant amounts of phosphorus in the Beaver Lake watershed come from nonpoint sources, and that a more cost-effective approach to reducing nutrient loading to the Beaver Lake watershed might be to reduce nonpoint source, rather than point source, pollution.

The City and BWD entered into an agreement for the protection of the Beaver Lake watershed in March 2006 (hereinafter referred to as the "First Agreement"). The First Agreement set forth a series of actions that would allow the Noland WWTP to keep a 1.0 mg/l Total Phosphorus effluent discharge limit in its renewal NPDES Permit in exchange for the City conducting a program to reduce nonpoint source loadings of phosphorus within the Beaver Lake watershed. In essence, the First Agreement was based on the City's and BWD's commitment to show reductions of phosphorus from nonpoint sources sufficient to offset the increased phosphorus loading from the Noland WWTP that would be allowed if the renewal permit provided for a discharge flow increase and kept the 1.0 mg/l Total Phosphorus limit. In express recognition of the First Agreement, ADEQ issued the renewal NPDES Permit for the Noland WWTP, effective June 1, 2006 (hereinafter referred to as the "2006 Permit"), with a Total Phosphorus limit of 1.0 mg/l.



ADEQ currently is in the process of again renewing the NPDES Permit for the Noland WWTP. The City and BWD believe that the actions taken under the First Agreement have been productive and that, if continued as follows, they warrant the retention of the 1.0 mg/l Total Phosphorus limit in the next renewal NPDES Permit for the Noland WWTP. Therefore, the following actions and commitments have been agreed to by the City and BWD:

1. The City will maintain the operation of the Noland WWTP to achieve an effluent discharge of Total Phosphorus (TP) that is at or below 0.5 mg/l on an annual average basis.
2. The annual load of TP discharged to the White River will be no more than 9.49 tons.
3. The total load of TP discharged to the White River from July 1 to October 31 of each year will be no more than 2.85 tons.
4. The average daily load of TP discharged to the White River from July 1 to October 31 of each year will be no more than 46.7 pounds (lbs).
5. The maximum daily load of TP discharged to the White River from July 1 to October 31 of each year will be no more than 93.4 lbs. (1.0 mg/l TP x 11.2 million gallons per day x 8.34 lbs per gallon).
6. The City will report monthly to BWD the discharged loads and concentrations of TP from the Noland WWTP.
7. The City will continue to review City codes and ordinances for opportunities to improve nonpoint source controls.
8. The City will continue to evaluate the creation of a stormwater management utility.
9. The City will continue to implement nonpoint source reduction projects (such as stream bank restorations, rain garden construction, and educational programs) at levels consistent with the City's 2013 – 2017 Capital Improvement Plan.
10. BWD will continue to implement its source water protection program (which includes watershed and in-lake monitoring and modeling, public outreach and education, and support for land conservation) at levels consistent with BWD's annual budget as approved by its Board of Directors.
11. BWD will continue to work with other entities within the Beaver Lake watershed to implement the Beaver Watershed Alliance's May 2012 Revised Beaver Lake Watershed Protection Strategy.

12. Both BWD and the City will seek outside sources of funding to leverage their respective expenditures on source water protection and nonpoint source reduction projects.
13. The City and BWD will meet quarterly to coordinate and share plans for future efforts and review progress made by both parties in achieving the goals of this Second Agreement.

Both BWD and the City recognize that at certain times extreme environmental conditions may make it impossible to meet some or all of the above actions and commitments.

This Second Agreement shall be in effect upon signature by both the City and BWD and shall remain in effect during the term of the renewal NPDES Permit that replaces the 2006 Permit.

**CITY OF FAYETTEVILLE,
ARKANSAS**

**BEAVER WATER
DISTRICT**

Date

Date

Lioneld Jordan, Mayor

President
Board of Directors

Sondra Smith, City Clerk

Secretary
Board of Directors