

MEMORANDUM #09-51

To: Doug Russell, City Manager
From: Kyle Goodmanson, Director of Environmental Services
Date: March 3, 2009
Subject: Water Source / HDR

As a continuation of the 2005 Master Planning Study, the City of Yankton contracted with HDR Engineering, Inc. to investigate an improved water source to replace the East intake which is becoming an unreliable source due to decreasing water levels of the Missouri River. The latest work was done following the results of prior testing which eliminated the Riverside Park site due to limited well yield potential. The following statements summarize some of the advantages of ground water source over our current surface water intake.

- The potential to make use to river bank filtration
- Improved quality and consistency of water to treatment facilities
- Elimination of potential Zebra Mussel fouling
- Less impact from colored water episodes in the Missouri River
- Fluctuations in temperature are reduced and eliminates "frazzle ice" conditions
- Not impacted by fluctuations in water surface elevation changes

Data has also shown that river bank filtration should decrease the THM's. Preliminary data collected from the test well and survey data from downstream river bank filtered water suggest a reduction in THM's adequate to obtain compliance.

HDR has previously reported information relevant to their investigation and options for development at a location on the south side of the river.

The Environmental Services Department recommends the City of Yankton proceed with Nebraska well site for water source development. It is also the recommendation that city staff perform due diligence to reach an agreement for easement acquisition by April 6, 2009.

Resolution #09-12

AUTHORIZING RESOLUTION

Nebraska Well Site Source Water Development

WHEREAS, the City of Yankton strives to produce a water quality that meets all local, state and federal requirements; and

WHEREAS, the City of Yankton has identified the need for an improved raw water source; and

WHEREAS, the City of Yankton has identified the need to replace the east intake structure; now

THEREFORE, BE IT RESOLVED, that the Yankton City Commission duly authorizes the source water development of raw water wells on the Nebraska well site; and

BE IT FURTHER RESOLVED, that the City of Yankton staff perform due diligence in reaching an agreement for easement acquisition by April 6, 2009.

Dated this 9th day of March 2009.

SIGNED:

Dan Specht, Mayor

S E A L

ATTEST:

Al Viereck, Finance Officer