



City of Grand Island

Tuesday, November 16, 2010

Study Session

Item -3

Upadte on Waste Water Capital Imprpovement Plan (CIP)

Staff Contact: Steve Riehle

Council Agenda Memo

From: Steven P. Riehle, Public Works Directore
Meeting: November 16, 2010
Subject: Update on Waste Water Capital Improvement Plan (CIP)
Item #'s: 3
Presenter(s): Steven P. Riehle, Public Works Director

Background

Comprehensive planning is important for a utility operation to insure the system be sized and maintained at a level that is necessary to accomplish the vital public purposes for which it is in place.

Waste water master planning is used to develop a Capital Improvement Plan, multi-year rate projections, and of course annual budgets. The Plan analyzed collection system issues such as flow projections, system condition, and operation & maintenance plans. The Plan addresses treatment plant issues such as loading & hydraulic capacity, condition, operation & maintenance plans, and future regulations. The Plan also recommends a short and long range Capital Improvement Plan.

Consulting Engineering firm CH2MHill worked with city staff in developing an updated comprehensive plan for the waste water collection system and treatment plant. The waste water comprehensive plan was completed in May with the City Council approving the certificate of completion for the consulting agreement with CH2MHill in August of 2010.

The Waste Water Comprehensive Plan recommended an increased emphasis on the collection system, especially the gravity sanitary sewer interceptor mains because of their condition. The Plan also recommended a smaller emphasis on treatment plant projects because of the reduced loading from the JBS meat packing plant.

In conjunction with the finalization of the planning process, the City hired the firm of Black and Vetch to conduct a rate analysis incorporating key components of the Master Plan including the need for capital investment and debt financing. An initial presentation, "Report on Revenue Requirements, Cost of Service and Rates for Wastewater Service" was made to the City Council by consultant Anna White of B&V in May of 2009. Subsequent to that, changes in the rate analysis have been made as JBS plans have

solidified and better information has been generated on the effect upon City revenue from reduced loadings from JBS.

Discussion

With the decision by JBS to construct extensive pretreatment facilities, the emphasis of the Plan changed to include a more aggressive commitment to replacement and upgrade of collection facilities. Among the planned projects most impacted by the JBS construction will be the Digester project which the City had planned for and spent several hundred dollars in designing. The need for that project in the short term is negated as the sludge generation at the plant is expected to be significantly reduced.

The Fiscal Year 2011 Waste Water budget was put together using the Waste Water Comprehensive Plan as a starting point. The attached 5 year Waste Water Capital Improvement Plan (CIP) was put together using information from the Waste Water Comprehensive Plan and considered parameters such as condition, flow, growth, loading, permit requirements, and future regulations. The projects were prioritized with a ranking and scoring system that considered a number of factors including benefit and risk. Two large projects are included in the front end of the timeline, including a new aeration basis on the treatment side and replacement of a portion of the North Interceptor Sewer on the collection side.

The CIP that incorporated in to the 2009 rate analysis included approximately \$50m in capital investment, whereas the revision to the rate analysis reduced that by approximately \$8m.

The revised rate analysis also incorporates new revenue projections associated with the extensive increase in pretreatment that is expected to occur at the JBS site.

Conclusion

This is a presentation, and no action is expected at this time. It is intended to provide the City Council with an awareness of the impact on the 2009 rate analysis that is associated with the revised CIP and the JBS conversion.

It is expected that this will be brought back to Council in a follow-up Study Session for discussion and to identify the course of action to take on potential changes to the CIP and the rate model.