



City of Grand Island

Tuesday, March 17, 2009

Study Session

Item -1

Presentation Concerning Groundwater

Staff Contact: Steve Riehle

Council Agenda Memo

From: Steven P. Riehle, Public Works Director
Meeting: March 17, 2009
Subject: Presentation Concerning Groundwater
Item #'s: 1
Presenter(s): Steven P. Riehle, Public Works Director

Background

Historical Ground Water Elevations

City staff has gathered information on historical ground water elevations and rainfall amounts dating back to 1968.

Well Drawdown

The Stolley Park drinking water well and the Parkview drinking water wells #1 and #2 were operated in June of 2008 to assist with lowering groundwater.

Stolley Drainage

Olsson Associates is studying the drainage system along Stolley Park Road east of Blaine Street to review the capacity of the system.

Contamination Plume

Olsson Associates is modeling the movement of the contamination plume from future operation of the Stolley Park drinking water well and the Parkview drinking water wells #1 & #2.

Discussion

Historical Ground Water Elevations

The historical ground water elevations for the 39 observation wells the city monitors will be presented from 1998 to present. The charts will also show rainfall amounts in relation to ground water elevations.

Well Drawdown

The city will show the impact the operation of the wells have on lowering groundwater by showing both theoretical and actual drawdown curves.

Stolley Drainage

If there is adequate capacity in the system, the city will proceed with plans to add another 24” storm drainage pipe under Stolley Park Road west of Blaine Street. If there is not adequate capacity, city staff will proceed with the project for a drainage system from north of Central Community College to the Wood River.

Contamination Plume

Olsson Associates will present a model showing movement of the plume from the operation of the Stolley Park drinking water well and the Parkview drinking water wells #1 & #2.

Conclusion

This item is presented to the City Council in a Study Session to allow for any questions to be answered and to create a greater understanding of the issue at hand.