Addressing Your Issues and Comments

Here's what we have heard from you so far from one-on-one interviews:

- **Build a high-quality system that will last:** "Put a little more into the right system now than have to come back and redo it in a few years."
- **Be cost-effective, throughout all stages and phases:** "Show how you calculate the project cost and the installation costs per house."
- **Keep us informed:** "This is critical for the homeowners: Tell them early, tell them often, and then tell them again; people want specifics, not vague statements."
- **Avoid construction disruptions:** "People are very finicky about their property being blocked off or used inappropriately by construction crews."
- **Design concerns:** "The wide variation in flows presents an unusual challenge in the design of both the collection and treatment systems."
- **Pollutants entering the lake:** "We know pollutants are coming in, even though we're not able to pinpoint the source."
- **Specific issues for Game and Parks:** "Trailer dump stations and fish cleaning sites will need special considerations."
- **Federal Energy Regulatory Commission (FERC) Regulations:** "The dam for Johnson Lake has more FERC regulations than any other FERC property."

JOHNSON LAKE
JLET
Johnson Lake Engineering Team

Meeting the JLET Team

Jim Olmsted
Project Manager

John S. Olsson
Project Manager

Mike Milius
Construction Engineering

Jeff Forney
Project Engineer

Jim Condon
Senior Project Engineer

Kim Jones
Project Technician

Lou Lamberty
Public Involvement

Karen Amen
Public Involvement

Lisa Behrns
Public Involvement

OLSSON ASSOCIATES
ENGINEERS • PLANNERS • SCIENTISTS • SURVEYORS

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Civil • Environmental • Transportation

Johnson Lake Wastewater System: Public Meeting

September 24, 2005

Welcome to the Public Meeting

Ever since the first cabin was built on the shores of Johnson Lake, individual home and business owners have been responsible for their own water supply and sanitary sewer facilities. However, pressures on the lake from this current system have led to the need for a more permanent and reliable wastewater treatment system.

This past spring, your Sanitary and Improvement District (SID) hired a team of engineers and scientists (the Johnson Lake Engineering team--JLET) to begin designing a comprehensive wastewater system that would help ensure the long-term health of the lake's waters.

During this morning's meeting, you will learn about the results of Phase I of this project. Using the results of the background research, the JLET team :

- Created initial concepts and drawings for various collection and treatment alternatives.
- Conducted detailed feasibility analyses of each alternative, looking at many different criteria and considerations.

Now the JLET team is ready to show you the details of its work and make their recommendations. Please visit the various stations, attend the presentation, ask questions, and, give us your feedback!

TODAY'S AGENDA

10:00	**Visit stations**
10:30	**Welcome and presentations**
11:00	**Questions, answers, comments**
11:30	**Continue visiting stations; fill out feedback sheets**

THE STATIONS

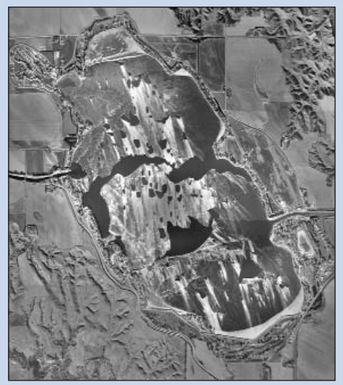
- **Project background, overview**
- **System alternatives and feasibility analyses**
- **Financing the project**
- **Construction schedule**
- **Feedback station**

Station 1: Project Background

When Johnson Lake was initially built, no one could have imagined that the lake would one day become one of the most popular recreational sites in Nebraska. But soon there was a large community of private homes and businesses around its perimeter.

Individual homeowners and businesses have been responsible for their own water supply and sanitary sewer facilities. However, as the community has grown, pressures on the lake have increased.

Routine sampling and testing by the Nebraska Department of Environmental Quality (NDEQ), started in 2001, has shown that Johnson Lake contains significant quantities of pathogenic bacteria.



December 2003 aerial view of Johnson Lake

Although the source of this has not been determined, human indicators were identified.

In March of 2000, NDEQ representatives met with JLDI officers and area presidents to explain septic system requirements and how these would impact many of the properties. It is estimated that 75 percent of the lots around Johnson Lake would not be able to obtain a permit to replace, repair, or expand their septic systems.

Lake residents realized that they needed to take positive action. In 2004 they voted to form an SID, and in February 2005, SID1 of Gosper County was legally created, with the authority to finance the design and construction of a new, lakeside sanitary sewer system.

Station 2: Alternatives and Analyses

This station has detailed information about all the alternatives we examined for both collection and treatment systems. The two tables below present major aspects of each. **These are estimates based upon this stage of design.**

ALTERNATIVE SANITARY SEWER SYSTEMS

Item	Gravity with Lift Stations	Low Pressure Grinder	Vacuum Sewer
Description	Conventional gravity sewers from each lot, flowing into main sewer lines. Includes 12 pump stations to raise the flowline when depths exceed 15 feet.	Grinder pump stations on lots; sewage flows by gravity to the grinder basin. When basin full, contents pumped into main sewer system.	Vacuum valve pits on lots, individually or shared, sewage flows by gravity to the valve pit. When pit full, contents pumped into regional vacuum station, then to treatment.
Capital Cost	$13,300,000	$12,000,000	$15,300,000
Annual O & M*	$125,000	$197,000	$243,000
40-Year Present Worth*	$20,700,000	$24,500,000	$30,000,000
Average Annual Cost	$500,000	$600,000	$750,000
Additional Considerations	•Average depths 3 -15 feet •Individual connections	•Pump stations either on individual lots or shared by two or three	•Valve pits either on individual lots or shared by two or three

ALTERNATIVE WASTEWATER TREATMENT SYSTEMS

Item	Complete Retention Lagoon	Controlled Discharge Lagoon	Mechanical Facility
Description	All water and materials are retained and treated.	Provides needed volume and storage for 270 days. Effluent discharged once a year.	Wastewater treatment facilities using two Sequencing Batch Reactors and sludge storage basins and tanks.
Capital Cost	$2,400,000	$2,000,000	$5,000,000
Annual O & M	$11,000	$19,000	$127,000
40-Year Present Worth	$3,100,000	$2,800,000	$8,000,000
Average Annual Cost	$78,000	$70,000	$199,000
Additional Considerations	•No permits required •Needs 75 acres of lagoon water surface	•Permit required •Needs 61 acres of lagoon water surface	•Permit required •Needs several buildings, computerized control system

* O & M = Operating and Maintenance Costs
Present Worth = the total cost of an alternative in terms of today's dollars.

Station 3: Team's Recommendations and Presentation

During the presentation, you will learn that the JLET team evaluated each alternative using a broad range of criteria, including:

- Capital construction costs
- Life-cycle costs
- System reliability
- Implementation capability
- Operational issues
- Regulatory compliance
- Environmental effects
- Future considerations
- Contribution to water quality objectives
- Energy and resource use
- Public acceptability

JLET's recommendations:

1. A gravity sanitary sewer collection system

2. A complete retention lagoon, which can be converted to a controlled discharge lagoon with future growth.

Reasons for recommendations:

- Proven reliability
- Most cost-effective
- No permit or regulatory compliance needed
- Minimal training requirements
- Lowest life-cycle costs
- Ease of operation

Station 4: Financing the Project: Initial Estimates

The total project cost for the recommended alternatives is estimated to be **$15.7 million**.

It is likely that **$10.1** million of this total cost will be specially assessed to the 950 lots around the lake. The average special assessment per lot will be **$10,650** which can be paid off with interest over a 10-year period. The actual assessment for each lot will vary somewhat from the average depending on the conditions encountered and the benefits conveyed to each property.

The remaining **$5.6** million of the project cost will be a general obligation of the SID. These costs will be amortized over a 20-year period. Based on the current assessed valuation of the SID and assuming an interest rate of 4.5 percent, a tax levy of $0.51 per $100 valuation would be required to pay off these costs.

This would result in an annual property tax assessment of **$510** for a house valued at $100,000.

The SID will also collect funds to pay for the annual operating and maintenance costs. This can be in the form of either a property tax levy or a periodic user fee assessment against each lot. Based on the estimated $136,000 annual operating and maintenance costs, the property tax levy would be $0.16 per $100 valuation (**$160** per year for a house valued at $100,000) or about $13.33 per month.

This is the normal and customary way of handling SID projects of this nature. However, when the project is complete, the SID Board will review all options and make final financing decisions then.

Station 5: Construction Issues and Proposed Schedule

The chart to the right shows our best estimates of a schedule for continuing into the next phases of this project.

At this point, we are not ready to ask for your individual information or issues. However, once final design begins, we will meet with the various area associations to learn about your specific and individual issues and information.

IMPLEMENTATION PLAN

Event	Date
Approve Report	October 2005
Begin Final Design	November 2005
Secure Project Funding	January 2006
Advertise for Construction Bids	Spring 2006
Begin Construction	Late Spring 2006
Complete Construction	Late Fall 2007*

* Contractor dependent

Final Station: Your Feedback

We appreciate your comments and concerns and hope you will take a moment to fill out the comment form.

Our Promise to You on How We Will Use Your Input:

We will keep you informed,
listen to and acknowledge your concerns,
and provide feedback on how your issues and comments
influenced the SID's decisions.