

September 22, 2005

Wastewater Treatment Plant Relocation and Conveyance System Project 2006 Capital Budget Request



City of Willmar



Introduction

- ◆ Les Heitke, Mayor
- ◆ Ken Sedmak, Senior Program Manager,
Donohue & Associates

Project Background

- ◆ The Users
 - 18,488 City residents and businesses/industries
 - Eagle Lake Sanitary District
- ◆ Plant is over 70 years old located in southeast Willmar
- ◆ Discharges to Hawk Creek/Minnesota River Watershed

Project Background

- ◆ Existing Wastewater Plant Deficiencies
 - Future regulatory landscape-Minnesota River water quality (phosphorous reduction)
 - Cannot reliably meet new permit limits
 - Outdated/Failed treatment technology
 - Capacity to meet City growth
- ◆ Existing Wastewater Sewer Deficiencies
 - Sewer deterioration
 - Future capacity limitations
 - Sewer surcharging and overflows
- ◆ WWTP relocation west of Willmar
- ◆ Sewer system upgrade and expansion

Wastewater Treatment Plant (WWTP) Relocation



Existing Flow



Proposed Flow

CITY of WILLMAR

0 1/3 2/3 1

Scale In Miles

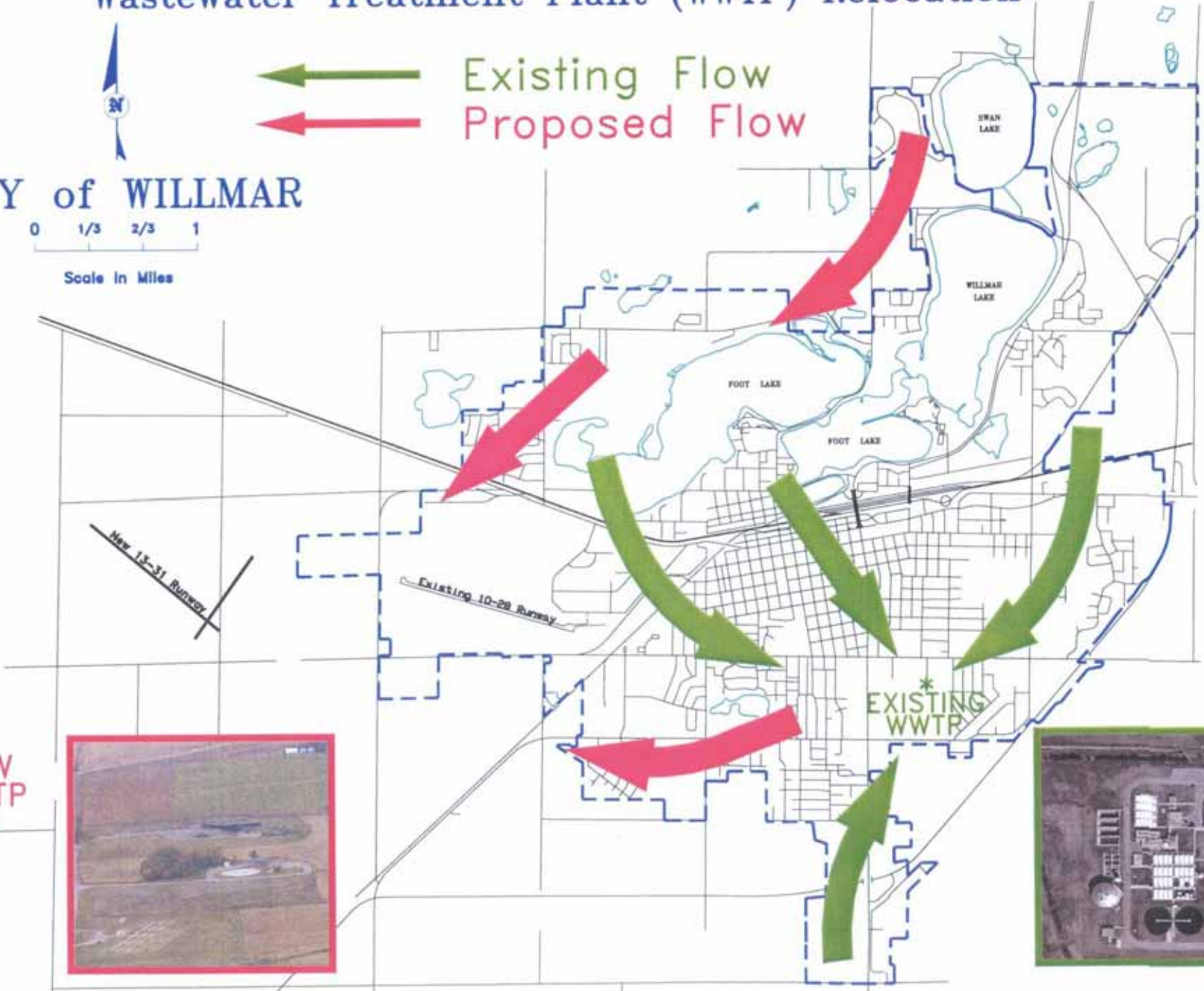
New 13-31 Runway

Existing 10-28 Runway

EXISTING
*
WWTP



NEW
WWTP
*



Purpose

◆ Our Purpose

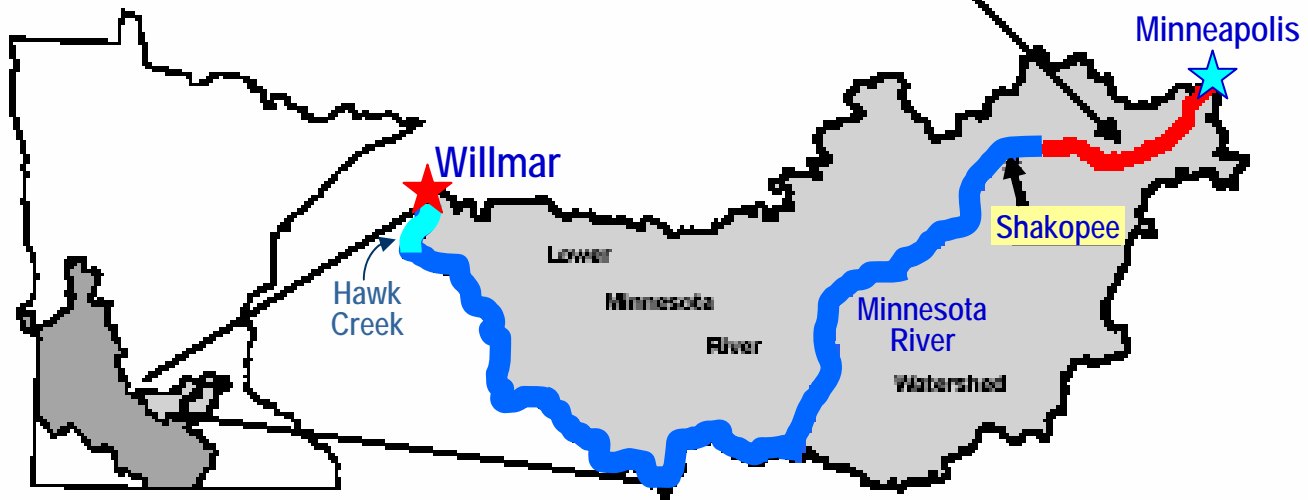
- Create a City/State/Federal Funding **Partnership**
- Maintain **affordable** sewer rates
- Document the Project's **significance** and show its impact: statewide - regionally - locally

Project Significance

Regulatory Landscape

- ◆ Statewide Impact – Phosphorus Removal
 - Second highest point source contributor (14%) to Minnesota River
 - Too much phosphorus increases river algae growth → algae dies → reduces oxygen → decomposing vegetation causing fish kill and odors
 - Project reduces Willmar's phosphorus discharge (by 90%) to lower Minnesota River watershed and improves water quality at Shakopee
- ◆ Interstate Impact - Phosphorus Removal
 - Drains to Mississippi River's Lake Pepin
 - Similar impact

Lower 22 miles, Lower Minnesota River Watershed



Project Significance

West-Central Minnesota Growth

◆ Regional Impact

- Commercial and medical center supporting west central Minnesota rural/agricultural communities with goods and services
 - Turkey, cattle, swine, produce
- Facility to provide infrastructure to support regional community
- May provide treatment to other communities: Pennock, St. John's Lake, and Kandiyohi
- Approximately one-half of people who work in Willmar live outside the City
- Protect Hawk Creek watershed

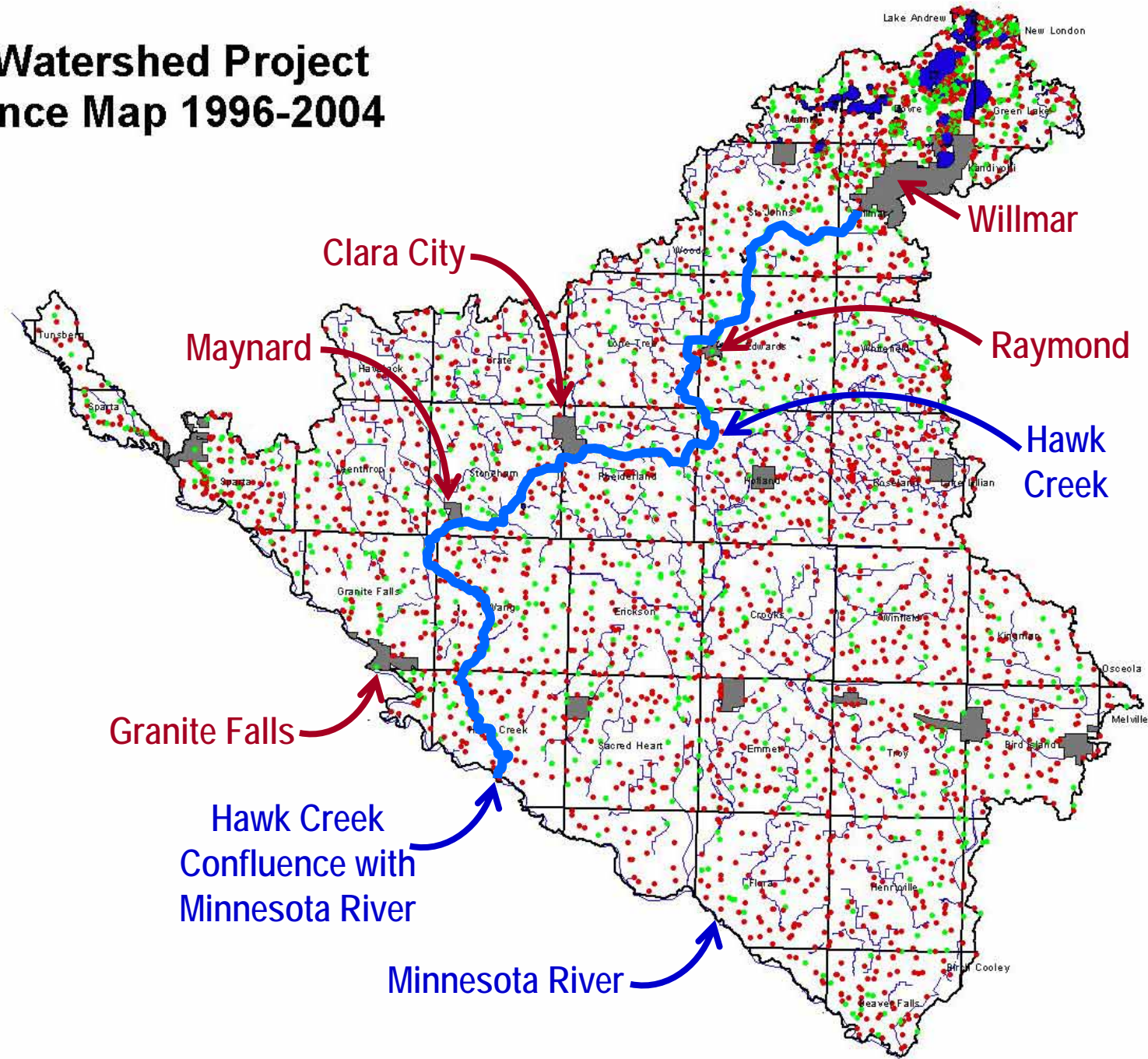
Project Significance

Environmental

◆ Local Impact

- Existing Plant
 - Objectionable odors
 - Failed technology
 - Poor plant reliability
 - Restrictive location
 - Will not meet future permit limits
- Eliminate sewer surcharging and overflows
- Connecting to septic systems within service area
- Environmental protection: “first line of defense”
- Provide sound, proven treatment infrastructure for continued City growth

Hawk Creek Watershed Project ISTS Compliance Map 1996-2004



ISTS Compliance

- No
- Yes

■ Cities

□ Townships

— Rivers

■ Lakes

N

Project Schedule

| | |
|--------------------------------|----------------------|
| Facilities Planning | May 2005 – July 2006 |
| Submit Facilities Plan to MPCA | March 1, 2006 |
| Begin Design | Late 2006 |
| Construction | Mid-2007 |
| Project Completion | Late 2010 |

This schedule is being dictated by MPCA and USEPA - NPDES Effluent Limit Discharger requirements

LEGEND

- Existing Lift Station
- Manhole
- Existing Sanitary Sewer
- Existing Foremain
- Main Sanitary Sewers
- - - Major Forcemains
- - - Existing Service Area
- - - Future Service Area
- - - Planning Area

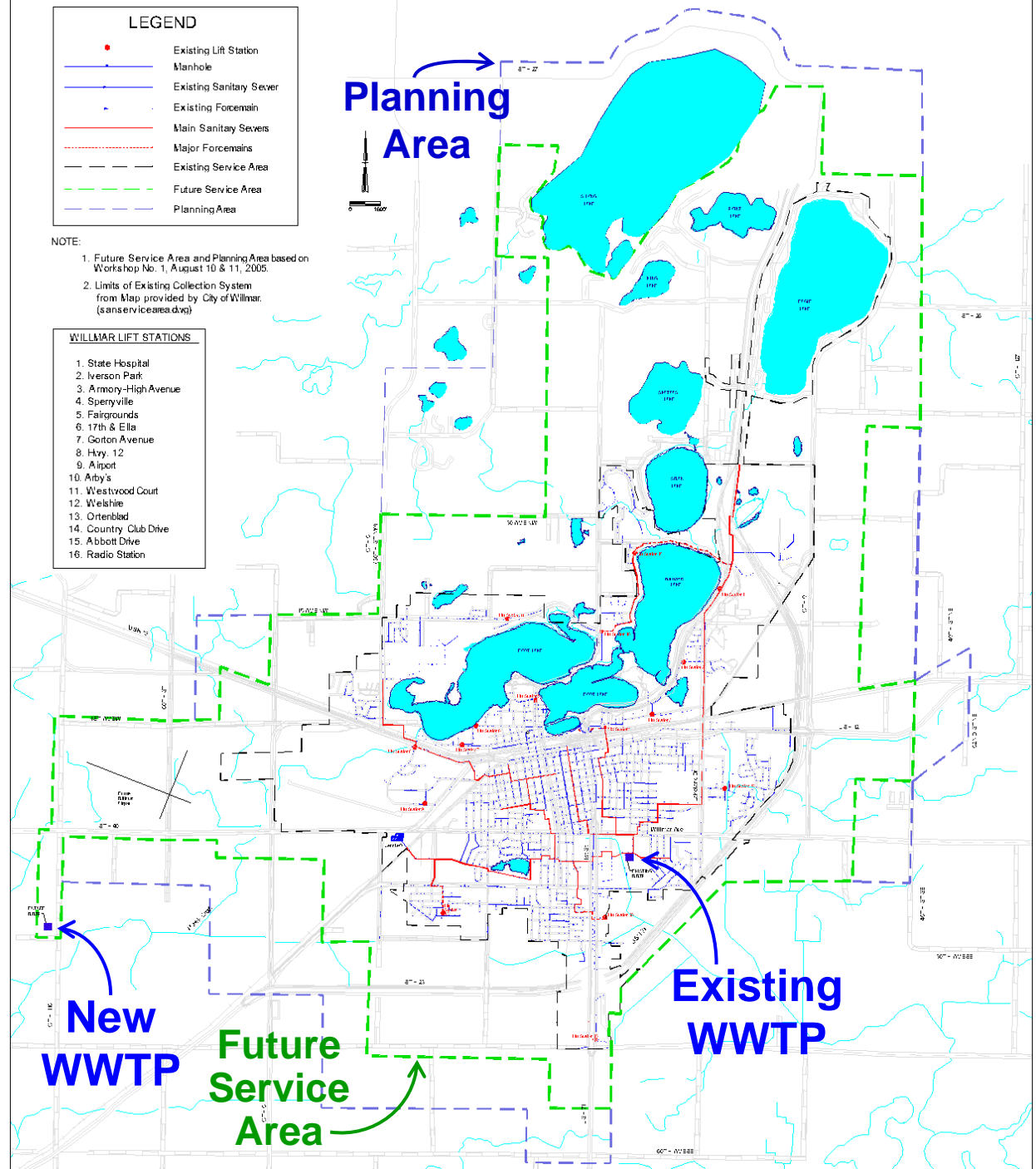
NOTE:

1. Future Service Area and Planning Area based on Workshop No. 1, August 10 & 11, 2005.
2. Limits of Existing Collection System from Map provided by City of Willmar. (sanservicearea.dwg)

WILLMAR LIFT STATIONS

1. State Hospital
2. Iverson Park
3. Armory-High Avenue
4. Sperryville
5. Fairgrounds
6. 17th & Ella
7. Gorton Avenue
8. Hwy. 12
9. Airport
10. Arby's
11. Westwood Court
12. Welshie
13. Ortenblad
14. Country Club Drive
15. Abbott Drive
16. Radio Station

Planning Area



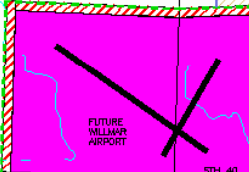
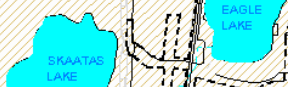
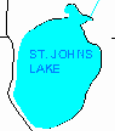
New WWTP

Future Service Area

Existing WWTP



10301 F. JO. JDT, 2005



New WWTP

Existing WWTP

NOTE:

1. FUTURE SERVICE AREA AND PLANNING AREA BASED ON WORKSHOP NO. 1, AUGUST 10 & 11, 2005.
2. LIMITS OF EXISTING COLLECTION SYSTEM FROM MAP PROVIDED BY CITY OF WILLMAR.

* FROM MMDC CITY OF WILLMAR ZONING MAP (APRIL 2004)

LEGEND

| | |
|-------------------------------------|--|
| RESIDENTIAL DISTRICTS* | INDUSTRIAL DISTRICTS* |
| R-1, One Family Residential | I-1, Limited Industry |
| R-2, One and Two Family Residential | I-2, General Industry |
| R-3, Low Density Multiple Family | |
| R-4, Medium Density Multiple Family | MISCELLANEOUS DISTRICTS* |
| R-5, High Density Multiple Family | A, Agricultural |
| | G, Government/Institutional District |
| BUSINESS DISTRICTS* | Lake/Wetland |
| LB, Limited Business | |
| GB, General Business | FUTURE DISTRICTS |
| CBD, Central Business District | FR, Future Residential |
| SC, Shopping Center | FC, Future Commercial |
| | FI, Future Industrial |
| PARK DISTRICTS* | Streams/Ditches |
| P, Park District | --- Limits of Existing Collection System |
| | - - - Future Service Area |
| | - - - Planning Area |

CITY OF WILLMAR LAND USE

Project Details

- ◆ Three Phases: Planning, Design, Construction
- ◆ The Project is in Facility Planning Phase
 - Following MPCA State revolving fund format and timeline
 - Recommended alternative will include
 - New wastewater treatment plant
 - New interceptor and force mains
 - New pumping station
 - Collection system improvements

Wastewater Treatment Plant (WWTP) Relocation



Existing Flow



Proposed Flow

CITY of WILLMAR

0 1/3 2/3 1

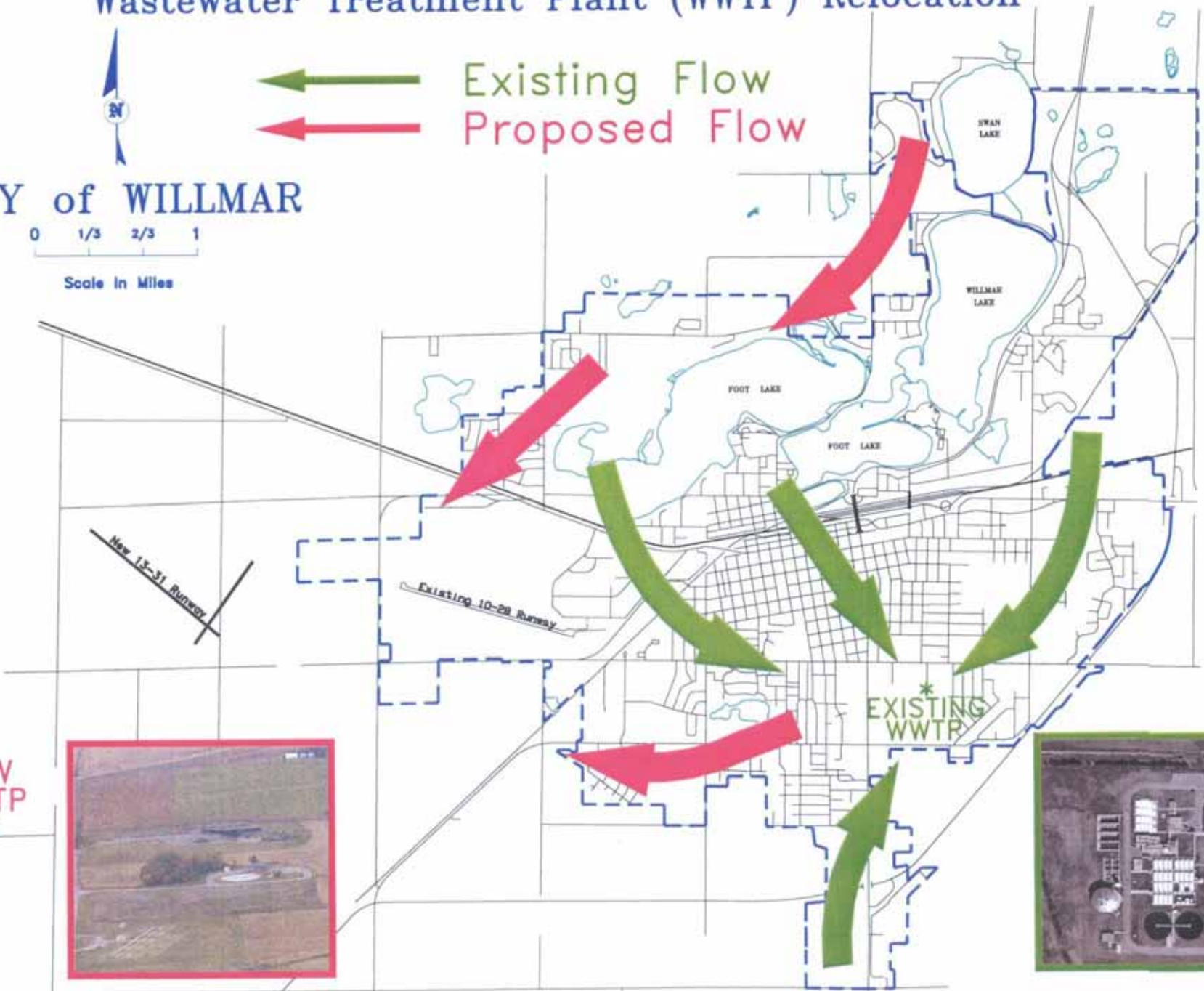
Scale In Miles

New 13-31 Runway

Existing 10-28 Runway

EXISTING
*
WWTP

NEW
*
WWTP



Project Significance

Local Impacts

◆ Local Affordability and Financial Issues

■ Current estimate: \$40 million

- City rates and reserves

• Other Sources

- Local Borrowing - Eligible Minnesota WPCRF Loan Funds
- Federal Grants - Eligible U.S. EPA STAG Congressional Funds
- State Grants - Eligible WIF or Budget Line Item
- If new jobs can be tied directly to Project - Eligible DEED grants

◆ Industrial and Commercial Issues

■ New WWTP will provide capacity for business growth

- New jobs - If cost of services is not too high

Willmar Demographics

| <u>Parameter</u> | <u>U.S.</u> | <u>Minnesota</u> | <u>Willmar</u> |
|------------------------------|-------------|------------------|----------------|
| Median Household Income | \$41,994 | \$47,111 | \$33,455 |
| Families Below Poverty Level | 9.2% | 5.1% | 8.4% |
| Persons Below Poverty Level | 12.4% | 7.9% | 13.1% |

Possible Funding Sources

◆ Local

- Existing reserves
- Annual sewer rate increases

◆ Federal

- Secured \$500,000 U.S. EPA STAG Congressional FY 2006 grant
- Additional Congressional appropriations

◆ State

- Minnesota Water Pollution Control Revolving Fund
- Capitol Budget Request
- DEED for Direct Job Impact Monies

Project Significance

National & State Impact

- ◆ Overall Minnesota Federal Tax Facts (*Northeast-Midwest Institute*)
 - Ranks 49th in federal government spending
 - Receives only 74% return of federal taxes paid
 - 12th highest federal taxed state
- ◆ U.S. EPA's STAG Special Project Funding Summary
 - \$6.4 billion since FY1992: 2,993 grants to 1,838 cities
 - State's share has been \$15 million to 8 cities, or **0.23%**
 - Willmar received \$0.5M FY2006 funding
 - Will continue federal funding partnership

2006 Capital Budget Request From State of Minnesota

- ◆ Critical project
 - Future regulatory landscape-phosphorous removal
 - Cannot reliably meet future permit limits
 - Outdated/Failed treatment technology
 - Capacity to meet City growth
- ◆ State and regional impact to watershed
- ◆ Protect west-central Minnesota environment
- ◆ Provide jobs for regional commerce center
- ◆ Ease economic burden on residents
- ◆ Provides wastewater treatment to support construction of affordable housing

Overall 5-Year Funding Objective

- ◆ Ideal Funding Scenario
 - 1/2 Project cost - locally paid or financed
 - 1/4 Project cost - State grants
 - 1/4 Project cost - Federal grants

- ◆ Financial Realities Over 5 Years
 - \$20M local
 - \$10M State
 - \$10M Federal

Discussion

