

A photograph of a construction site. In the foreground, a large blue pipe is being lowered into a trench. Two workers in high-visibility vests and hard hats are guiding the pipe. In the background, a yellow excavator is visible, and another worker stands on a dirt embankment. The scene is set outdoors under a clear sky.

Western Area Water Supply Project

Jaret Wirtz
Executive Director

ND Rural Water
Leadership Retreat
Medora, ND

July 16, 2014

WESTERN AREA WATER
SUPPLY AUTHORITY

City of Williston

**Williams Rural
Water District**

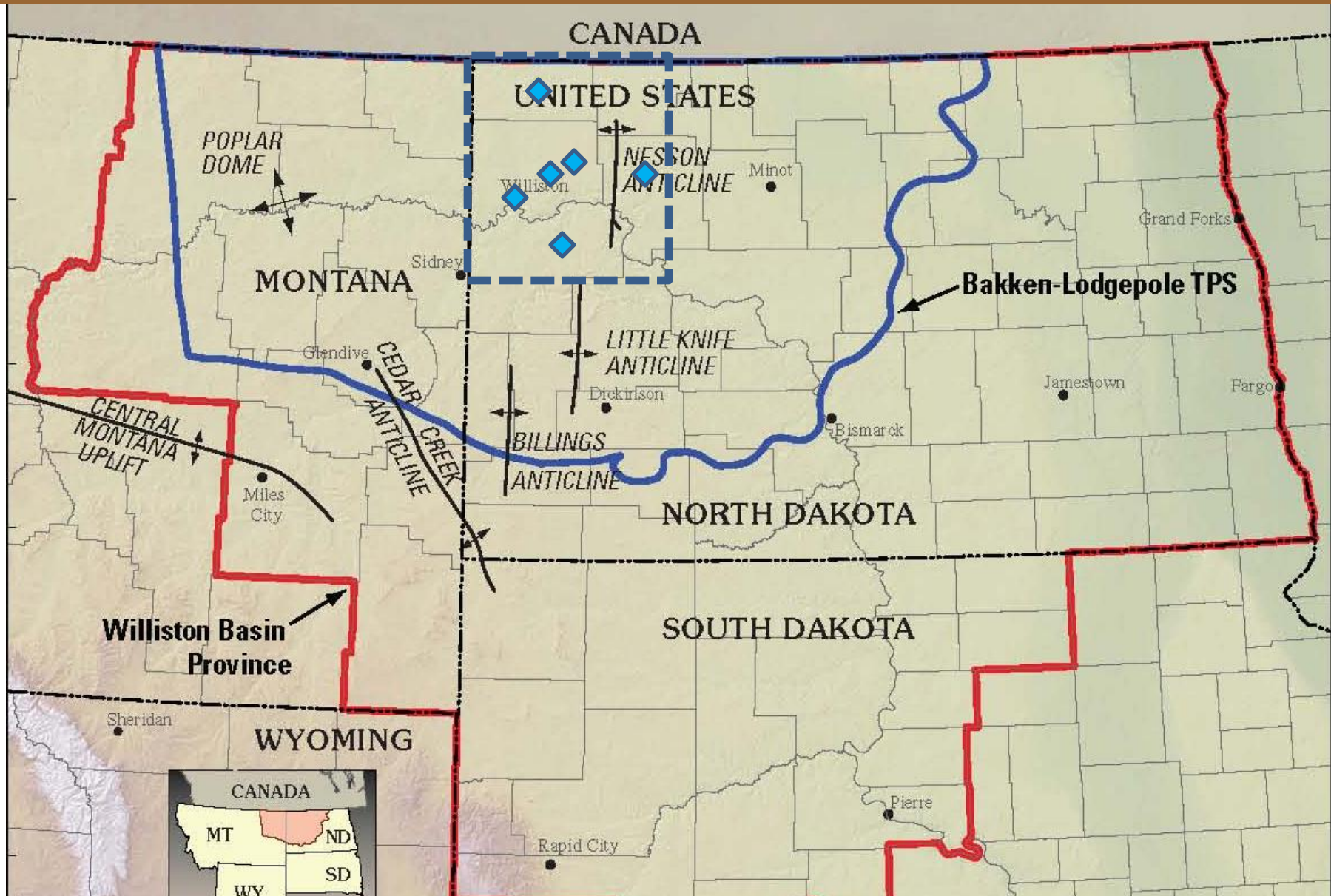
**McKenzie Water
Resources District**

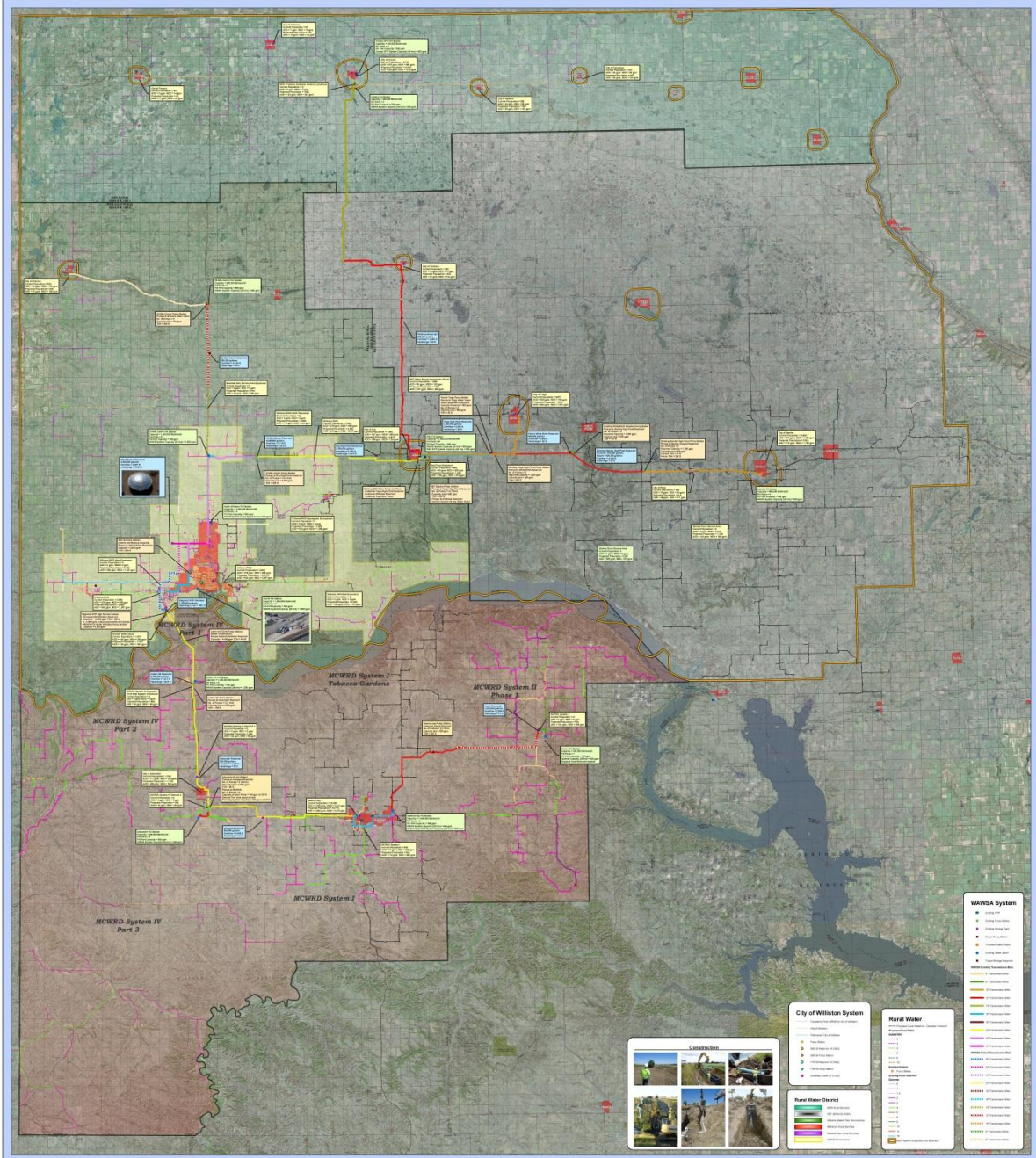
**R&T Water Supply
Commerce
Authority**

BDW Rural Water



Bakken/Three-Forks Formation Extent





Draft
JUL 16 2014

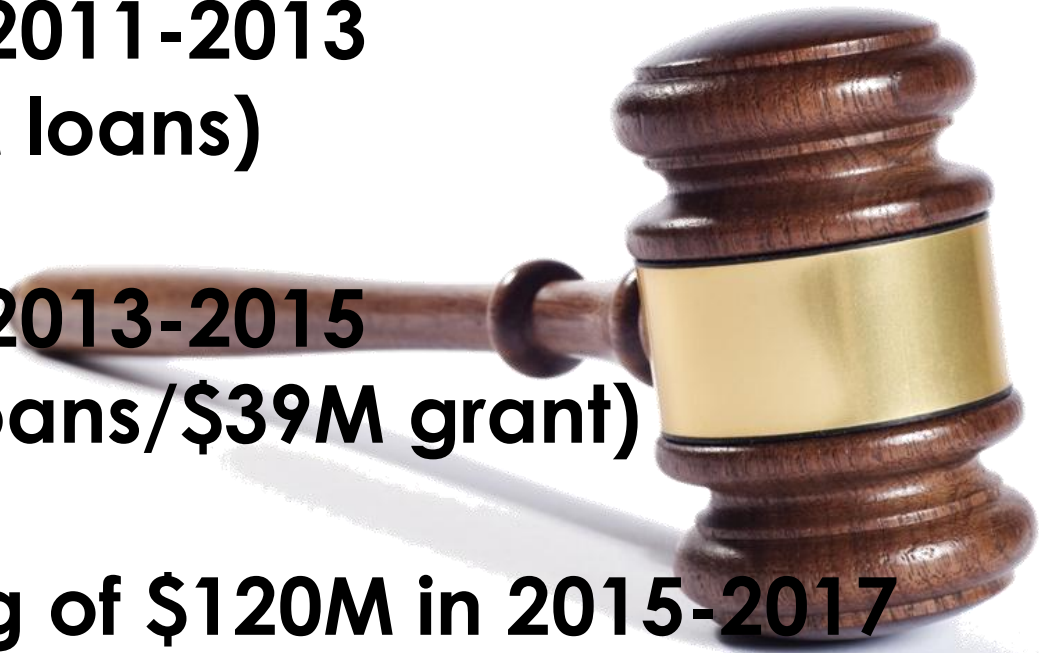
**Western Area Water Supply Project
Proposed and Existing System**

Project Background: The Need for this Project

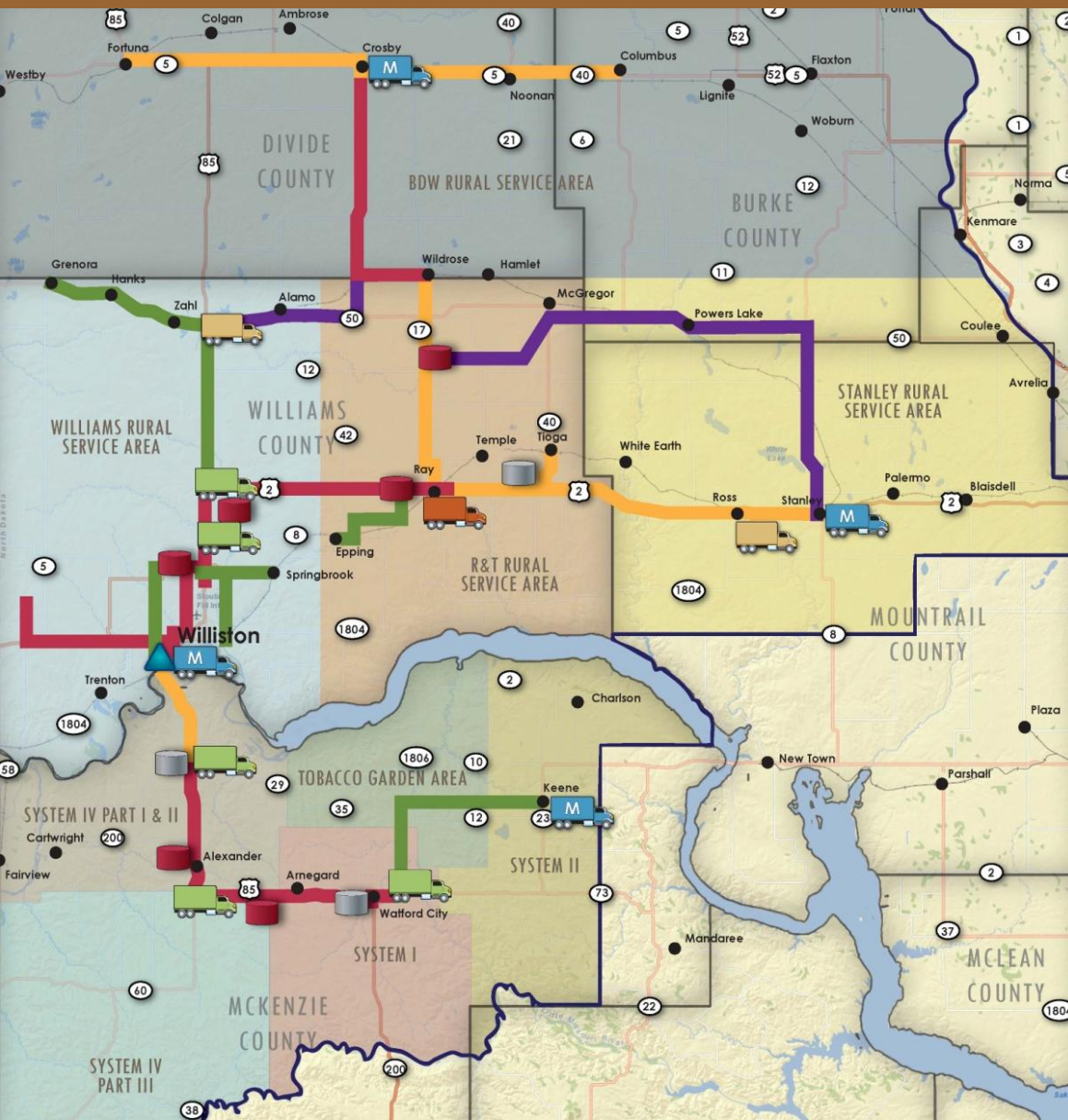
- **Increasing Water Demand/Growing Population**
- **Poor Water Quality / Insufficient Quantity**
- **Maximum Sustainable Yield Capacity of Aquifers**
- **Increasing Water Demand/Growing Population –
Moratorium on new Users**
- **Expansive Growth / Pressure & Volume Needs**

ND State Legislative Action

- **Created Western Area Water Supply Authority (WAWSA)**
- **Funded \$110M in 2011-2013 biennium (\$110 M loans)**
- **Funded \$119M in 2013-2015 biennium (\$80M loans/\$39M grant)**
- **Requested funding of \$120M in 2015-2017 biennium (\$ loan?/\$ grant?)**



Communities and Region Served

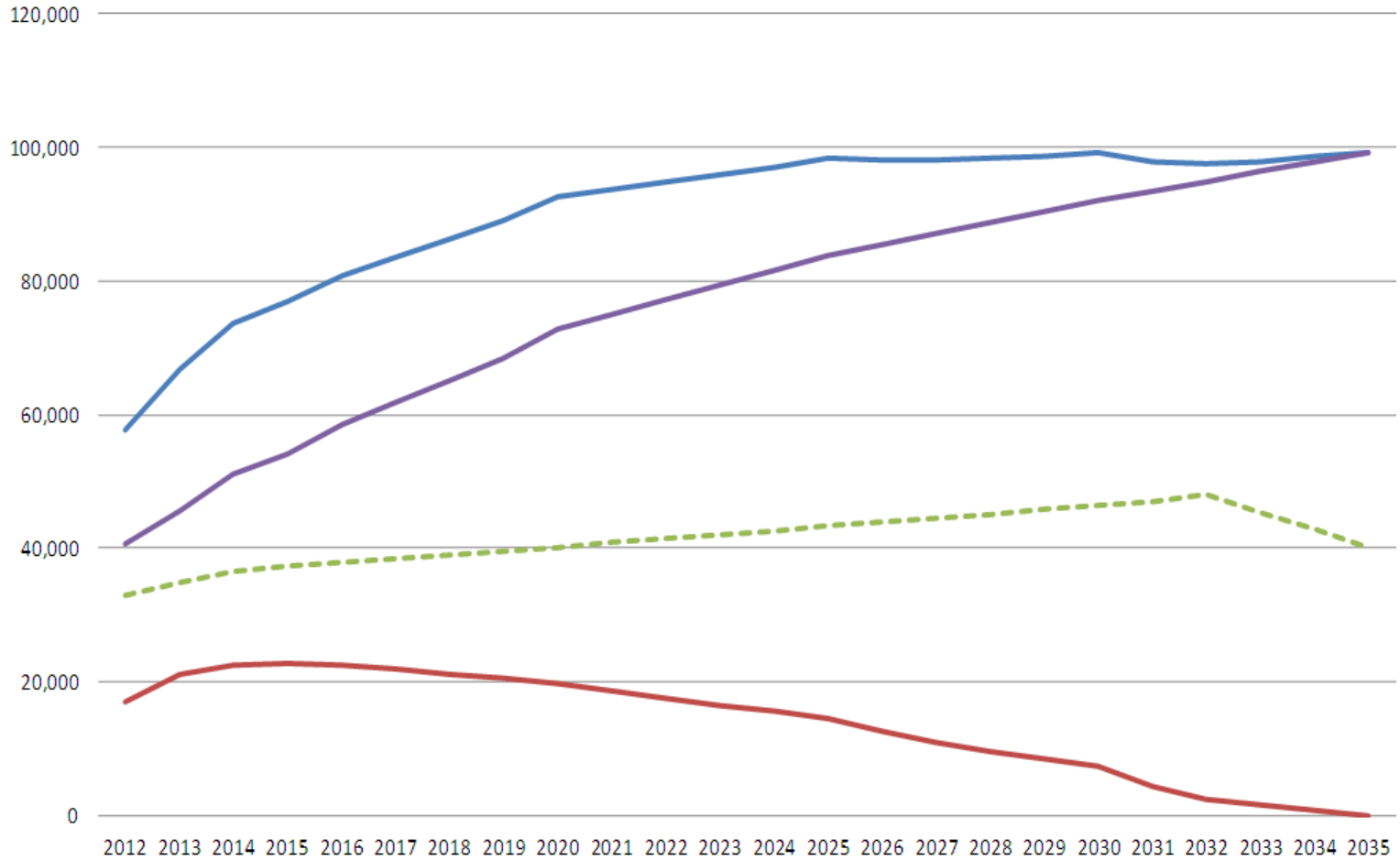


Communities such as Williston, Watford City, Ray, Tioga, Stanley, Noonan, Columbus, Fortuna, Wildrose, Crosby, and others benefit from WAWSP

- Existing Transmission Lines
- 2011/2012 Improvements
- 2013/2014 Improvements
- 2015/2016 & Beyond Improvements
- WAWSA Project Boundary Line
-  Existing Reservoir
-  2011/2012 Reservoir
-  2013/2014 Reservoir
-  WTP/Intake Expansion/Improvements
-  Existing Member Depots in Operation
-  WAWSA Depots in Operation
-  WAWSA Depots Operational by Summer 2013
-  Future WAWSA Depots

Population Growth WAWSA Service Area

* 160,000

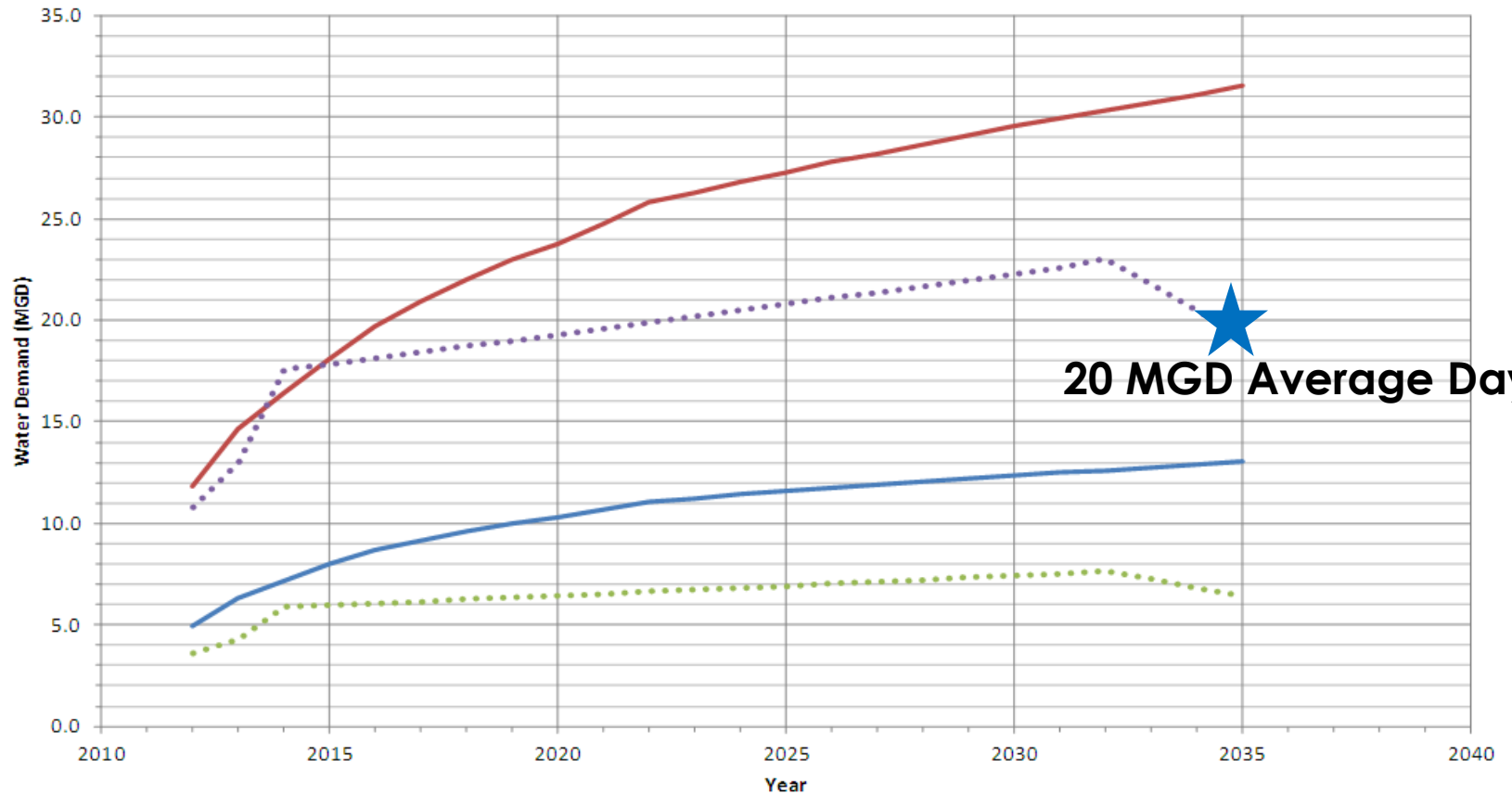


— Current (2013) Projected Total Population
 — Current (2013) Projected Temporary Population
— Current (2013) Projected Permanent Population
 - - - Previous (2011) Projected Optimistic Population

Projected Water Demands

Western Area Water Supply Project Projected Average and Peak Day Water Demands

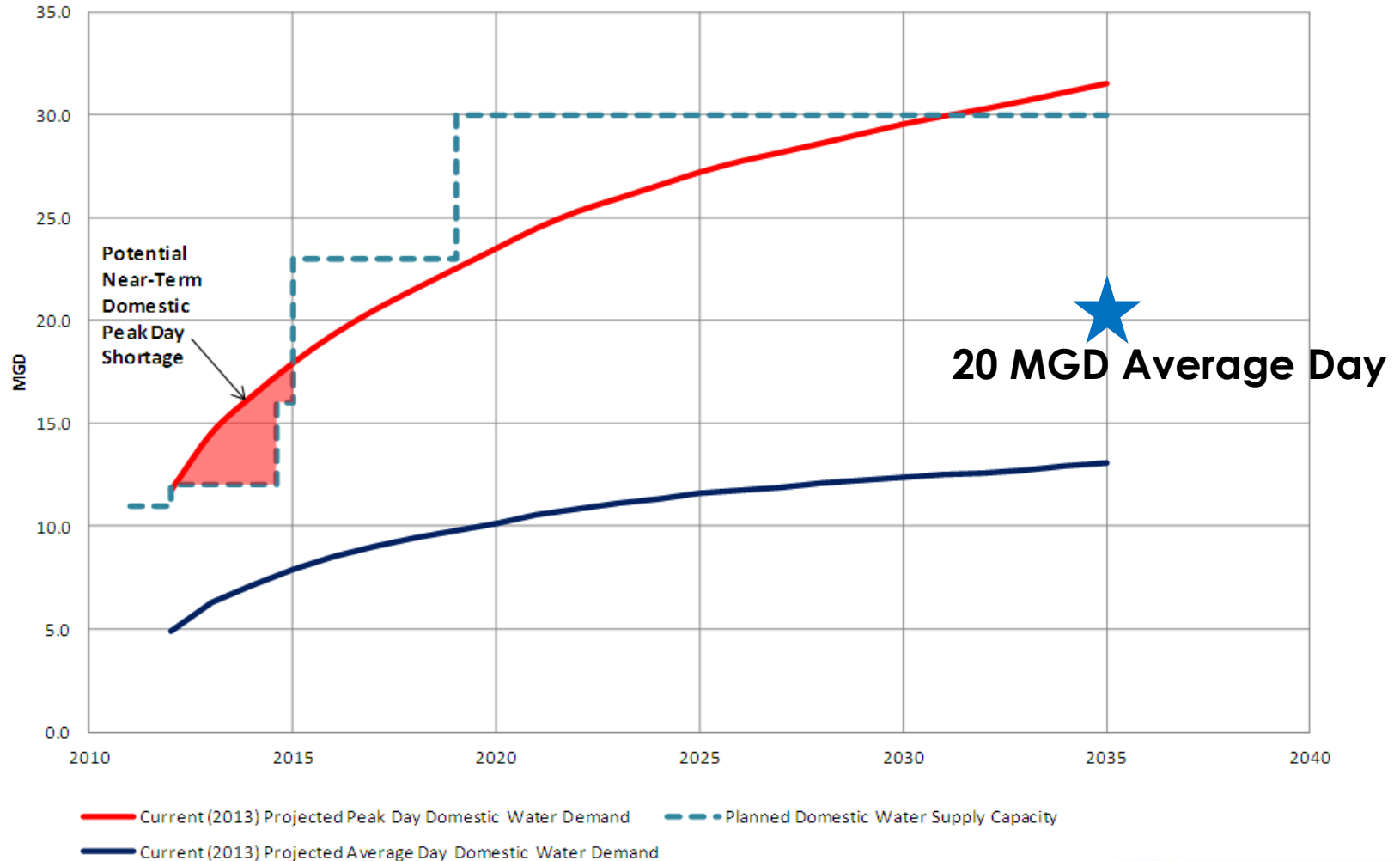
* 50 MGD Peak Day



— Current (2013) Estimated Average Day Domestic Water Demand — Current (2013) Projected Peak Day Domestic Water Demand
..... Previous (2011) Projected Average Day Domestic Water Demand Previous (2011) Projected Peak Day Domestic Water Demand

Water Supply Needs

* 50 MGD Peak Day



WAWSP By the Numbers

2010 Numbers:

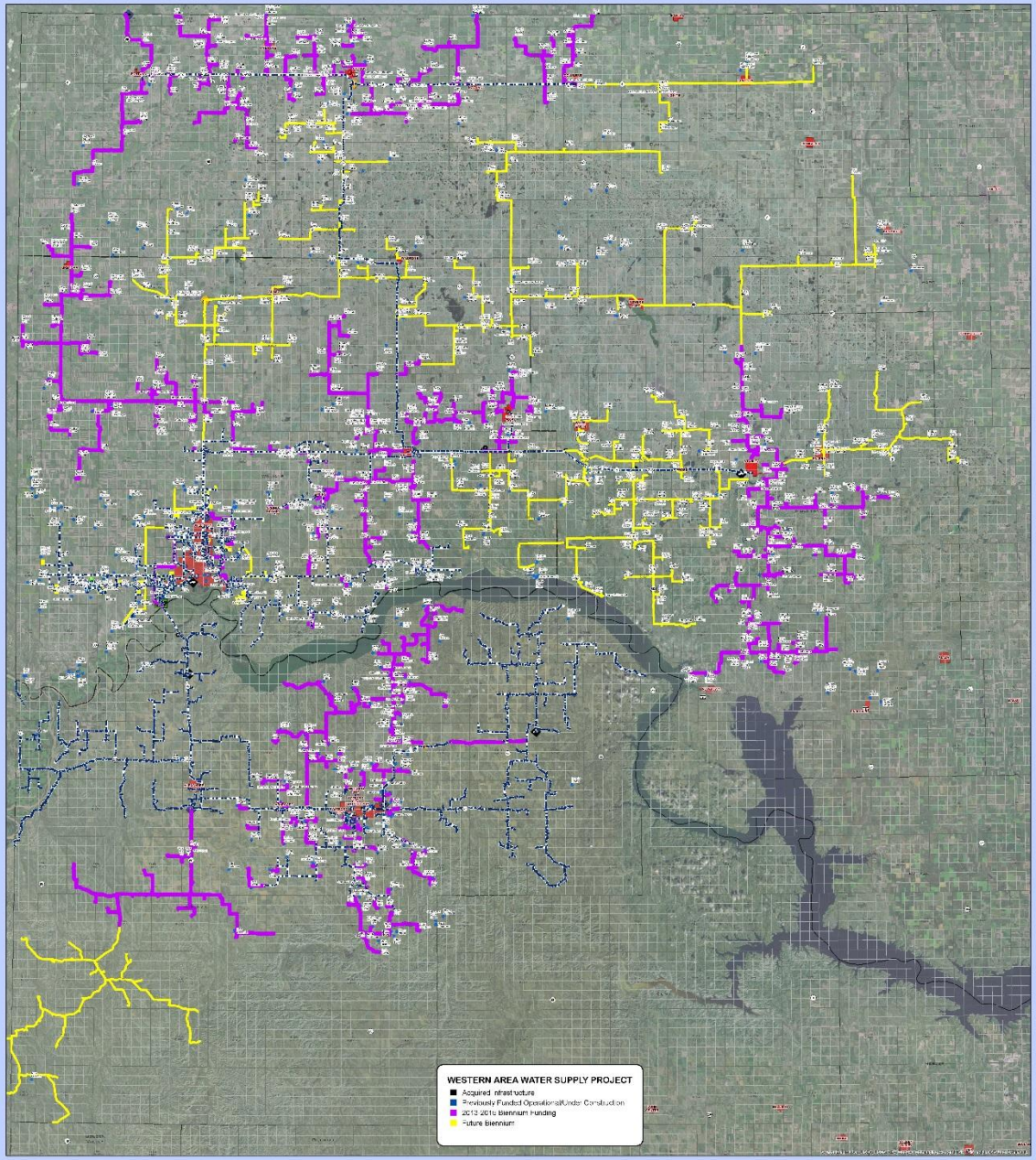
- Original plan accounted for 400 users requests

2013 Numbers:

- **1,200** rural water user hook-up requests
- **10,815** residential lot service requests
- **612** commercial lot service requests
- **4,450** crew camp/RV park service requests

Total of 17,077 user/service requests





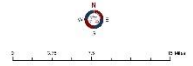
WESTERN AREA WATER SUPPLY PROJECT

- Acquired Infrastructure
- Previously Funded Operations/Under Construction
- 2012-2015 Biennium Funding
- Future Biennium

AES

All data, text, lines, and lines are an approximation and subject to change.

Western Area Water Supply Project
Proposed WRWD/R&T Boundary
 Last Updated July 16, 2014



WESTERN AREA
 WATER SUPPLY AUTHORITY

Challenges

- **Cost of Projects**
- **Changing Needs**
- **Easements**
- **Reclamation**



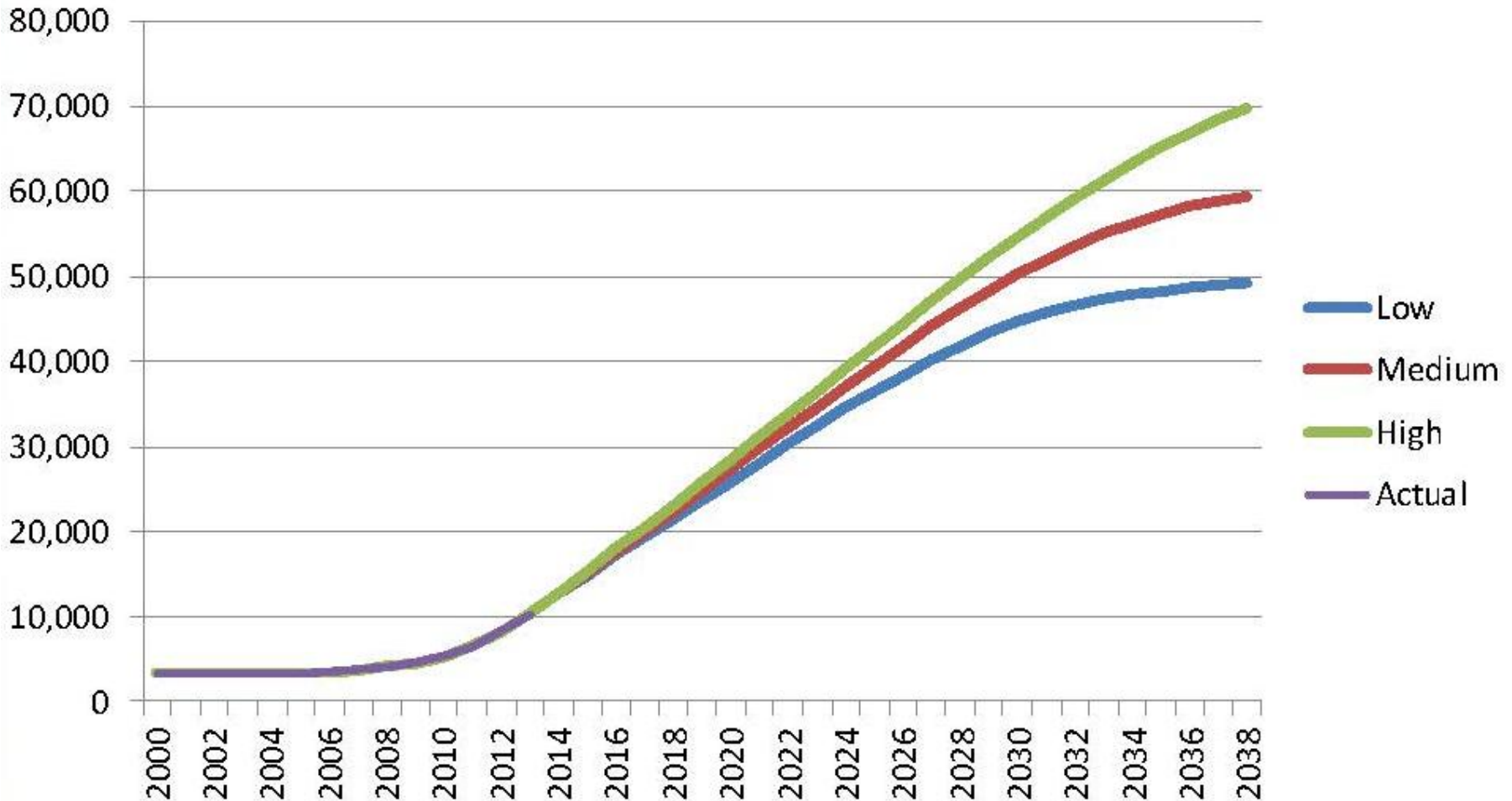
WAWS Payback

- Industrial Sales will pay back a majority of debt
 - Depots
 - Temporary Connections
 - Permanent Connections



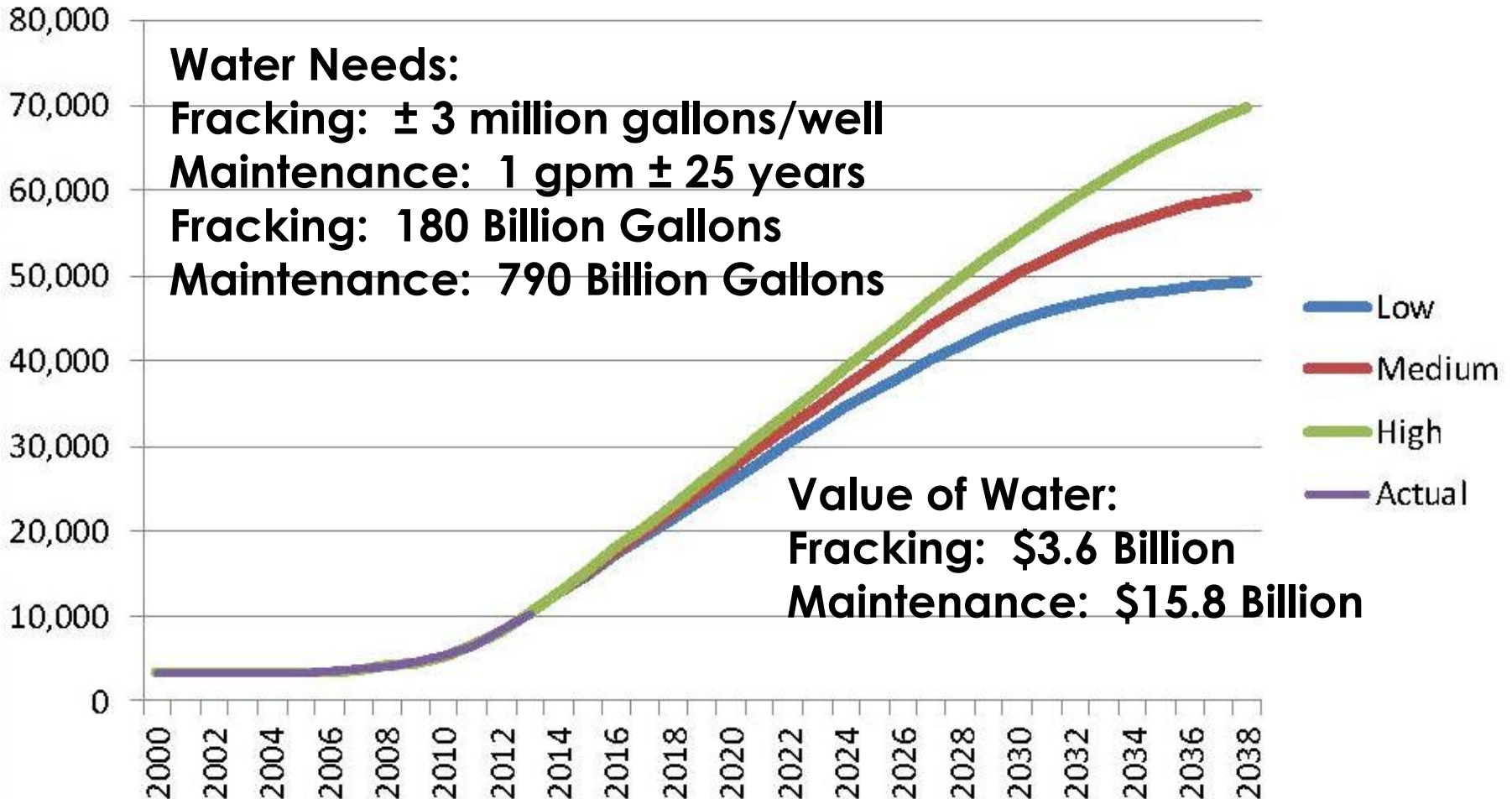
Total Producing Wells

North Dakota Producing Wells



Total Producing Wells

North Dakota Producing Wells



WAWSP By the Numbers

2012 Numbers (from ND State Water Commission):

- Statewide Oil & Gas Demand: 5.4 Billion Gallons

2013 Numbers:

- WAWSA Sales to Date: 900 Million Gallons
- WAWSA Projected Sales: 1.2 Billion Gallons

2014 Projection:

- WAWSA Sales Projected: 1.4 Billion Gallons

WAWSA PERMIT: 13.86 Billion Gallons/Year



WAWS Total Industrial Sales

- **2012: \$9,709,708**
 - **2013: \$24,043,600**
 - **2014: \$16,561,094 (6 months)**
- Total \$50,314,402**



Principal and Interest Payments

- 2013: \$2,118,572
- 2014: \$7,696,187 (6 months)

• Total \$9,814,759



WESTERN AREA

WATER SUPPLY AUTHORITY

For more information, please contact:

Jaret Wirtz, Executive Director

701-774-6605

Jaret.Wirtz@WAWSP.com

www.WAWSP.com