



Region of Waterloo

Long Term Water Supply Strategy

Jorge Cavalcante

Manager, Engineering & Planning – Water Services

Water Symposium to Conserve and Protect

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Region of Waterloo

Presentation Outline

- Background
- 2007 Water Supply Strategy
- 2013 Water Supply Strategy



Region of Waterloo

The Region's Water Supply

➤ Population

- 2011: 553,000 people
- 2031: 729,000 people

➤ Water System

- Integrated Urban System
- 16 Rural Systems
- 25% Groundwater
- 75% Surface Water



GIS department.



Water Supply

2007 Long Term Strategy

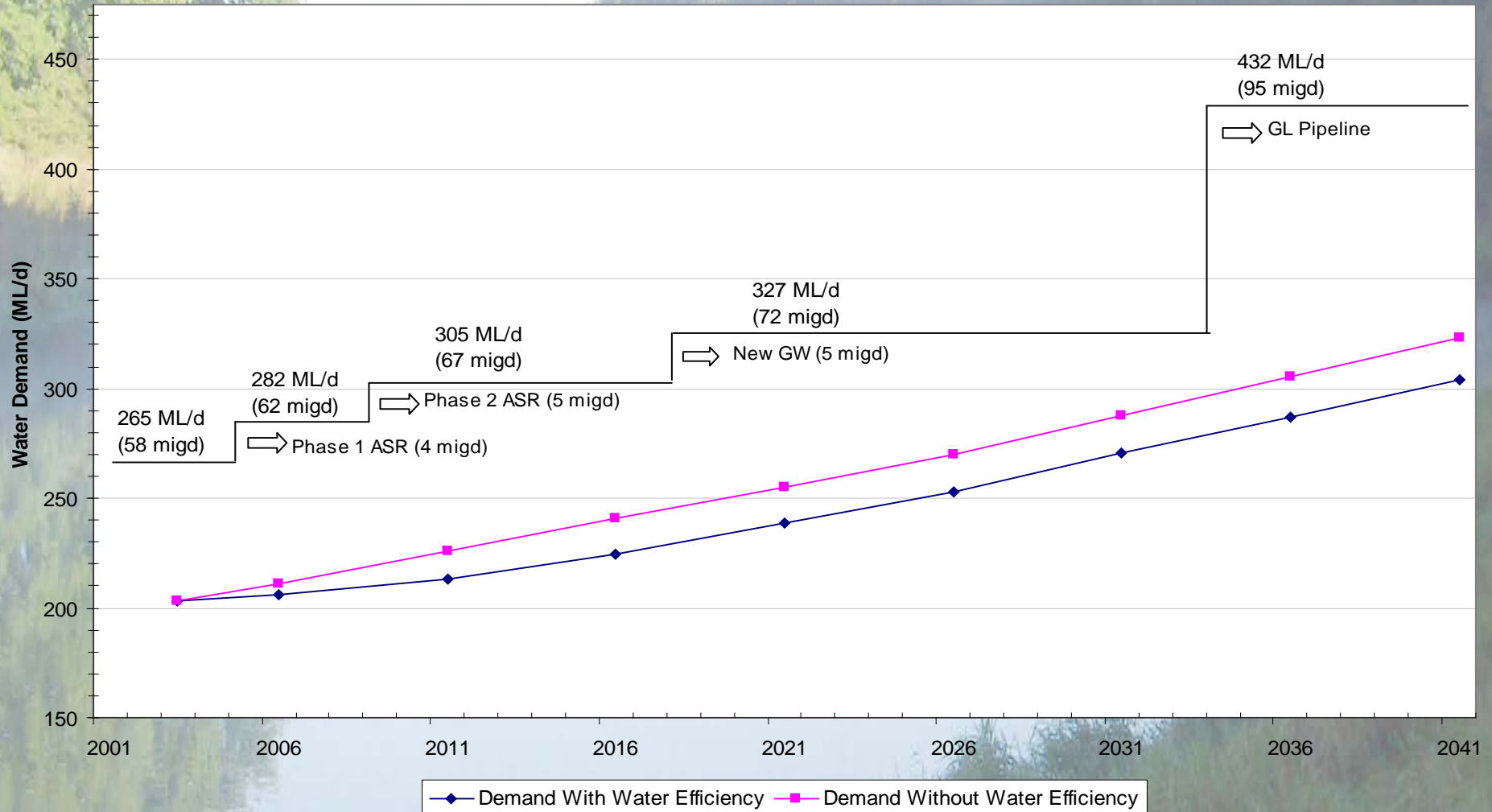
- 2007 Water Supply Master Plan
 - Confirmed the 2000 Strategy, including:
 - Construct 45 MLD Aquifer Storage and Recovery (ASR) facility in two phases
 - Develop up to 22.5 MLD new groundwater resources by 2018
 - Plan/construct Great Lakes Pipeline by 2035 (Lake Erie)
 - Continue with water efficiency efforts



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2007 Long Term Strategy

Recommended strategy with maximum week demand effective water efficiency program & water restrictions





Water Supply

2013 Water Supply Master Plan

➤ **The Big Shift**

- Declining Water Demands in the Region (and in North America)
- Which components of the 2007 Master Plan are still valid?
- What do we do next ?

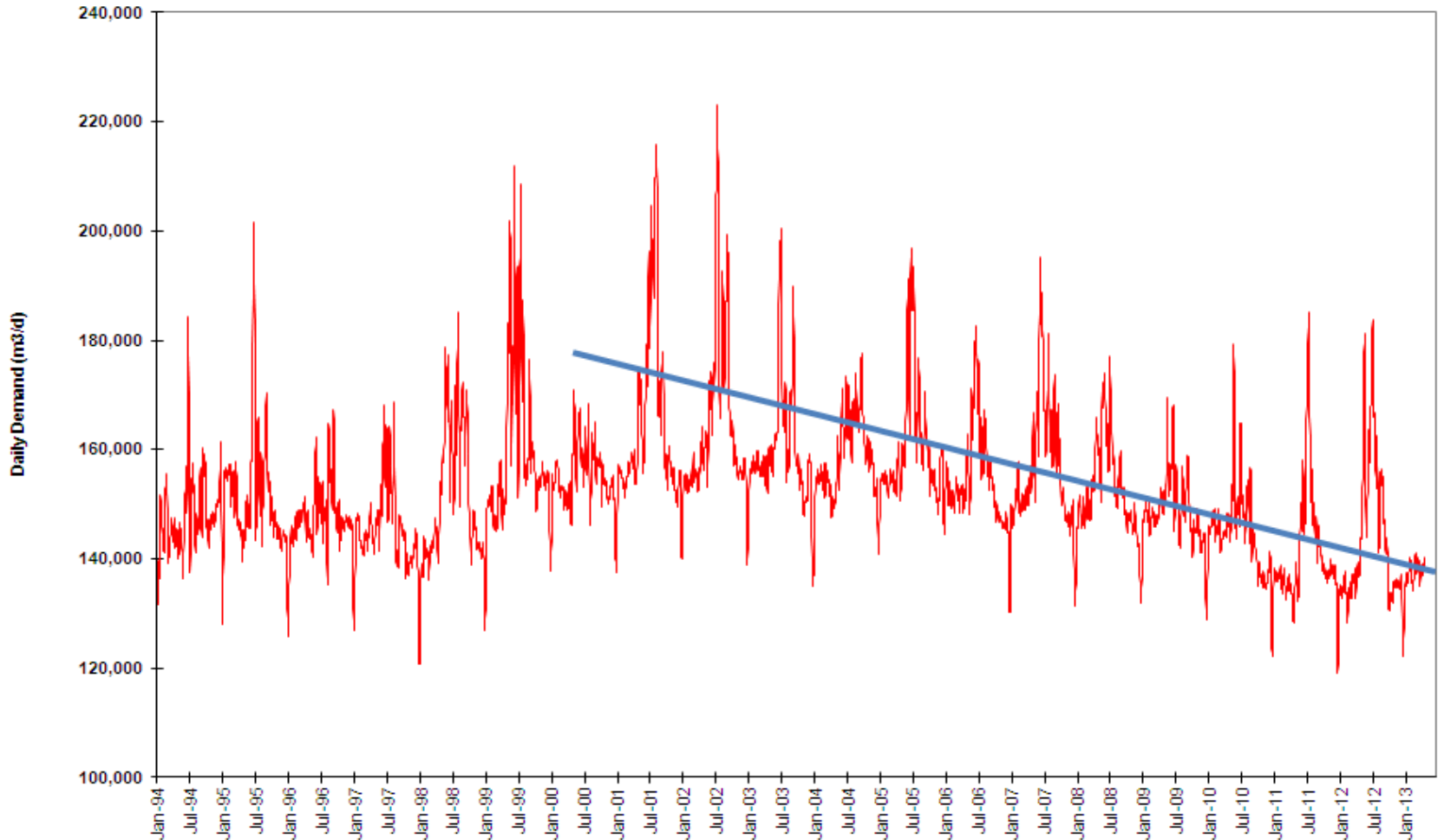


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The Shift in Water Demands

Long Term Trend

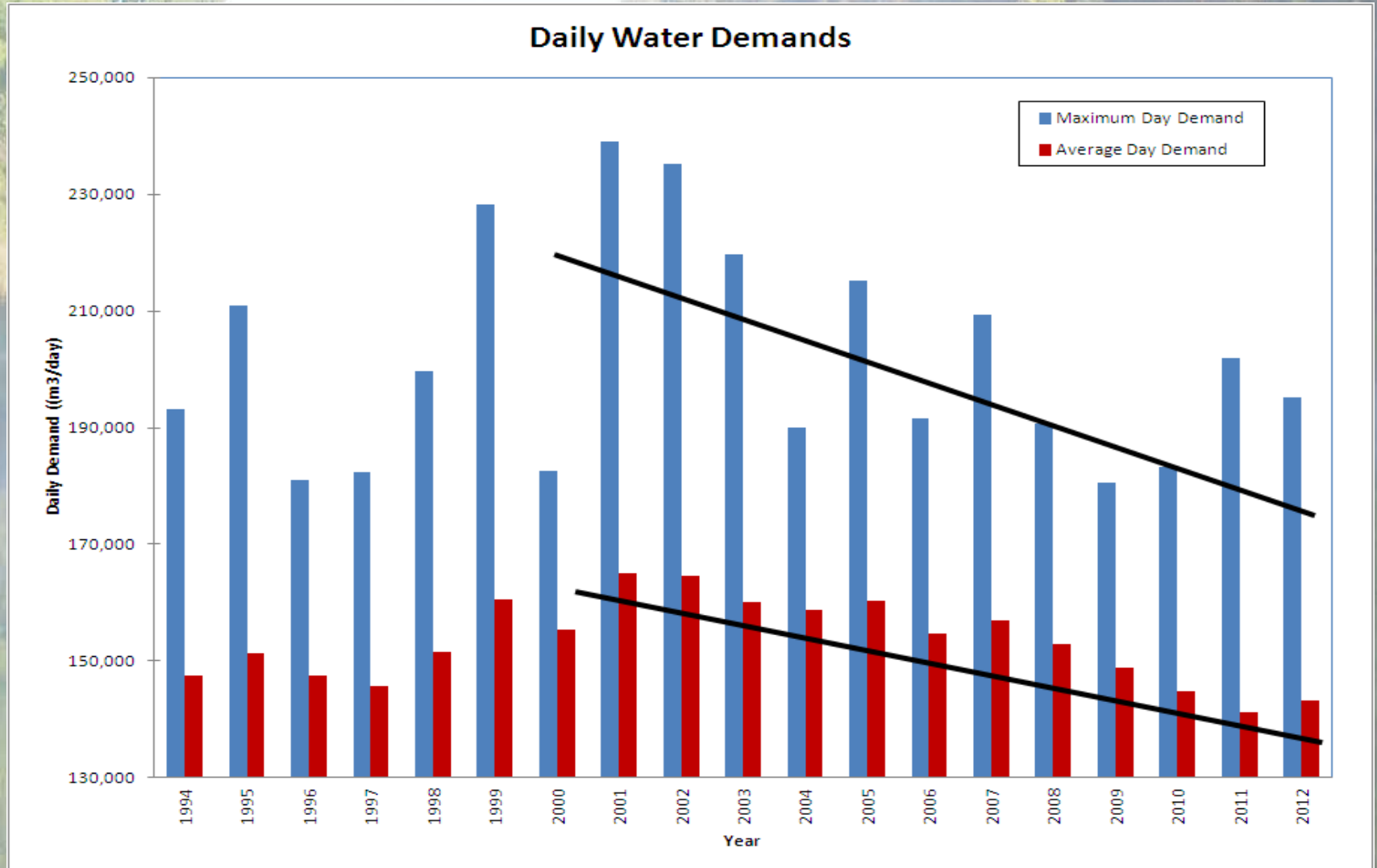
Total Tri-City Water Demand - 1994 to 2013
7 Day Moving Average





The Shift in Water Demands

Average Day vs Max Day





The Shift in Water Demands

Why The Drop in Demands?

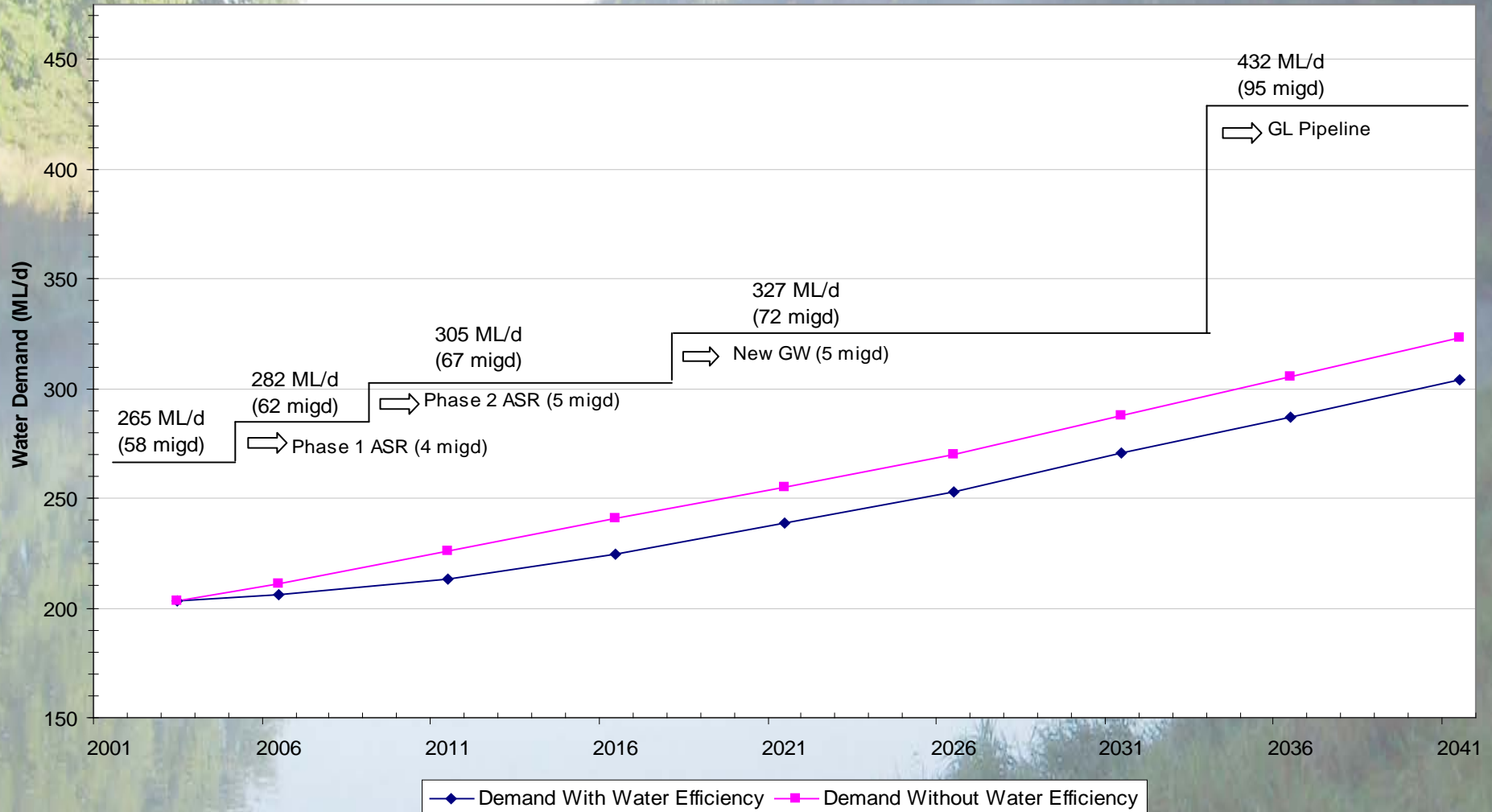
- Water Efficiency Master Plan Implementation
- Outdoor Water Use By-Law (Max Day)
- Large Users – Recycling & Re-Use
- Reduction of Intensive Water Use Industries
- More Efficient Appliances and Fixtures
- More Water-Conscious Public



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2007 Long Term Strategy

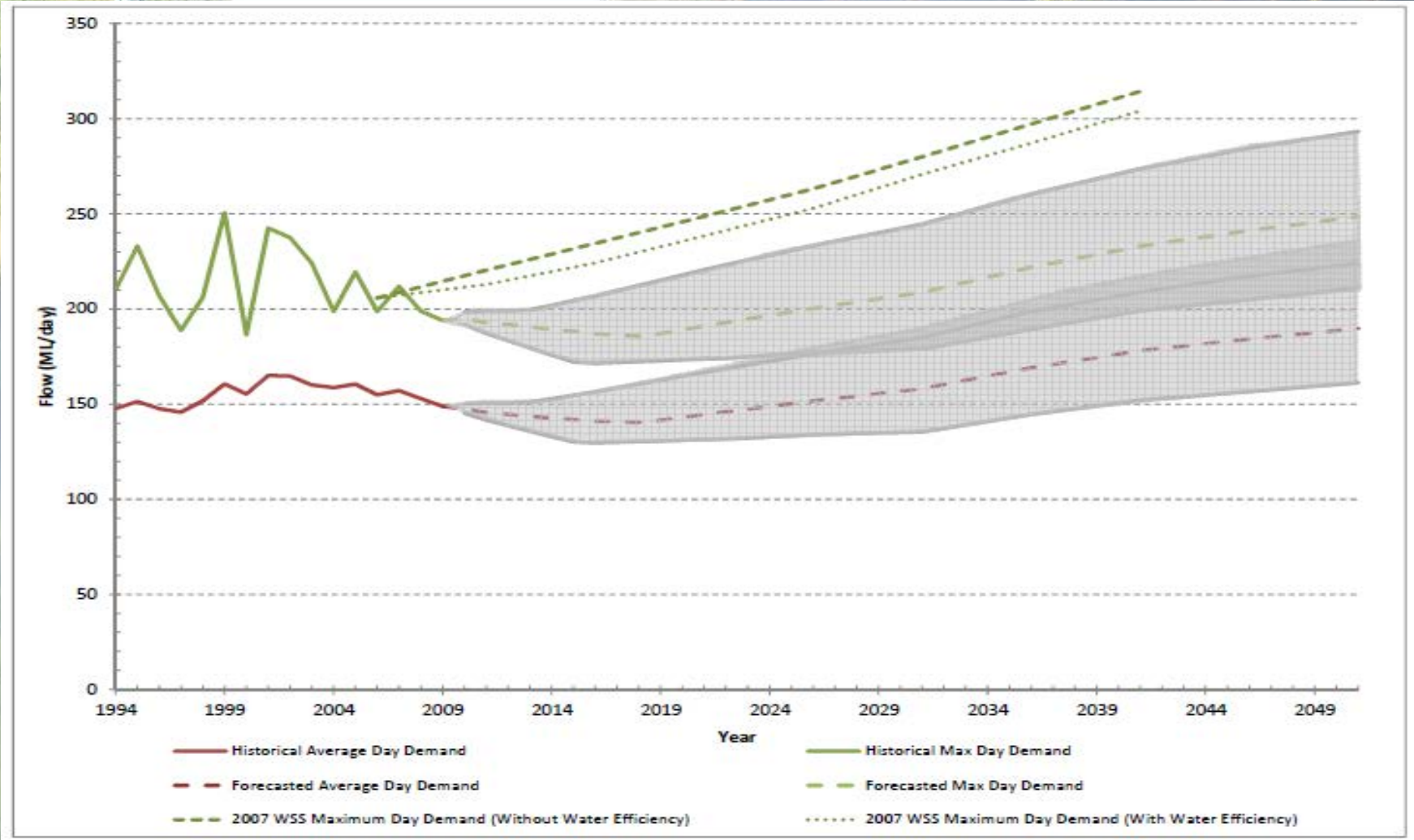
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The Shift in Water Demands

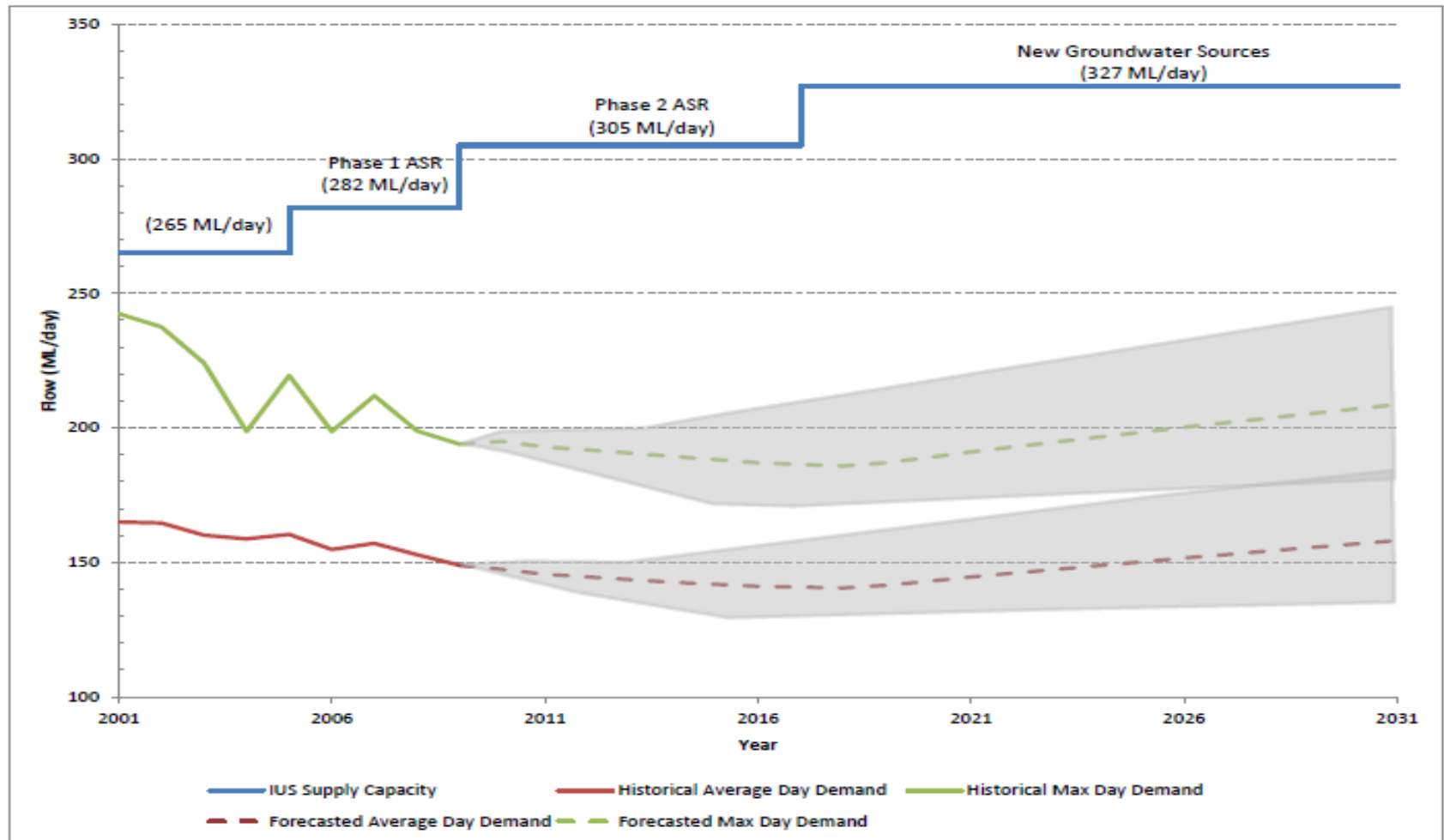
2007 WSMP vs 2013 WSMP Estimates





The Shift in Water Demands

2013 WSMP – Future Demand Estimates





Water Supply

2013 Long Term Strategy

- 2013 Water Supply Master Plan
 - Detailed review of all existing water supply sources:
 - Optimize water supply in the local municipalities and pressure zones
 - Tier 3 Water Study – optimize water budget
 - Re-evaluate timing Great Lakes Pipeline



Water Supply

2013 Long Term Strategy

- **Preliminary Conclusions**
 - Shift from growing to sustaining
 - Optimize rehabilitation and replacement of Groundwater Sources
 - Continue with water efficiency efforts
 - Optimize existing water distribution system
 - Close tracking of water demand trends
 - Great Lakes Pipeline can be deferred



Water Supply

2013 Long Term Strategy

➤ **Expected Completion**

- Late 2013, early 2014
 - Depends on completion of the Tier 3 Study



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Thank You