

Welcome and Orientation Station

What Can I Expect from this Meeting?



Welcome and Orientation

Overview of Events

- Technical Stations for General Information
- Round Tables: Finding Out More
- Panel Discussions: Ask the Experts
 - 4:45 – 5:45
 - 6:30 – 7:30
- Find Out Where Your Water Comes From
- Experience the Groundwater Model



What is this Project About?

How is the East Side Water Supply Project Helping to Supply Reliable and Safe Water?

- How do We Meet Expectations for Water Quality?
- How do We Meet Expected Future Water Demands?
- How Can We Better Conserve Water?



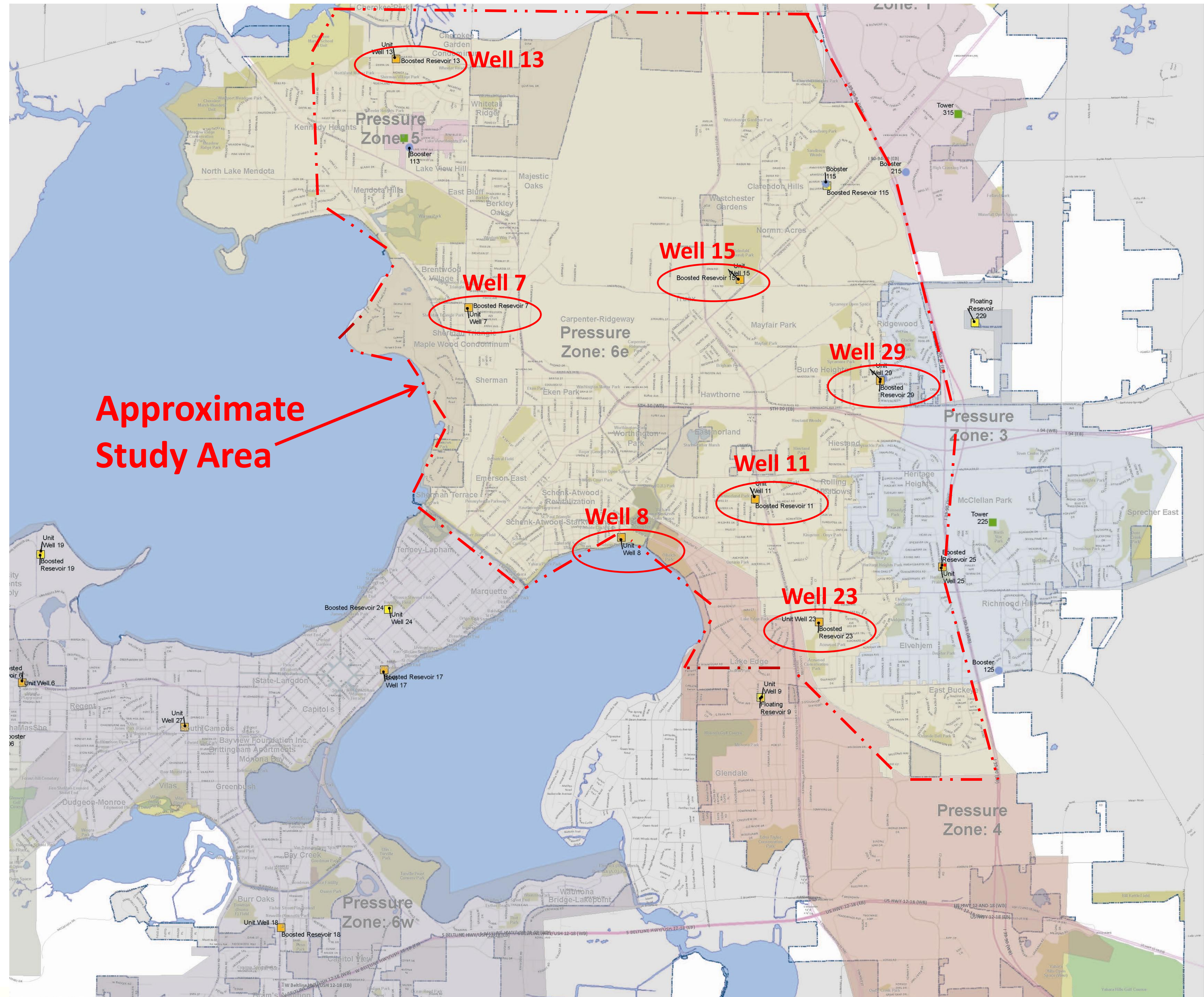
Understanding the East Side Water Supply Project

— What is the “East Side” Area?

— Where Are East Side Wells?

— What are East Side “Issues?”

— How does Water Get to Your House?



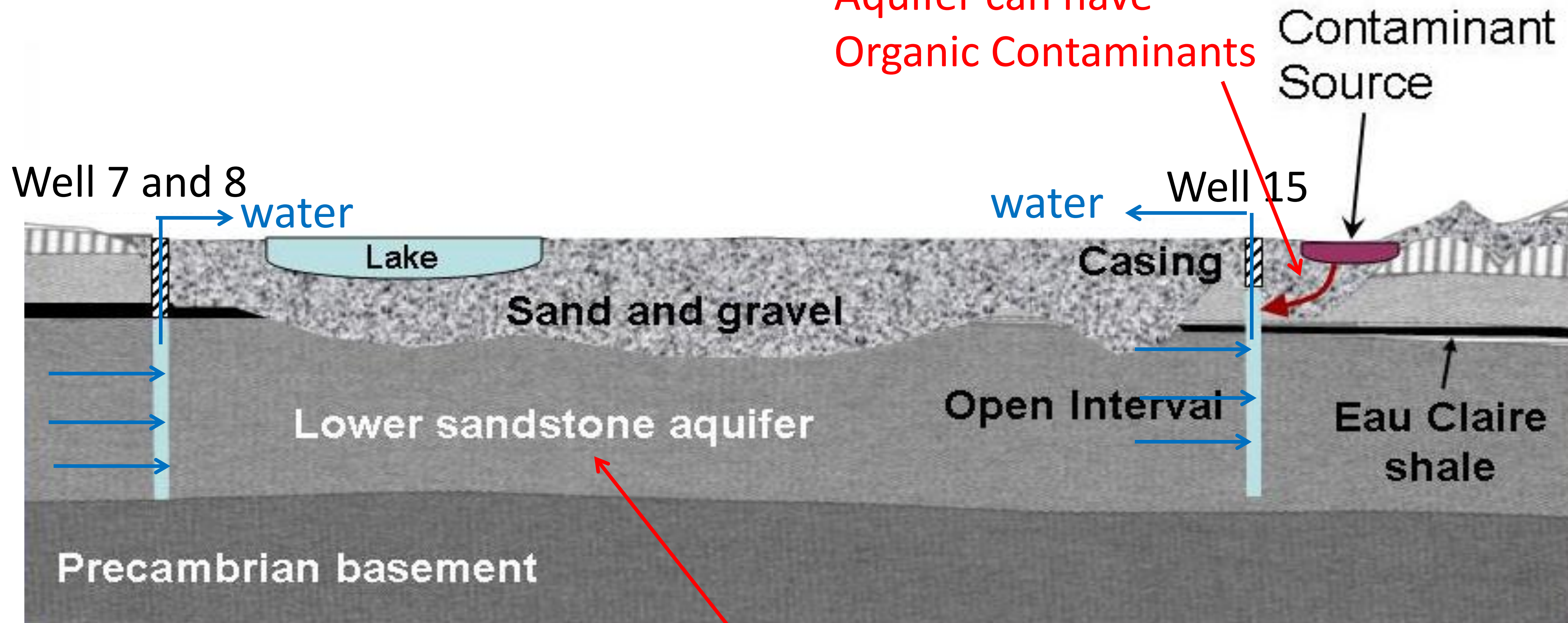
Water Quality Station

What is the Quality of Drinking Water
on Madison's East Side?



Understanding How We Get Water from the Ground and How the Water can be Contaminated

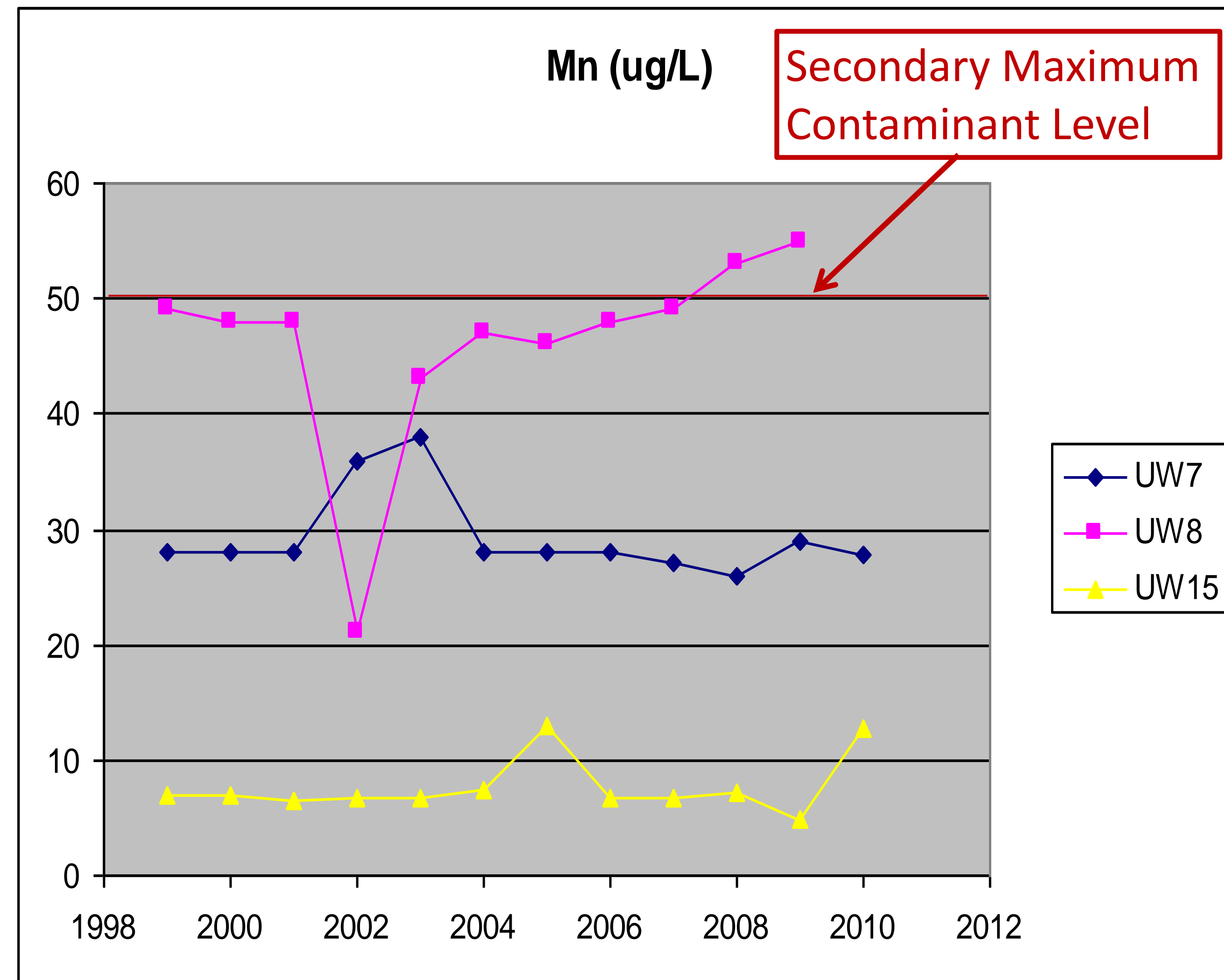
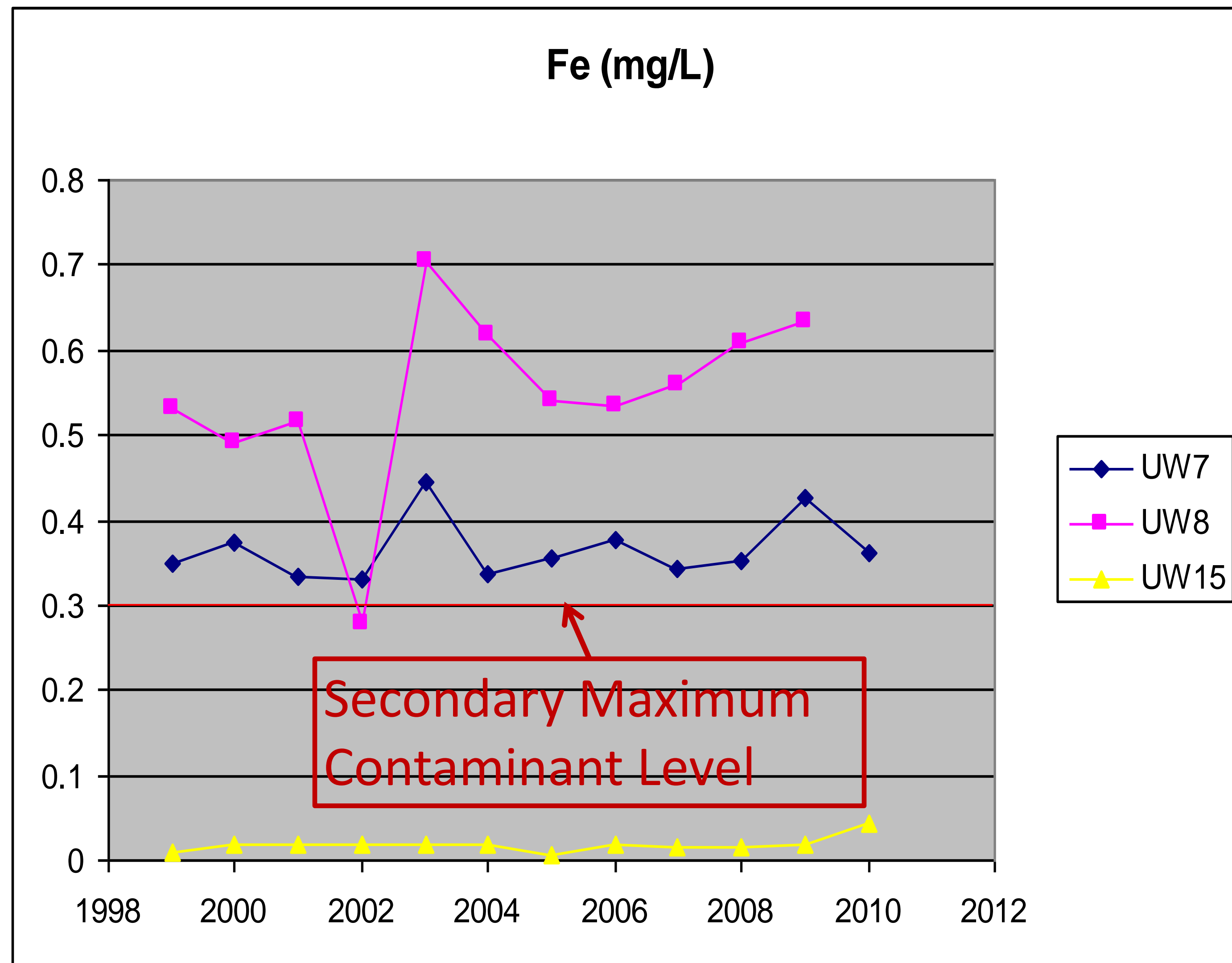
Sand and Gravel
Aquifer can have
Organic Contaminants



Lower Sandstone
Aquifer has Iron and
Manganese

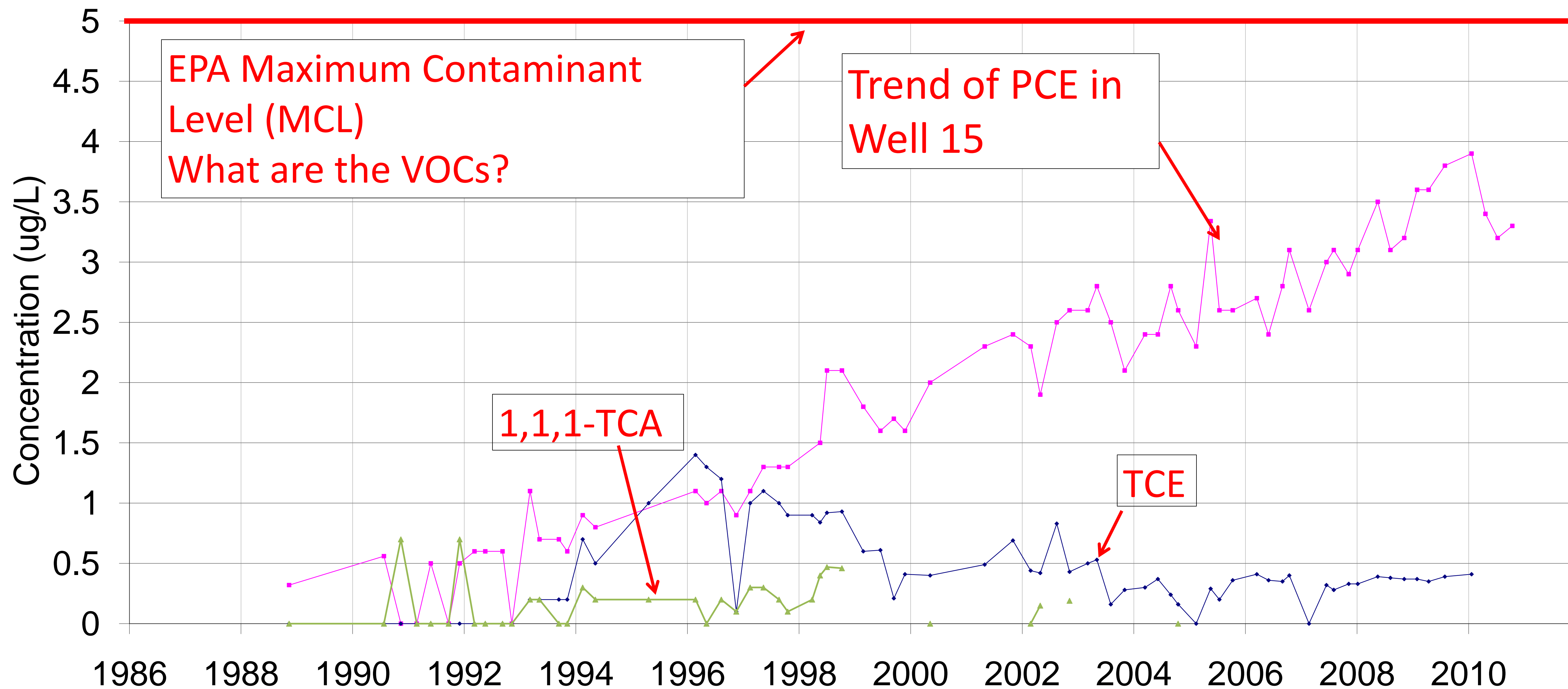


Understanding Water Quality – Iron (Fe) and Manganese (Mn) at Wells 7 and 8



Understanding Water Quality

Volatle Organic Compounds (VOCs) at Well 15



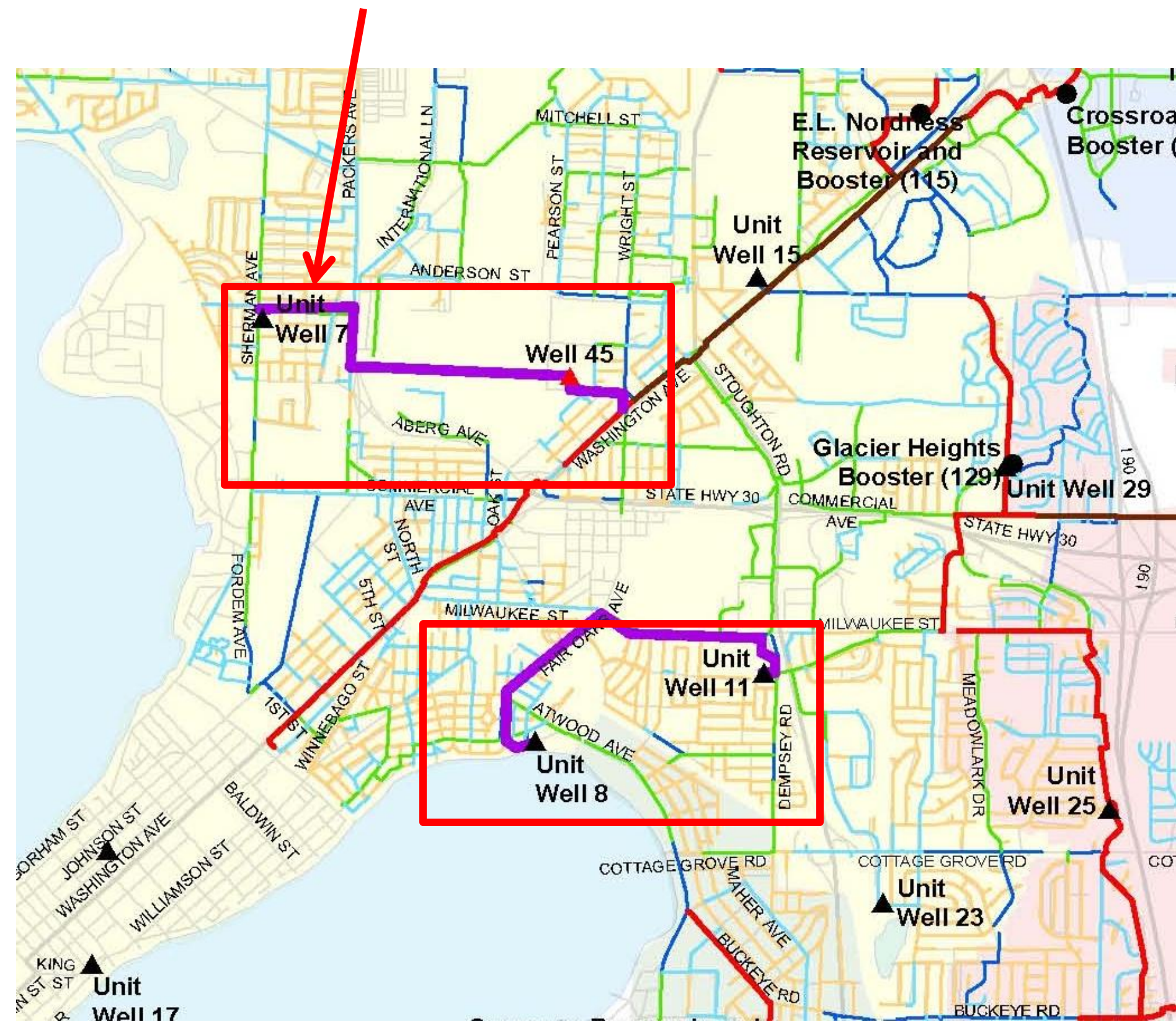
- PCE = Perchloroethene
- TCE = Trichloroethene



Options to Improve Water Quality for Iron and Manganese

Mixing/Blending

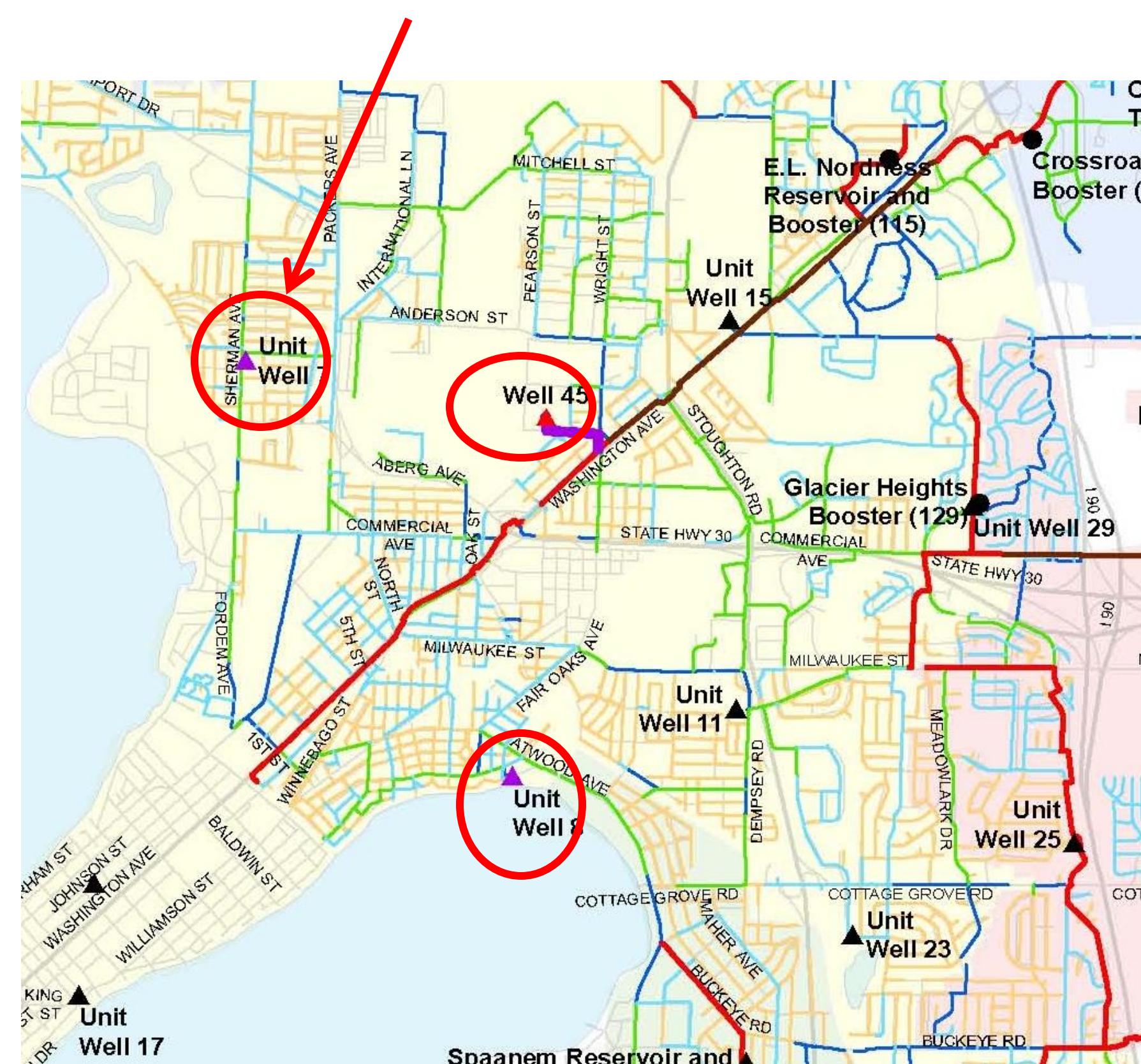
Mix Low and High Quality Water Together



Cost for Blending is \$14m

Treat at Each Well

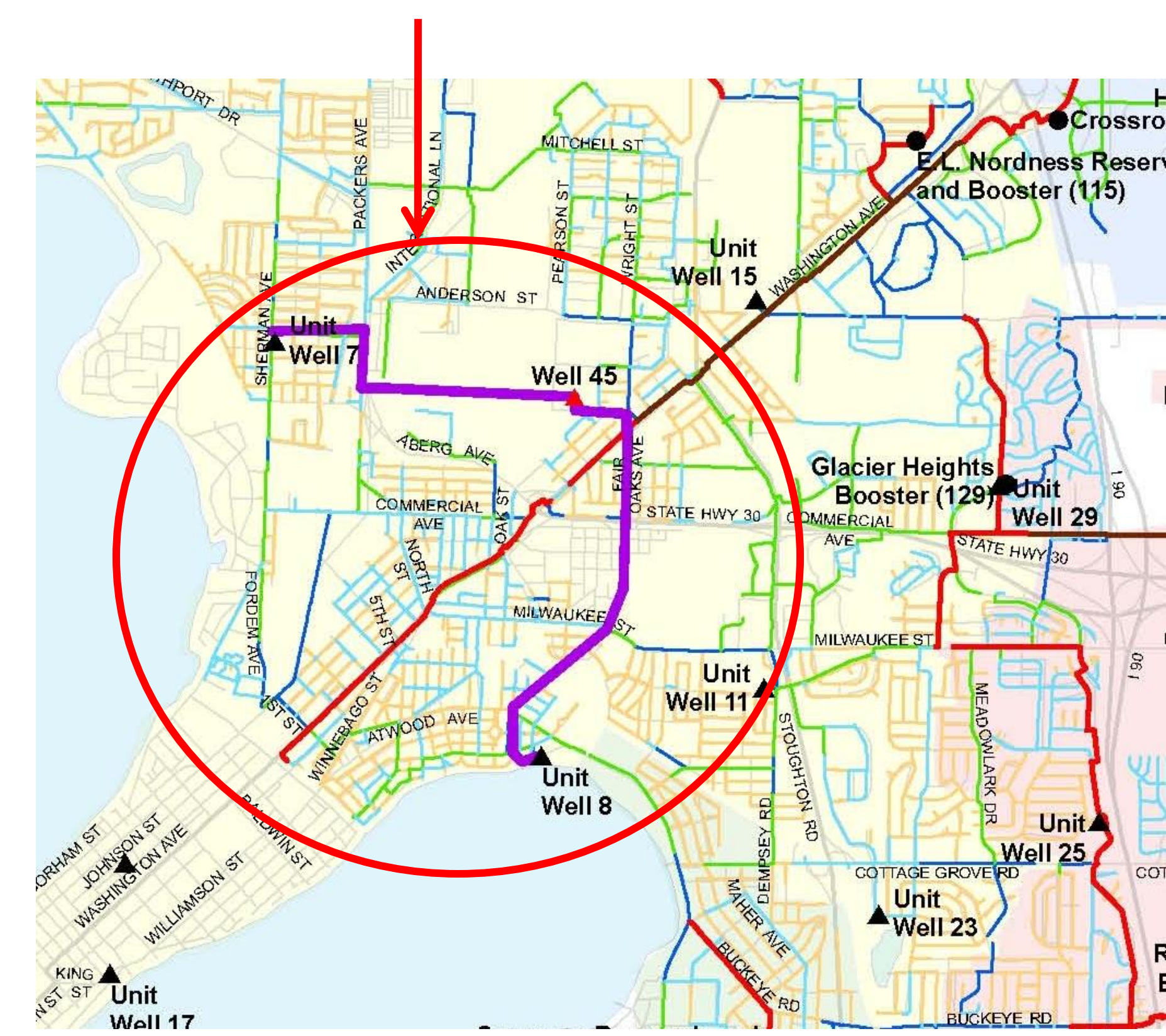
Individual Treatment Systems



Cost for Treatment at Each Well is \$15m

Regional Treatment

Pipe Water to Regional Treatment System



Cost for Regional Treatment \$20m

Note: All options assume a new well shown as Well 45. Location of new well is to be determined.



What Would an Iron and Manganese Well Head Treatment Look Like at Wells 7 and 8?

Outside View of Iron and Manganese Treatment System at Well 29



Iron and Manganese Filter at Well 29



What Would a VOC Treatment System Look Like at Well 15?

A VOC Treatment System Would Approximately Double the Size of the Existing Well 15 Building

Approximate Floor Plan and Section View for VOC Treatment

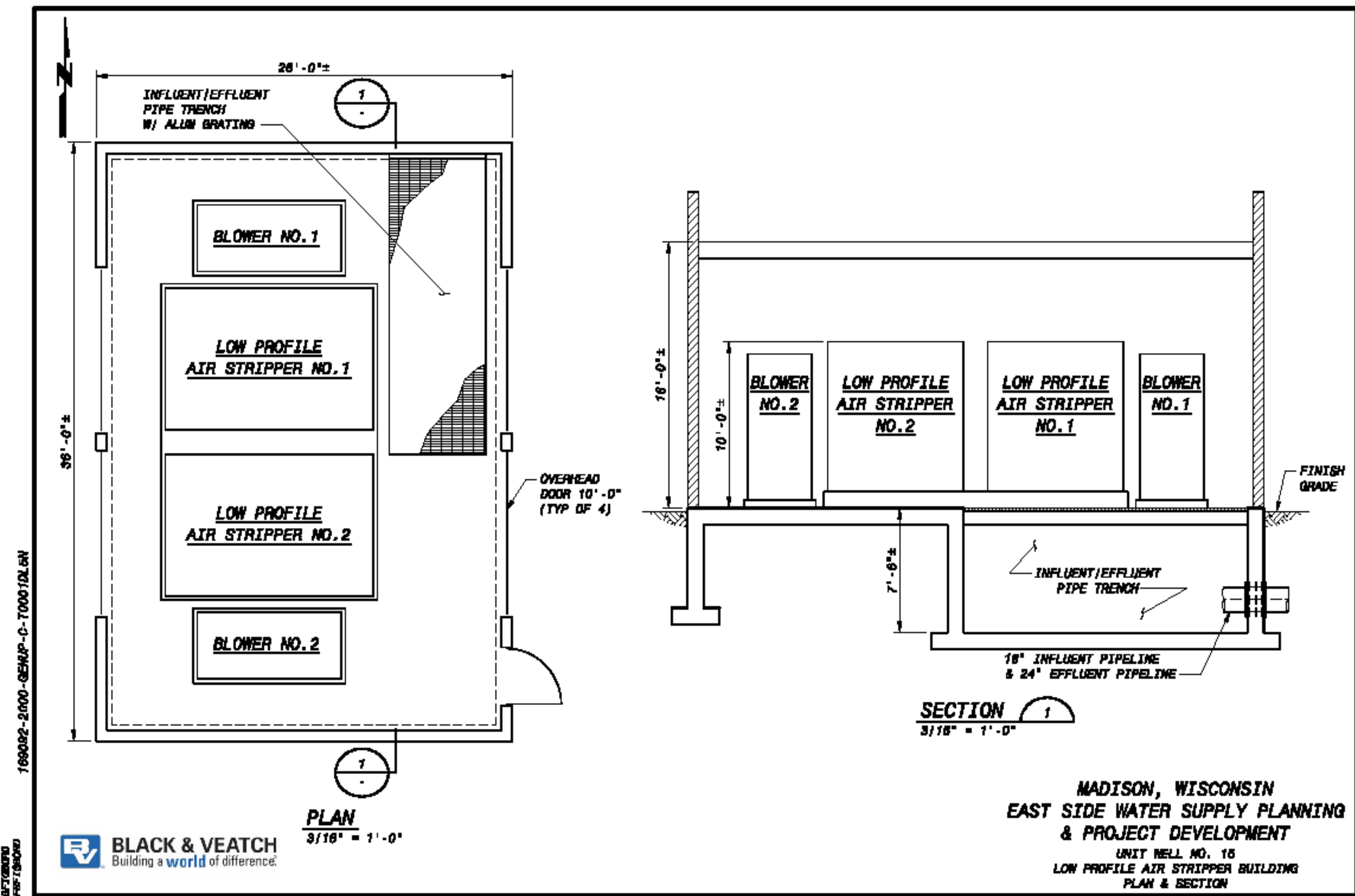
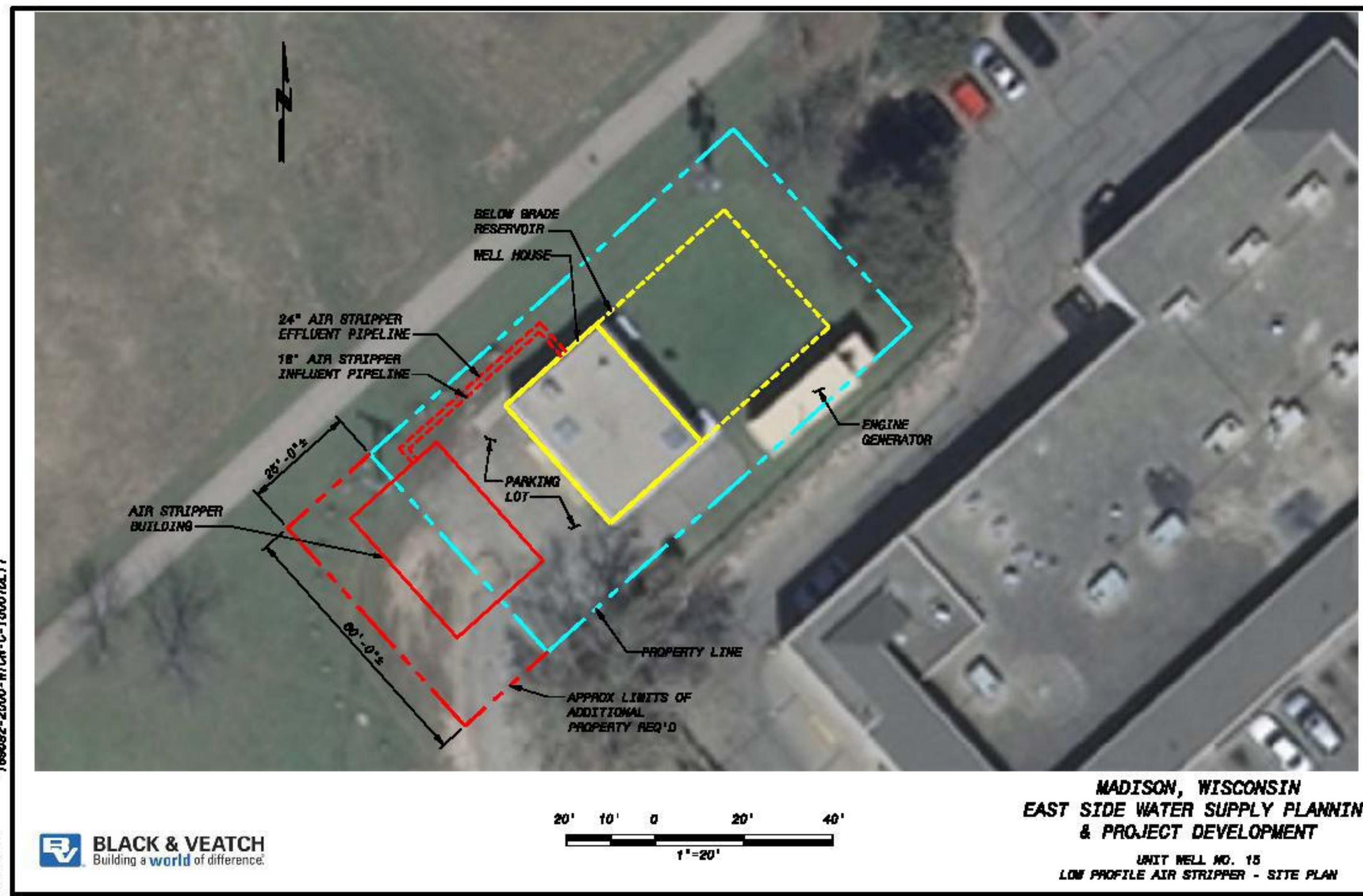


FIGURE 8



Citizens Advisory Panel Advice for Improving Water Quality

CAP Advisory

- Implement Treatment for Iron and Manganese at Wells 7 and 8. Provides High Quality Water for Lowest Cost
- Implement Treatment for VOCs at Well 15 to Protect Water Quality
- Cost of Projects
 - \$15 m to Construct Iron and Manganese Treatment
 - \$2 m to Construct VOC Treatment
 - \$YYY Increase to Yearly Water Bill

Agree? Comments? Questions?

- Please Note Your Comments on the Adjacent Paper



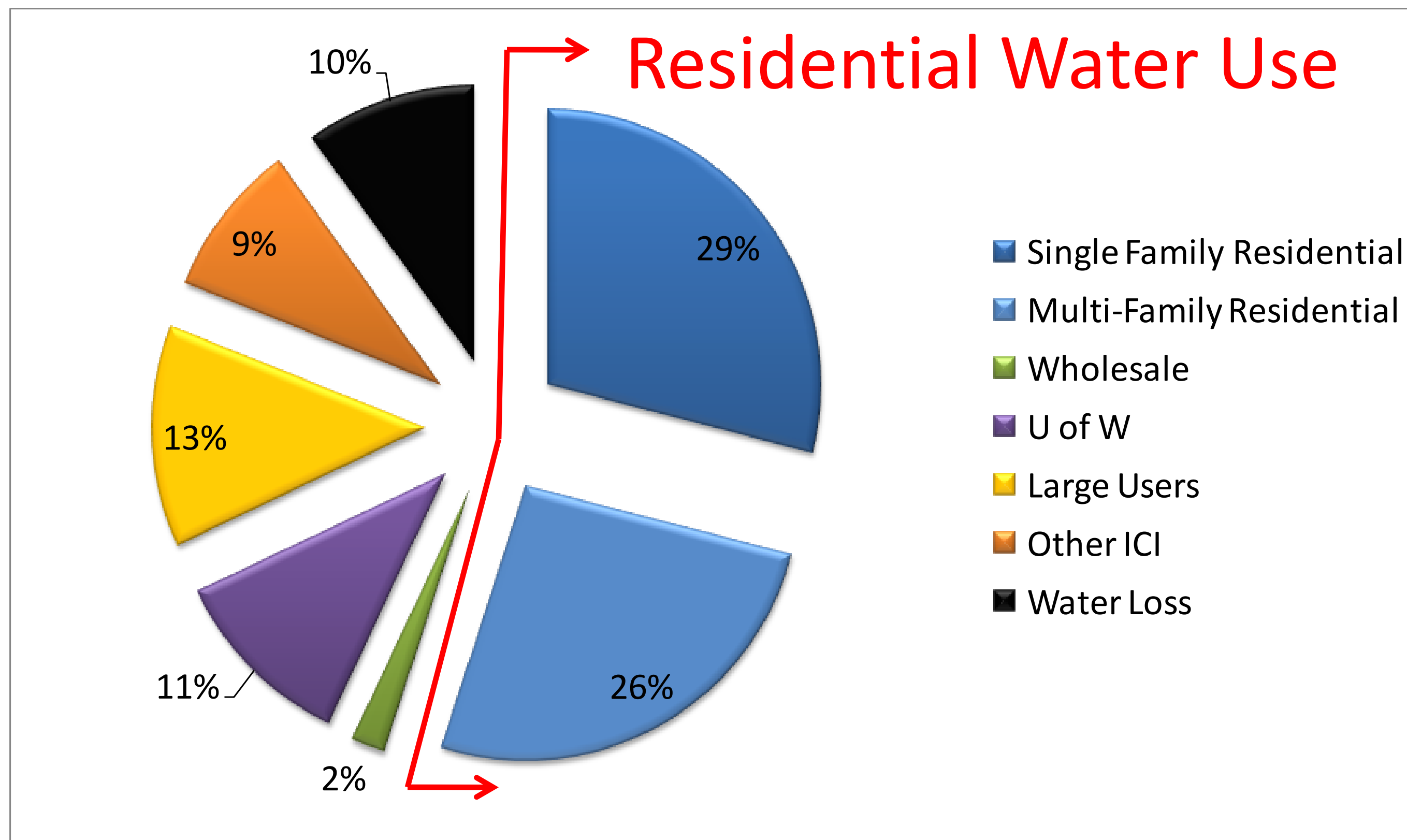
Water Supply and Demand Station

Is There Adequate Water to Meet East Side Demands?



Madison's Existing Water Use (City-Wide)

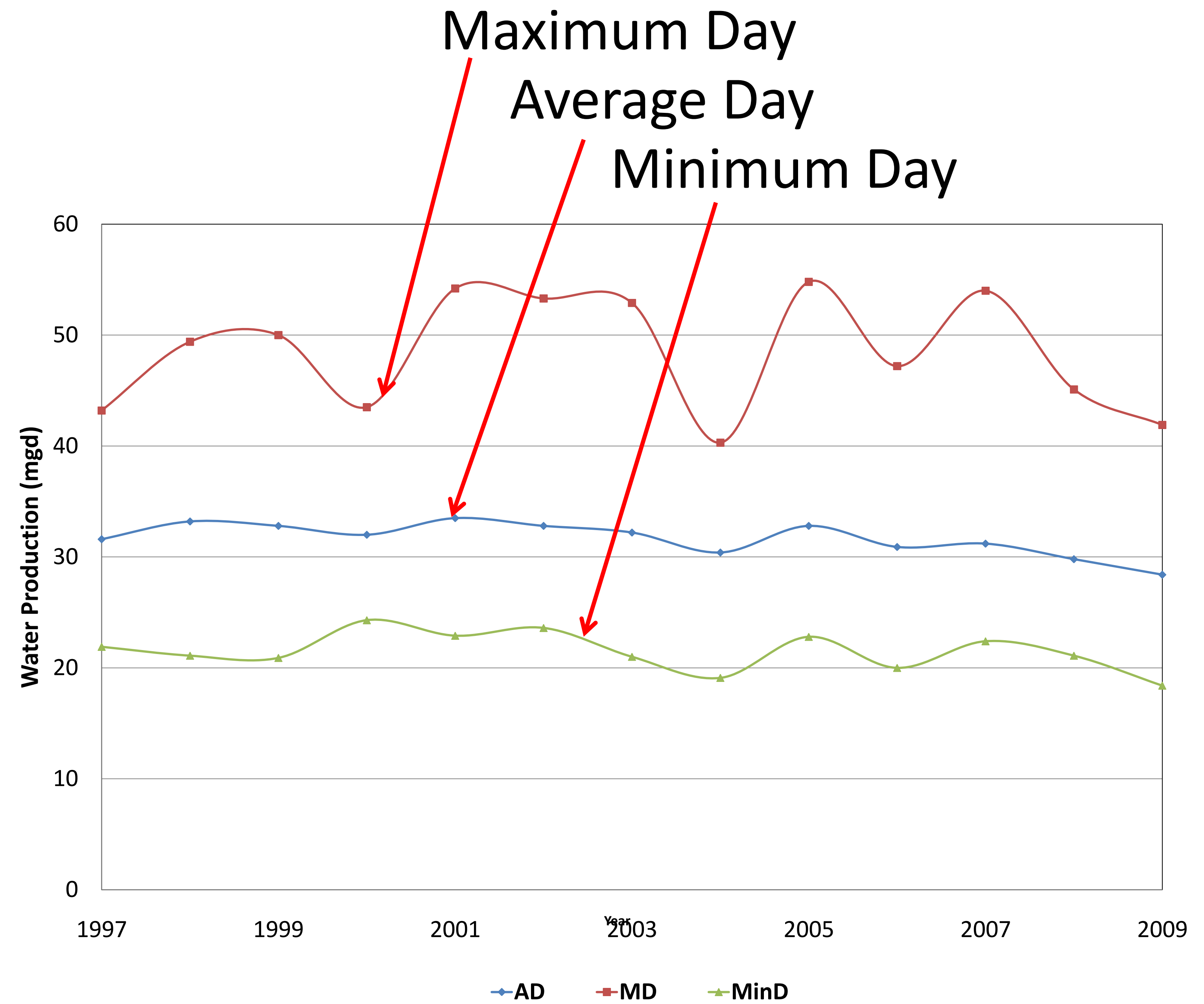
Who Uses our Water?



-55% of Madison's Water is for Residential Use

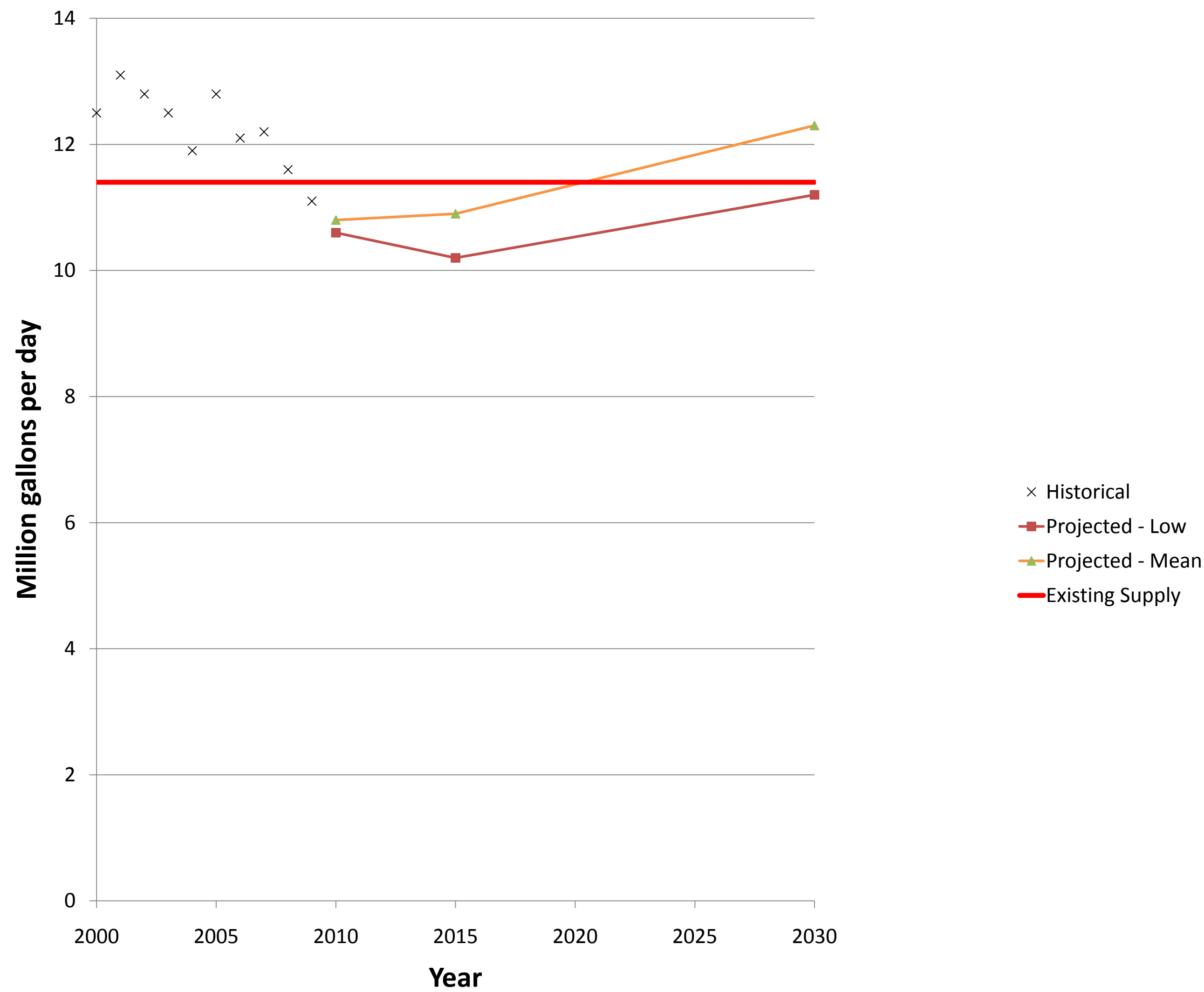
-Wholesale is Water Sold to Other Communities

How Much do We Use?



Does the East Side Supply Meet Demand?

Existing Water Supply for Can Meet “Average Day” Demands



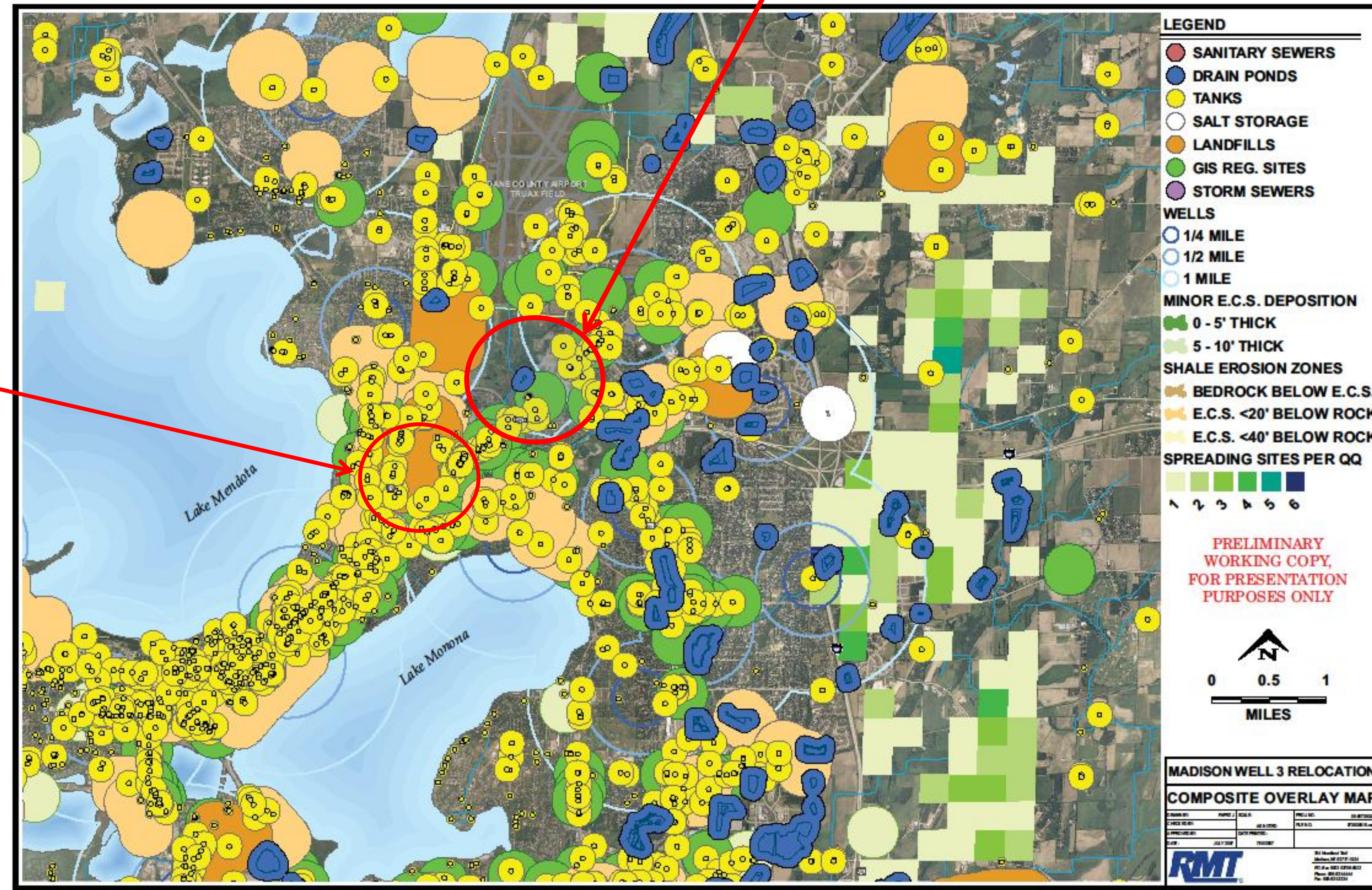
Existing Water Supply for can not meet “Maximum Day” Demands



Why is East Side Water Supply Limited?

Potential New Well Location

Well 3 was Abandoned and Not Replaced



New Well Needs to be Located in an Area where Groundwater is Unlikely to be Impacted by Contamination



Citizens Advisory Panel Advice for Meeting Water Demand

CAP Advisory

- Replace the Abandoned Well No. 3 at a Location to be Determined
- Provide for Iron and Manganese Treatment at Replacement Well
- Cost of Projects
 - \$XXXXXX to Construct
 - \$YYYYYY Increase to Yearly Water Bill

Agree? Comments? Questions?

- Please Note Your Comments on the Adjacent Paper



Water Conservation Station

What Can I do to Conserve Water?



City of Madison Water Conservation and Sustainability Plan (2006)

Primary Goal: Maintain the current annual rate of groundwater pumping in existing areas.

Secondary Goals:

- Reduce residential water use 20% by 2020 (gallons per capita per day)
- Promote commercial conservation through rebate promotions and education
- Develop a water conservation plan for each industrial customer
- Enact water savings programs at each government building



Improving Water Conservation

CAP Advisory

Comments/Questions

