

Water Reuse ?

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Lake Thunderbird

Western States Water Council

Workshop

October 6, 2015

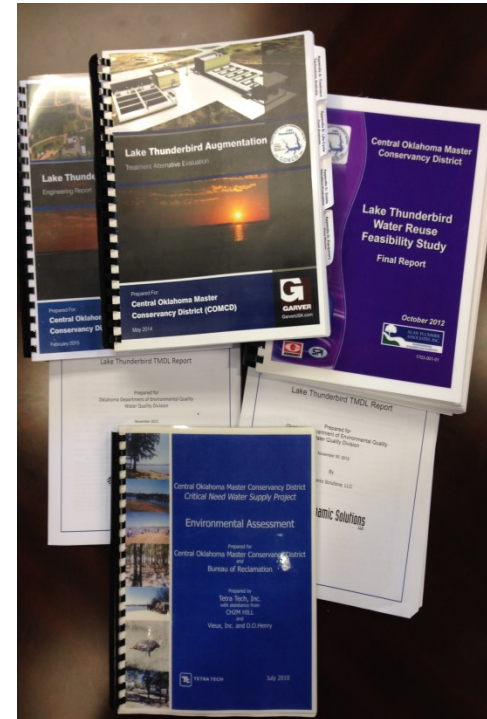
# Why Reuse?

- Multiple Studies
- Federal Legislation
- State Legislation
- Multiple Challenges
- New Water Quality Standards
- New Water Reuse Regulations



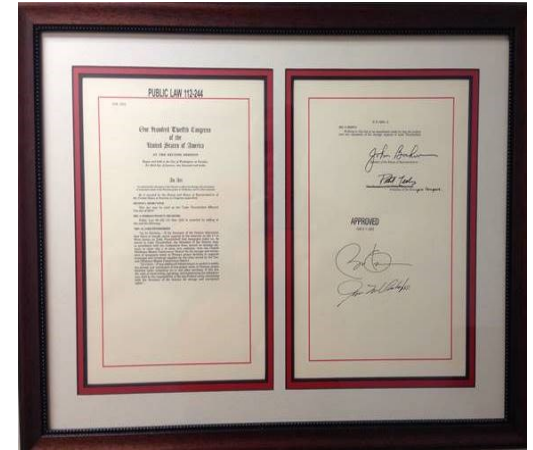
# Multiple Studies

- Augmentation 2010 Tetra Tech
- Reuse & Non-Reuse 2012  
Alan Plummer Assoc.
- Preliminary Engineering 2014  
Garver
- Modeling for nitrates/nitrites  
& TDS 2015 Garver
- CEC studies 2016 Garver



# Federal & State Legislation

- S802  
Sen. Inhofe – US Senate  
Rep. Cole & Lankford – US House  
Allowed non-project water to be imported into Lake Thunderbird.
- SB 1187 Allows reuse discharge into SWS lakes  
“where such discharges do not contain concentrations greater than the concentrations in the existing water body”



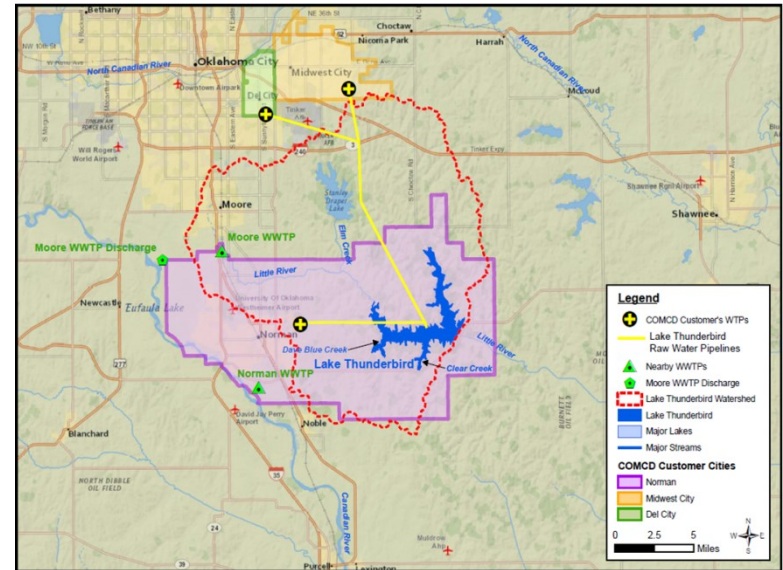
# New Regulations & Standards

- OML - Organized working group to draft reuse standards in 2008
- ODEQ - Initially opposed reuse until legislative action in 2012 forced them to develop regulations
- OWRB - Developed additional Water Quality Standard to include SWS-r (Sensitive Water Supply for Reuse)



# Challenges

- Lake Thunderbird on Clean Water Act 303(d) list of impaired water bodies
  - Chlorophyll – a
  - Turbidity
  - Dissolved Oxygen
- 2013 TMDL completed
- Cultural change resistance with regulators
- Public education and acceptance



# Challenges

- Board of Directors - changing directors and re-education
- Customer cities differences
- First review by ODEQ of first indirect potable reuse project under rules to be adopted in 2016
- CEC (Contaminants of Emerging Concern)