NTMWD Water Supply Update

S.A.M.E.

March 16, 2015

“Regional Service Through Unity ... Meeting our Region’s Needs Today and Tomorrow”
History of NTMWD

From our founding 10 Member Cities:

“We decided we were all in this together. We couldn’t do it separately.”

• 1951 - Created by Texas Legislature to Provide Water Service

• 1956 - Began Providing Treated Water

• 1970s - Expanded to Wastewater Service

• 1980s - Expanded to Solid Waste Service
Excerpts from  
*Gift of Water, Legacy of Service*

**Population Growth**

“…an outburst of suburban growth that would rank the area, over much of the next quarter-century, among the fastest-growing in the nation.”

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<tr>
<td>Garland</td>
<td>10,291</td>
<td>38,501</td>
<td>81,437</td>
<td>138,857</td>
<td>180,635</td>
<td>215,768</td>
<td>226,876</td>
<td>231,700</td>
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<td>Mesquite</td>
<td>1,684</td>
<td>27,526</td>
<td>55,131</td>
<td>67,053</td>
<td>101,484</td>
<td>124,523</td>
<td>139,824</td>
<td>142,210</td>
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<tr>
<td>Plano</td>
<td>2,115</td>
<td>3,695</td>
<td>17,872</td>
<td>72,331</td>
<td>127,885</td>
<td>222,030</td>
<td>259,841</td>
<td>269,330</td>
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**NTMWD Historical / Projected Population**

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<tr>
<td>Area Population</td>
<td>32,000</td>
<td>60,000</td>
<td>200,000</td>
<td>800,000</td>
<td>1,600,000</td>
<td>2,500,000</td>
<td>3,700,000</td>
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Basic Services Led to Self-Actualization

• “Fastest growing cities in the U.S.”
  – Frisco, McKinney
• “Best Texas cities to raise a family”
  – Allen, Frisco, McKinney, Richardson, Rockwall, Wylie
• “McKinney #1 Best Place to Live in America”
  – Money Magazine, 2014
• “Best suburb for education in America”
• “Best cities for first-time home buyers”
  – Allen, Frisco, Plano, McKinney, Richardson, Garland
Growth

Water supply infrastructure is the driving force of community & business vitality.
Regional Water System

• **Entities Served:** 61 cities, towns, municipal utility districts, special utility districts and water supply corporations

• **Supply Sources:**
  - Lavon Lake
  - Jim Chapman Lake
  - Lake Texoma
  - Lake Tawakoni
  - Lake Bonham
  - East Fork Raw Water Supply Project (Wetland)

• **Fully Ozonated Water Treatment Plant Capacity:** 806 MGD
  - Wylie: 770 MGD
  - Tawakoni: 30 MGD
  - Bonham: 6 MGD
NTMWD Raw Water Supply Sources

- Lake Texoma
- Lake Tawakoni
- Lake Lavon
- Jim Chapman Lake
- NTMWD Wetlands
NTMWD’s Trifecta
… led to toughest watering restrictions in the region

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<tr>
<th>CONCERNS</th>
<th>SOLUTIONS</th>
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<tr>
<td>Denied Access</td>
<td>• Texoma back online</td>
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<tr>
<td>Loss of 28% Water Supply</td>
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<tr>
<td>Long-Term Drought</td>
<td>• Rain to replenish reservoirs</td>
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<tr>
<td>Regional Growth</td>
<td>• New norm of conservation</td>
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<tr>
<td></td>
<td>• New reservoir will meet growth demands</td>
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</table>
2012 State Water Plan for NTMWD
Proposed
Lower Bois d’Arc Creek Reservoir

First major reservoir to be constructed in Texas in the last 30 years
Lower Bois d’Arc Creek Reservoir

“First major reservoir to be constructed in Texas in the last 30 years”

Location: Fannin County, TX
Area: 16,526 acres
Supply: 113 MGD
Average/Max Depth: 22/70 ft
Lake Elevation: 534 ft msl
Owner & operator: NTMWD
Cost: $992M

- Permitting Completed 2015
  - Water Rights
  - USACE 404
- Planned to start construction 2015
- Delivering treated water 2020
Final Pipeline Alignment, Intake Pump Station, Treatment Plant and Mitigation Area Locations
Lower Bois d’Arc Creek Reservoir

Two Major Permits Required

- CWA Section 404
  - USACE
- Water Rights
  - TCEQ
- No one has permitted a major reservoir recently
CWA Section 404 Permit

- Application submitted – June 2008
- EIS Determination – March 2009
  - EIS contractor selected – August 2009
  - Public & Agency Scoping Meetings – December 2009
CWA Section 404 Permit USACE
Projected Timeline

- 2/20/15 - Draft EIS Issued
- 4/21/15 - Draft EIS Public Review Period Ends
- 8/15 - USACE Preparation of Administrative Final EIS and circulation to cooperating agencies
- 9/15 - Cooperating agencies comments due to USEPA
- 9/15 - USACE complete Administrative Final EIS and send to Division for review
- 10/15 - USACE receive Division comments
CWA Section 404 Permit USACE Projected Timeline

• 10/15 - USACE incorporate Division comments into Final EIS and send to HQ and EPA

• 11/15 - Final EIS published in Federal Register

• 12/15 - USACE Issue Record of Decision (ROD) and 404 Permit

• Deadline for Appeal of 404 Permit – 30 days after ROD
TCEQ Water Rights Permit
“Recent Activities”

• Hired Conservation Experts and Enhanced Conservation Plan

• Settlement Agreements
  – National Wildlife Federation
  – Sierra Club
  – Texas Parks & Wildlife
  – Bois d’Arc MUD
  – Landowners

• Water Supply briefing to local, State, and Federal elected officials November 6, 2014

• Updated Fannin County land prices

• SOAH Jurisdictional Hearing held November 10, 2014

• Contested Case Hearing set for July 6-15, 2015
  – 10 Landowners
  – 1 water rights holder
TCEQ Water Rights Application

- Submitted - December 2006
- Administratively Complete - June 2007
- Interbasin Transfer Meetings - September 2007
- TCEQ referred to SOAH on September 24, 2014
TCEQ Water Rights Projected Timeline “Best”

- Negotiate Settlements with Protestants – January 1 - April 1, 2015
- Settlement Agreements Executed – April 15, 2015
- Remand of Application to TCEQ – May 1, 2015
- Action by TCEQ to Issue Permit – June 1, 2015
- Deadline for Filing Motion to Overturn – June 23, 2015
TCEQ Water Rights Projected Timeline “Probable”

• Contested Case Hearing – July 6 - 15, 2015

• Written Closing Arguments/Replies – August 31, 2015

• Preliminary Final Decision Issued – October 30, 2015

• Exceptions/Replies – November 30, 2015

• TCEQ Consideration of Preliminary Final Decision – January 13, 2016

• TCEQ Order Issued – January 27, 2016

• Deadline for Filing Motion for Rehearing – February 19, 2016
TCEQ Water Rights Possible Timeline – “Delayed”

- Written Closing Arguments/Replies – November 1, 2015
- Preliminary Final Decision Issued – December 15, 2015
- TCEQ Consideration of Preliminary Final Decision – March 2016
Property Acquisition

- NTMWD Board initially approved - November 2007
- Reservoir site property needed - 22,590 acres
- Acquisitions to date - 18,850 acres (83%)
- Riverby Ranch mitigation area - 14,959 acres
- North (Leonard) WTP site - 841 acres
- Reaching out to remaining landowners
Lower Bois d’Arc Creek Reservoir Purchased Parcels

Purchased Parcels as of January 2014

Legend:
- Proposed Dam
- Purchased Parcels
- Net Purchased Parcels
- Elevation 534
- Elevation 541
- Elevation 545
## Current Cost Estimates

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<tr>
<th>Project Component</th>
<th>Cost Estimate</th>
<th>Expenditures</th>
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<tr>
<td>Reservoir</td>
<td>$413 M</td>
<td>$110 M</td>
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<tr>
<td>- Land</td>
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<td>- Dam</td>
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<td>- Intake</td>
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<td>- PS</td>
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<td>- Conflicts</td>
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<td>- Permitting</td>
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<td>- Mitigation</td>
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<tr>
<td>WTP (70 MGD) &amp; Terminal Storage</td>
<td>$249 M</td>
<td>$.2 M</td>
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<td>90-inch Raw Water Pipeline</td>
<td>$185 M</td>
<td>$4.4 M</td>
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<td>High Service PS &amp; Pipeline</td>
<td>$145 M</td>
<td>$0 M</td>
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<td><strong>TOTAL</strong></td>
<td><strong>$992 M</strong></td>
<td><strong>$114.6 M</strong></td>
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Conflicts

• Roads
  – FM 1396
  – FM 987 Bridge
  – County Road crossings

• Cemeteries

• Reservoir clearing plan

• Utilities
  – Power lines
  – Telephone lines
  – Natural gas lines
  – Bois d’Arc MUD pipelines

• Lake Bonham
  – Dam protection
  – Emergency spillway enhancement
Design & Construction

- CMAR 1 – Dam, Intake & Pump Station
- CMAR 2 – Mitigation Area
- CMAR 3 – WTP & HS Pump Station
- CMAR 4 – FM 987 Bridge
- CMAR 5 – Raw & Treated Pipelines
## LBCR Overall Timeline

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<td>Land &amp; Easement Acquisition</td>
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<td>Dam &amp; Reservoir Design</td>
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<td>Pipeline, Pump Station &amp; WTP Design</td>
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<td>Reservoir Impoundment</td>
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### Delivering Water
We need this Reservoir!

The growth that ranked NTMWD’s service area among the fastest growing regions in the nation for the past 50 years is projected to continue for the next 50 years.

- First in Texas in 30 years
- Meets our growth needs through 2040
Closing Remarks

• How can you help?
  – Be an advocate water supply projects
  – Make sure factual information is presented
  – Educate others on the importance of reservoir projects
www.nwmwd.com and follow us on:

https://www.facebook.com/pages/North-Texas-Municipal-Water-District/220424934701711

https://twitter.com/ntmwd

www.water4otter.org