NTMWD’s Water Supply Update

Lower Bois d’Arc Creek Reservoir

November 6, 2014

“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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<tbody>
<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>
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<td>Mesquite</td>
<td>1,684</td>
<td>27,526</td>
<td>55,131</td>
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<td>101,484</td>
<td>124,523</td>
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<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</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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<tr>
<td>Population</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”
  – Plano
• “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
Lake Lavon Elevations by Month

Elevation drop does not include flood pool > 492'
NTMWD’s Trifecta … led to toughest watering restrictions in the region

**CONCERNS**

1. Denied Access
   - Loss of 28% Water Supply

2. Long-Term Drought

3. Regional Growth

**SOLUTIONS**

- Texoma back online
- Rain to replenish reservoirs
- New norm of conservation
- New reservoir will meet growth demands
2012 State Water Plan for NTMWD
Thanks to our Cities and Consumers

Comparison of Member City Water Use and Goal
October 2013 - September 2014

- Allen
- Farmersville
- Forney
- Frisco
- Garland
- McKinney
- Mesquite
- Plano
- Princeton
- Richardson
- Rockwall
- Royse City
- Wylie
Proposed
Lower Bois d’Arc Creek Reservoir

First major reservoir to be constructed in Texas in the last 30 years
Three Purposes of the Reservoir

Vital New Source for Fannin County & NTMWD

- Provide water for Fannin County
- Supplement water supply for NTMWD Member Cities & Customers through 2040
- Provide recreational opportunities
Lower Bois d’Arc Creek Reservoir
Fannin County, TX

Area: 16,526 acres
Storage: 367,609 ac-ft
Supply: 113 MGD
Average Depth: 22 ft
Maximum Depth: 70 ft
Lake Elevation: 534 ft msl
Owner & operator: NTMWD

(Not a USACE reservoir)
Lower Bois d’Arc Creek Reservoir
Benefits To Economic Growth

During Construction:
• Dam and infrastructure will increase local economic activity in Fannin County between $509 M & $563 M during construction

Following Construction:
• Ongoing operation & maintenance of new infrastructure will support approximately 24 full-time equivalent jobs & spur approximately $2 M in new economic activity per year

(2011 dollars)
Opportunities for Business Development & Commerce

- **$145 M** in economic activity through new industrial & commercial activities
- **$70 – 77 M** in annual spending by new, permanent & weekend residents
  - Supporting more than 500 new permanent jobs
- **$16 - 22 M** in annual spending by non-local recreational visitors
- New housing, residents & recreational visitors will contribute:
  - **$1.9 M** in county property tax revenues
  - **$3.9 M** in school property tax revenues
  - **$290,000** in municipal sales tax revenues
  - **$175,000** in hotel occupancy tax revenues
- **3,200 new homes** over a 30-year period

(2011 dollars)
Lower Bois d’Arc Creek Reservoir

Two Major Permits Required

- Water Rights
- TCEQ

- CWA Section 404
- USACE
TCEQ Water Rights Application

- Submitted - December 2006
- Administratively Complete - June 2007
- Interbasin Transfer Meetings - September 2007
- TCEQ referred to SOAH on September 24, 2014
- SOAH hearing scheduled for November 10th
CWA Section 404 Permit

- Application submitted – June 2008
- EIS Determination – March 2009
  - EIS contractor selected – August 2009
  - Public & Agency Scoping Meetings – December 2009
- Draft EIS expected to be published in early 2015
Property Acquisition

- NTMWD Board initially approved - Nov. 2007
- Reservoir site property needed - 22,590 acres
- Acquisitions to date - 18,560 acres (82%)
- Riverby Ranch mitigation area - 14,959 acres
- North (Leonard) WTP site - 841 acres
Lower Bois d’Arc Creek Reservoir Purchased Parcels
Impact on Local Taxing Authorities

• Taxes paid to Fannin County by NTMWD
  - Tax Years 2008 - 2010 - $272,043.77
  - Tax Year 2011 - $171,436.66
  - Tax Year 2012 - $166,884.20
  - Tax Year 2013 - $174,046.25

• Taxes paid to Lamar County by NTMWD
  - Tax Year 2010 - $145.20
  - Tax Year 2011 - $2,047.52
  - Tax Year 2012 - $2,037.04
  - Tax Year 2013 - $2,222.77
Other Issues

- Roads (FM 1396 & 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
## Current Cost Estimates

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<tr>
<th>Project Component</th>
<th>Cost Estimate</th>
<th>Expenditures</th>
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<td>Reservoir</td>
<td>$413 M</td>
<td>$110 M</td>
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<td>• Land</td>
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<td>• Dam</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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### LBCR Overall Timeline

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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 of the project
  – Make sure factual information is presented
  – Educate your staff & constituents on the importance of the project
Questions

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