

## DRAFT MEMORANDUM TO FILE

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[NTD02182]1\Task 4 - Water Mgmt Strategies\Strategies for WWPs and WUGs.xls

Subject: Potentially Feasible Water Management Strategies for Wholesale Water Providers

One of the steps in the regional water planning process is the designation of potentially feasible water management strategies by the regional water planning group. The potentially feasible strategies are then evaluated, and the regional water planning group reviews the evaluations and selects the recommended water management strategies for the region. Potentially feasible water management strategies have already been identified for the following categories:

- Connection to Existing Supplies
- Reuse
- New Groundwater Supplies
- New Surface Water Supplies
- Interbasin Transfers
- System Operation
- Reallocation of Reservoir Storage

No potentially feasible water management strategies were identified for:

- Conjunctive Use of Groundwater and Surface Water
- Brush Control
- Precipitation Enhancement and
- Water Right Cancellation

This memorandum is a compilation of the strategies already identified for each of the Wholesale Water Providers. Strategies involving new sources of supply for a WWP will include the construction of necessary facilities to deliver (and treat if necessary) water. Specific conservation strategies are identified in a separate memorandum.

## **REGIONAL WHOLESALE WATER PROVIDERS**

### **Tarrant Regional Water District**

The following potentially feasible water management strategies have been identified for Tarrant Regional Water District.

- Conservation
- System Operation
- Expansion of Delivery System
  - Additional Richland Chambers/ Cedar Creek Pipeline
  - West Fork connection
- Toledo Bend Project
- Oklahoma water
- Cypress Basin Supplies (Lake O' the Pines and Lake Bob Sandlin)
- Lake Wright Patman
- Lake Texoma Not Yet Authorized - Desalination
- Purchase Water from Brazos River Authority
- Lake Livingston
- Gulf of Mexico - Desalination
- Richland-Chambers Reuse Project
- Cedar Creek Reuse Project
- Reallocation of Wright Patman
- Reallocation of Texoma
- Marvin Nichols I Lake
- Lake Tehuacana
- Roberts County groundwater
- Carrizo-Wilcox groundwater from Region G
- New Groundwater Well(s) near Eagle Mountain Lake

### **North Texas Municipal Water District**

The following potentially feasible water management strategies have been identified for North Texas Municipal Water District.

- Conservation
- Expansion of Treatment and Delivery System
- Toledo Bend Project
- Additional Supplies from Lake Texoma
- Cypress Basin Supplies (Lake O' the Pines and Lake Bob Sandlin)
- Lake Wright Patman
- Lake Texoma Not Yet Authorized - Desalination
- Additional Yield from Lake Lavon
- Interim Lake Fork Use
- Interim GTUA Texoma Water

- Interim Treated Water Purchase from Dallas
- Lake Texoma (Already Authorized)
- Lake Livingston
- Gulf of Mexico - Desalination
- Additional Wilson Creek Reuse
- East Fork Trinity River Reuse
- Direct Reuse for Collin Co Steam Electric
- Reallocation of Wright Patman
- Reallocation of Texoma
- Lower Bois d'Arc Creek Reservoir
- Marvin Nichols I Lake
- Roberts County Groundwater
- Carrizo-Wilcox groundwater from Region G

#### **Trinity River Authority**

The following potentially feasible water management strategies have been identified for Trinity River Authority.

- Conservation
- Expansion of Treatment and Delivery System
  - Expand TRA Tarrant County Water System
- Continue/increase supplies from TRWD
- Ellis County Water System
- Additional Las Colinas Reuse
- Dallas County Steam Electric Reuse
- Ellis County Steam Electric Reuse
- Tarrant County Irrigation Reuse
- Denton County Irrigation Reuse
- Lake Grapevine Reuse
- Joe Pool Lake Reuse
- Additional Indirect Reuse Projects

#### **Upper Trinity Regional Water District**

The following potentially feasible water management strategies have been identified for Upper Trinity Regional Water District.

- Conservation
- Continue/Increase supplies from Dallas Water Utilities
- Expansion of Treatment and Delivery System
- Oklahoma Water
- Indirect Reuse of Lake Chapman water
- Additional Indirect Reuse Projects

- Reallocation of Wright Patman
- Marvin Nichols I Lake
- Ralph Hall Reservoir

**Dallas County Park Cities Municipal Utility District**

Dallas County Park Cities Municipal Utility District does not have any unmet demand through 2060, so potentially feasible water management strategies do not need to be identified.

**Greater Texoma Utility Authority**

The following potentially feasible water management strategies have been identified for Greater Texoma Utility Authority.

- Conservation
- Expansion of Treatment and Delivery System
- Additional Supplies from Lake Texoma (already authorized)
- Grayson County Water System
- Cooke County Water System
- Fannin County Water System

**City of Fort Worth**

The following potentially feasible water management strategies have been identified for the City of Fort Worth.

- Conservation
- Continue/Increase Supplies from TRWD
- Expansion of Treatment and Delivery System
- Emergency Connection to Dallas
- Reuse for Tarrant County Steam Electric
- Reuse for Parker County Steam Electric

**City of Dallas (Dallas Water Utilities)**

The following potentially feasible water management strategies have been identified for Dallas Water Utilities.

- Conservation
- System Operation
- Temporary overdraft of existing lake(s)
- Expansion of Treatment and Delivery System
- Lake Fork Connection
- Lake Palestine Connection
- Toledo Bend Project
- Oklahoma water
- Cypress Basin Supplies (Lake O' the Pines, Bob Sandlin)
- Lake Wright Patman

- Sam Rayburn/B.A. Steinhagen
- Lake Livingston
- Additional Supplies from Lake Palestine
- Lake Texoma Not Yet Authorized – Blend with Elm Fork
- Lake Texoma Not Yet Authorized – Desalination
- Gulf of Mexico - Desalination
- Reuse of Return flows above Dallas lakes
- Dallas Southside Reuse Project
- Additional Dallas Indirect Reuse Projects
- Reallocation of Wright Patman
- Reallocation of Texoma
- Marvin Nichols I Lake
- George Parkhouse I Lake
- Lake Columbia
- Roberts County groundwater
- Carrizo-Wilcox water from Region G

#### **City of Corsicana**

The following potentially feasible water management strategies have been identified for Corsicana.

- Conservation
- Expansion of Treatment and Delivery System
- Connection to Richland-Chambers

#### **Sabine River Authority**

The following potentially feasible water management strategies have been identified for Sabine River Authority.

- Conservation
- Lake Fork Connection
- Toledo Bend Project

#### **Sulphur River Water District**

Sulphur River Water District does not have any unmet demand through 2060, so potentially feasible water management strategies do not need to be identified.

### **LOCAL WHOLESale WATER PROVIDERS**

#### **Athens Municipal Water Authority**

The following potentially feasible water management strategies have been identified for Athens MUA.

- Conservation

- Begin purchasing from DWU
- Begin purchasing from TRWD
- Forest Grove Reservoir (potential TXU Agreement)
- Athens Indirect Reuse

#### **Cedar Hill**

The following potentially feasible water management strategies have been identified for Cedar Hill.

- Conservation
- Continue/increase supplies from DWU
- Develop Joe Pool Lake supply

#### **Denton**

The following potentially feasible water management strategies have been identified for Denton.

- Conservation
- Continue/increase supplies from DWU
- Expansion of Treatment and Delivery System
- Increase City of Denton direct reuse
- Increase City of Denton indirect reuse
- Develop new surface water project in conjunction with other entities

#### **Forney**

The following potentially feasible water management strategies have been identified for Forney.

- Conservation
- Continue/increase supplies from NTMWD
- Increase purchase of treated effluent from Garland

#### **Garland**

The following potentially feasible water management strategies have been identified for Garland.

- Conservation
- Continue/increase supplies from NTMWD

#### **Lake Cities Municipal Utility Authority**

The following potentially feasible water management strategies have been identified for Lake Cities MUA.

- Conservation
- Continue/increase supplies from UTRWD

### **McKinney**

The following potentially feasible water management strategies have been identified for McKinney.

- Conservation
- Continue/increase supplies from NTMWD

### **Midlothian**

The following potentially feasible water management strategies have been identified for Midlothian.

- Conservation
- Connection to TRWD
- TRA Ellis County Water Supply Project
- Expansion of treatment and delivery system
- Midlothian Pipeline Expansion

### **North Richland Hills**

The following potentially feasible water management strategies have been identified for North Richland Hills.

- Conservation
- Continue/increase supplies from TRA (original source is TRWD)
- Continue/increase supplies from Fort Worth (original source is TRWD)

### **Parker County Utility District #1**

The following potentially feasible water management strategies have been identified for Parker County Utility District #1

- Conservation
- Begin purchasing from Weatherford (original source is TRWD)
- East Parker County Water System

### **Rockwall**

The following potentially feasible water management strategies have been identified for Rockwall.

- Conservation
- Continue/increase supplies from NTMWD

### **Terrell**

The following potentially feasible water management strategies have been identified for Terrell.

- Conservation
- Begin purchasing from NTMWD
- Pipeline to connect to NTMWD
- Continue/increase supplies from SRA

- Expansion of treatment and delivery system

#### **Upper Neches MWD**

The following potentially feasible water management strategies have been identified for Upper Neches MWD.

- Conservation
- Lake Palestine Connection

#### **Waxahachie**

The following potentially feasible water management strategies have been identified for Waxahachie.

- Conservation
- Begin purchasing from DWU
- Begin purchasing from TRWD
- TRA Ellis County Water Supply Project
- Waxahachie/Rockett SUD/Red Oak connection from Dallas
- Connection to TRWD

#### **Weatherford**

The following potentially feasible water management strategies have been identified for Weatherford.

- Conservation
- Temporary overdraft of Lake Weatherford
- Continue/increase supplies from TRWD
- Parallel pipeline from Lake Benbrook
- Treated water transmission lines to Southeast Parker County
- Expansion of treatment and delivery system

#### **Wise County Water Supply Corporation**

The following potentially feasible water management strategies have been identified for Wise County WSC.

- Conservation
- Continue/increase supplies from TRWD