

Agenda Item 6.7 ***County Plan Updates***

December 16, 2009

BRAZOS G
WATER PLANNING GROUP

HDR



Status of Plan Development

- ✓ **Water demand projections, current supplies and needs finalized**
- ✓ **Major water management strategies are evaluated**
 - **Technical evaluations complete**
 - **Technical information presented to RWPG**
 - **Draft report sections are being reviewed and posted to Brazos G website (anticipate Jan 5 completion)**
 - **Still developing costs for misc strategies (new pipelines, WTP upgrades, new wells) based on WUG and WWP plans**
- ✓ **Draft plans have been developed for all WUGs in all 37 counties**
 - **Recommended water management strategies w/supply volumes**
 - **Costs not yet complete**
- ✓ **WUG plans being rolled up into plans for WWPs**
 - **Anticipate Dec 21 to post WWP plans to website**

Discuss Recommended Strategies when:

- ✓ **New Reservoirs (6.7.1)**
 - **Due to relatively large impacts of projects**
- ✓ **Competing water management strategies (6.7.2)**
 - **When decision needs to be made between two equivalent strategies**
 - ✓ **Supply, cost, environmental impact, local support**
 - ✓ **None today**
- ✓ **Significant changes from 2006 Brazos G Plan (6.7.3)**
 - **Change in direction, i.e., from groundwater to surface water**
 - **Significant (> 10,000 acft/yr change from 2006)**

New Reservoirs

- ✓ **Millican Reservoir – Panther Creek site**
 - **Evaluated in 2001 Plan**
 - **Bundic site (smaller) evaluated but not included in 2006 Plan**
 - **Recommended WUGs (probably BRA project)**
 - ✓ **College Station (Brazos County)**
 - ✓ **Region H supply**
- ✓ **Brushy Creek Reservoir**
 - **Marlin (Falls County)**
 - **Included in 2006 Plan**
 - **Need to confirm with City of Marlin**

New Reservoirs

- ✓ **Groesbeck Off-Channel Reservoir**
 - **Recommended to firm up existing surface water supplies for City of Groesbeck**
 - **2006 Plan recommended Carrizo-Wilcox groundwater supply**
- ✓ **Coryell County Reservoir**
 - **City of Gatesville**
 - **Coryell County-Other**
- ✓ **Millers' Creek Expansion (NCTMWA)**
- ✓ **Cedar Ridge Reservoir (City of Abilene)**
- ✓ **Turkey Peak Reservoir (Palo Pinto County MWD)**

Bell County

✓ Temple

- **28 MGD WTP expansion (two expansions)**
- **Total Project Cost: \$23,017,000**
- **Annual Unit Cost: \$470/acft**

✓ Steam-Electric

- **Reuse from City of Temple**

Bosque County

- ✓ **Steam-Electric supply from BRA Sys Ops**

Brazos County

- ✓ **Bryan**

- **Reuse only**

- ✓ **College Station**

- **Additional Carrizo-Wilcox groundwater**
- **Reuse**
- **Millican Reservoir**

Coryell County

- ✓ **Coryell County Reservoir**
 - **Gatesville**
 - **County-Other**

Falls County

- ✓ **City of Marlin**
 - **Brushy Creek Reservoir**
- ✓ **West Brazos WSC**
 - **Purchase supply from City of Waco**

Grimes County

✓ Steam-Electric

- **Raise level of Gibbons Creek Reservoir (in 2006 Plan)**
- **Purchase reuse water from College Station and/or Bryan**

Haskell County

✓ Irrigation

- Needs cannot be met (> 22,000 acft/yr)**

Hood County

- ✓ **City of Granbury**
 - **WTP (desalinate Lake Granbury supply)**
- ✓ **Steam-Electric**
 - **Large surplus transferred to Somervell County for new Comanche Peak units**

Johnson County

- ✓ **Purchase from Johnson County SUD**
 - **Alvarado, Bethany WSC, Godley,**
- ✓ **Bethesda WSC – Fort Worth, Arlington (TRWD)**
- ✓ **Cleburne – Reuse, Lake Whitney supply, WTP expansion**
- ✓ **Johnson County SUD – Mansfield, Grand Prairie, additional BRA SWATS**
- ✓ **Manufacturing and Steam-Electric**
 - **Purchase from Cleburne (reuse and potable)**

Limestone County

- ✓ **Bistone MWSD – Carrizo-Wilcox Aquifer**
- ✓ **Groesbeck – Groesbeck Off-Channel Reservoir**
- ✓ **Steam-Electric**
 - **Reallocation of surplus Falls County Irrigation**
 - **Reallocation of surplus McLennan County Steam-Electric**
 - **No specifics on exact location of new demand**

McLennan County

- ✓ **Increased Trinity Aquifer availability**
- ✓ **Reduced Municipal shortages**
 - **2006 Plan – 13 municipal WUGs with shortages totaling 10,876 acft/yr**
 - **2011 Plan – 9 municipal WUGs with shortages totaling 1,666 acft/yr**
- ✓ **Reduced Steam-Electric shortages**
 - **Portion of surplus reallocated to Limestone SE demand (could locate in McLennan County)**

Nolan County

✓ City of Sweetwater

- **Conjunctive operation of Oak Creek Reservoir and Champion Well Field (expanded)**
- **Alternative could piggy-back on SE supply from Abilene**

✓ Steam-Electric

- **20,000 acft/yr met by Abilene**

✓ Irrigation needs not met (< 2,000 acft/yr)

Palo Pinto County

- ✓ **City of Mineral Wells (Palo Pinto Municipal Water District No. 1)**
 - **Turkey Peak Reservoir to restore permitted capacity**

Somervell County

- ✓ **County-Other, Glen Rose, Steam-Electric**
 - **Somervell County Water Supply Project from Somervell County Off-Channel Reservoir**
 - **Based on 2006 Plan amendment**
- ✓ **Steam-Electric**
 - **Transfer of supply from Hood County**
 - **BRA System Operation (2006 Plan amendment)**

Stephens County

- ✓ Mining (9,253 acft/yr need)
 - BRA (Possum Kingdom Reservoir)
 - Temporary demand?

Taylor County

✓ City of Abilene

- **Cedar Ridge Reservoir**
- **Reuse**
- **Possum Kingdom supply is alternative**

Williamson County

- **112,000 acft/yr municipal needs (shortages)**
- **Georgetown – WTP expansions to utilize existing BRA supplies**
- **Three primary “supply” strategies**
 - ✓ **LCRA/Highland Lakes Supply**
 - ✓ **West side: Leander, Cedar Park, Round Rock**
 - ✓ **Unutilized EWCRWTS (Lake Granger)**
 - ✓ **Approx. 6,000 acft/yr available**
 - ✓ **East side – several small needs along SH 95**
 - ✓ **Lake Granger Augmentation (conjunctive operation)**
 - ✓ **Long-term needs (2050 and 2060)**
 - ✓ **Primarily Round Rock**