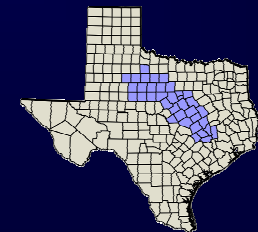


Agenda Item 8.5
Consideration of Additional Key Water
Quality Parameters Requested by the
TPWD

December 8, 2004

BRAZOS G
WATER PLANNING GROUP



Background

- ✓ **October 20, 2004 – Initial list of key water quality parameters approved by Brazos G RWPG**
 - **Additional parameters may be added per recommendation of TPWD**

- ✓ **Today:**
 - **Review approved parameters**
 - **Consider TPWD recommendations**

Background

Regional Water Planning Guidelines 357.7(a)(12)

Regional water plan development shall include a description of the **major impacts of recommended water management strategies** on **key parameters of water quality** identified by the regional water planning group as important to the use of the water resource and **comparing conditions with the recommended water management strategies to current conditions** using best available data.

Approved Key Water Quality Parameters (1)

Texas Surface Water Quality Standards Chapter 307

Criteria:

- Chlorides
- Sulfates
- Total Dissolved Solids (TDS)
- Dissolved Oxygen (DO)
- pH Range
- Indicator Bacteria (*E. coli* or fecal coliform)
- Temperature
- Nitrates

Uses:

- Recreation
- Aquatic Life
- Domestic Water Supply
- Agriculture

Approved Key Water Quality Parameters (2)

Other parameters:

Total phosphorous
Nitrogen, ammonia, total

Note: These parameters selected due to nutrient concerns in the North Bosque Watershed, but will be utilized throughout the Brazos G Region

Parameters Recommended by TPWD

Total suspended solids (TSS)

Orthophosphorous (OP) – more accurately accounts for phosphorous used by algae

Chlorophyll a (Chl a) – indicator of excessive algae growth

Note: No numeric standards exist for these parameters, but TCEQ is in process of developing standards for nutrients that may include OP and Chl a.

Discussion and Recommendation

- ✓ Analysis will be narrative in nature – no new data or water quality modeling will be completed for these evaluations.
- ✓ All surface water includes TSS (also known as suspended sediment). Effects of reservoir projects on TSS can be evaluated in narrative fashion and will provide good information.
- ✓ Review of the effects of WMS on nutrients (nitrogen and phosphorous) will indirectly include OP and Chl a. Additional detail is not warranted by the level of analysis to be performed.
- ✓ **Recommendation:** Add TSS but not OP and Chl a.