

Agenda Item 6.9
Consistency with Long-Term
Protection of the State's Resources

September 16, 2009



Protection of the State's Resources

- ✓ **Plan must be consistent with protection of:**
 - **State water resources**
 - **State agricultural resources**
 - **Natural resources**
- ✓ **Addressed in Section 7 of the Plan**
 - **Impacts of specific strategies evaluated**
 - ✓ **Streamflows, land, cultural, wildlife**
 - **Groundwater supplies utilize DFCs**
 - **Surface water strategies honor senior rights**
 - **Ag resources protected by attempting to plan for future water use**

Quantitative Streamflow Assessments

Objectives:

- 1. Provide information regarding cumulative effects of Regional Water Plan on instream flows**
- 2. Limit complexity of analysis, yet provide concise useful information**

Process Used for 2006 Plan

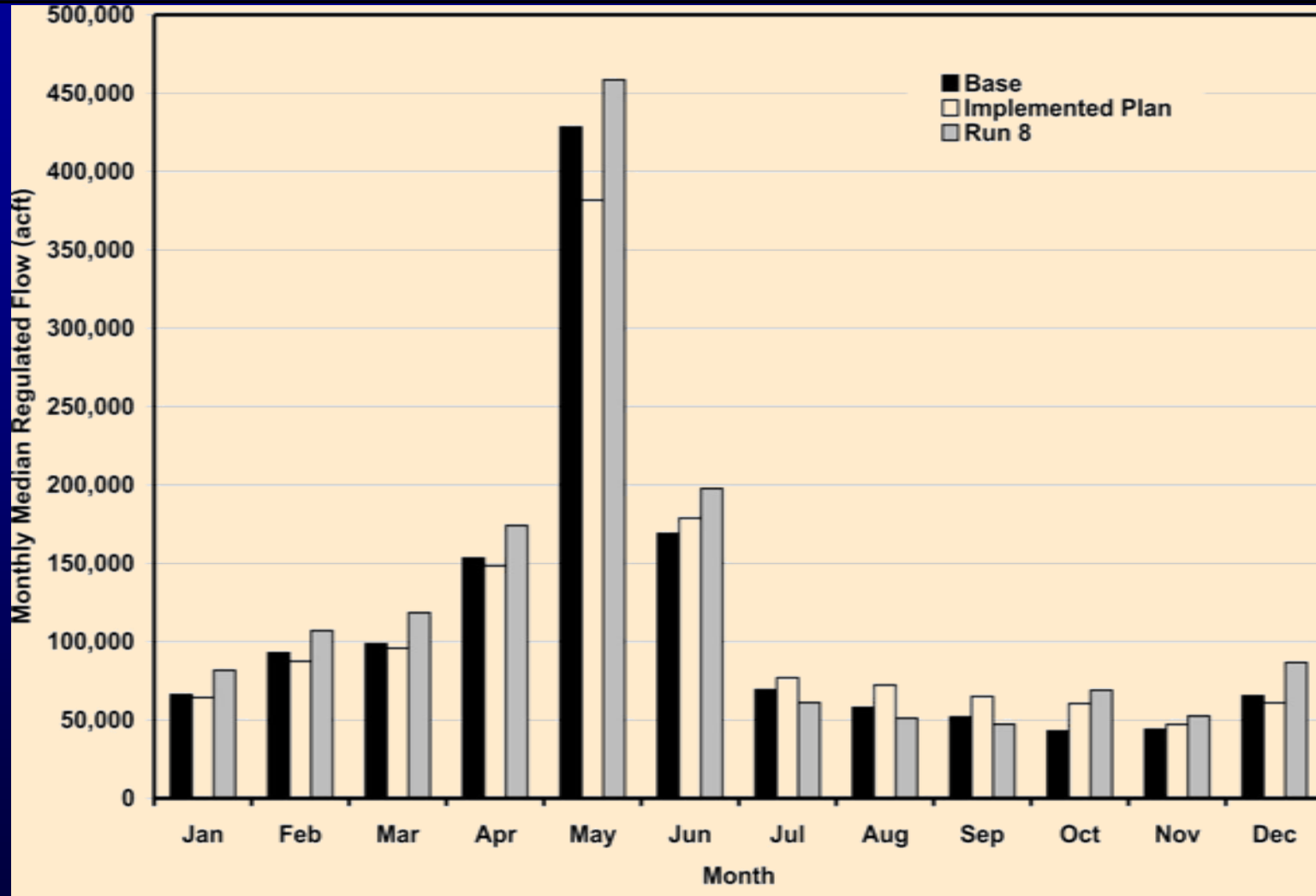
- 1. Identified various approaches**
 - Presented pros and cons
 - Which flows to compare?
 - How to present comparison?
- 2. Provided recommended list of analysis locations to TWDB**
- 3. Streamflow Assessment Workgroup**
 - Reviewed HDR information on various approaches
 - Received input from TPWD, TWDB, others
 - Recommended approach to BGRWPG

Approach Used in 2006 Plan

- ✓ **Baseline Condition = Brazos G Water Supply Analysis**
 - Existing water rights
 - Year 2060 reservoir sedimentation
 - Future return flows with aggressive reuse assumptions
 - BRA contracts placed at actual diversion locations
- ✓ **Implementation Condition**
 - Baseline Condition plus recommended water management strategies that would further impact streamflows
 - Reuse projects not included b/c return flows used assume more reuse than do the projects in the plan
- ✓ **Current Condition (TCEQ Run 8)**
 - Existing uses and return flows
 - Existing sedimentation conditions
 - BRA diversions located lakeside

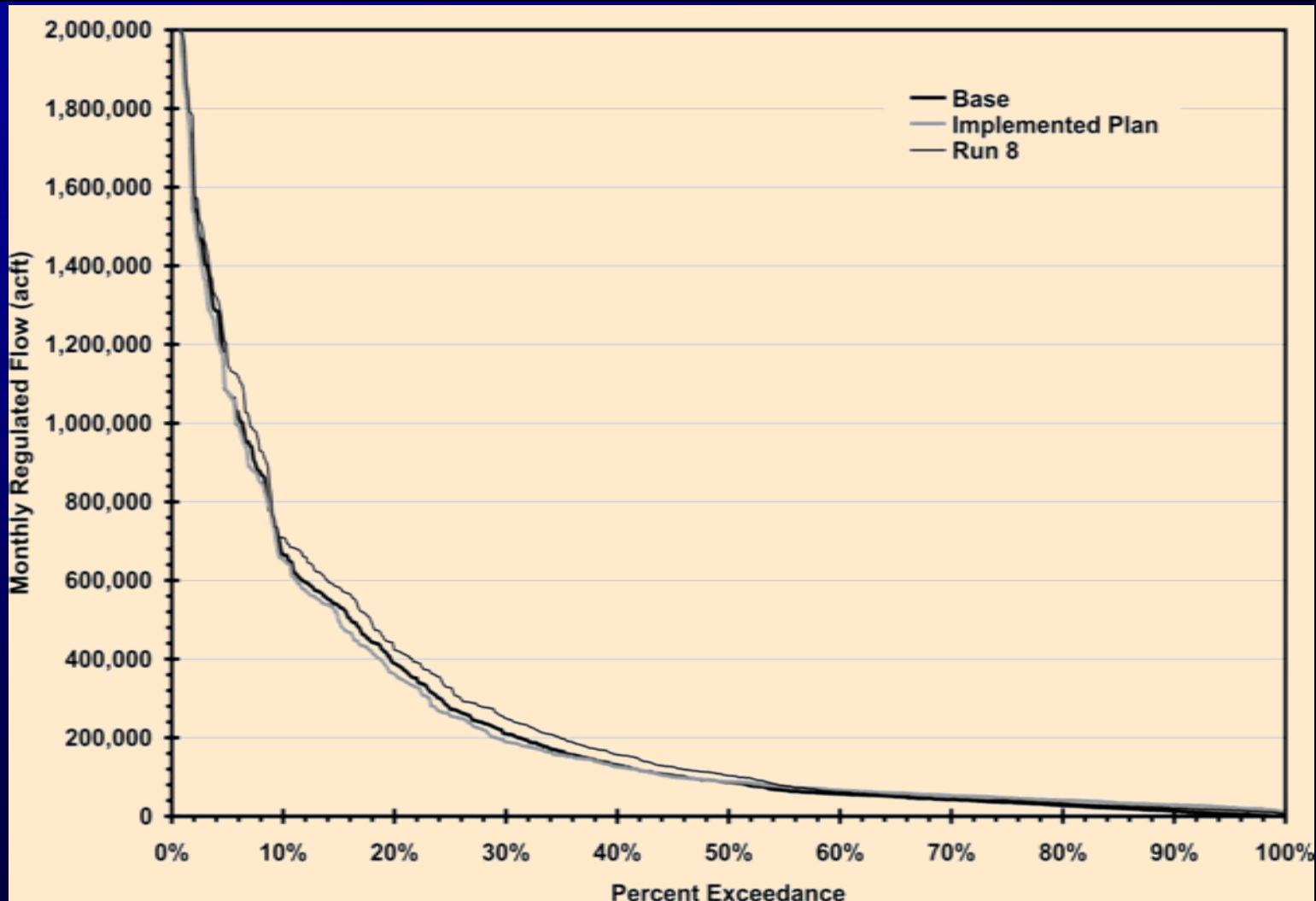
Recommended Graphical Comparisons (1)

Monthly Median Streamflows

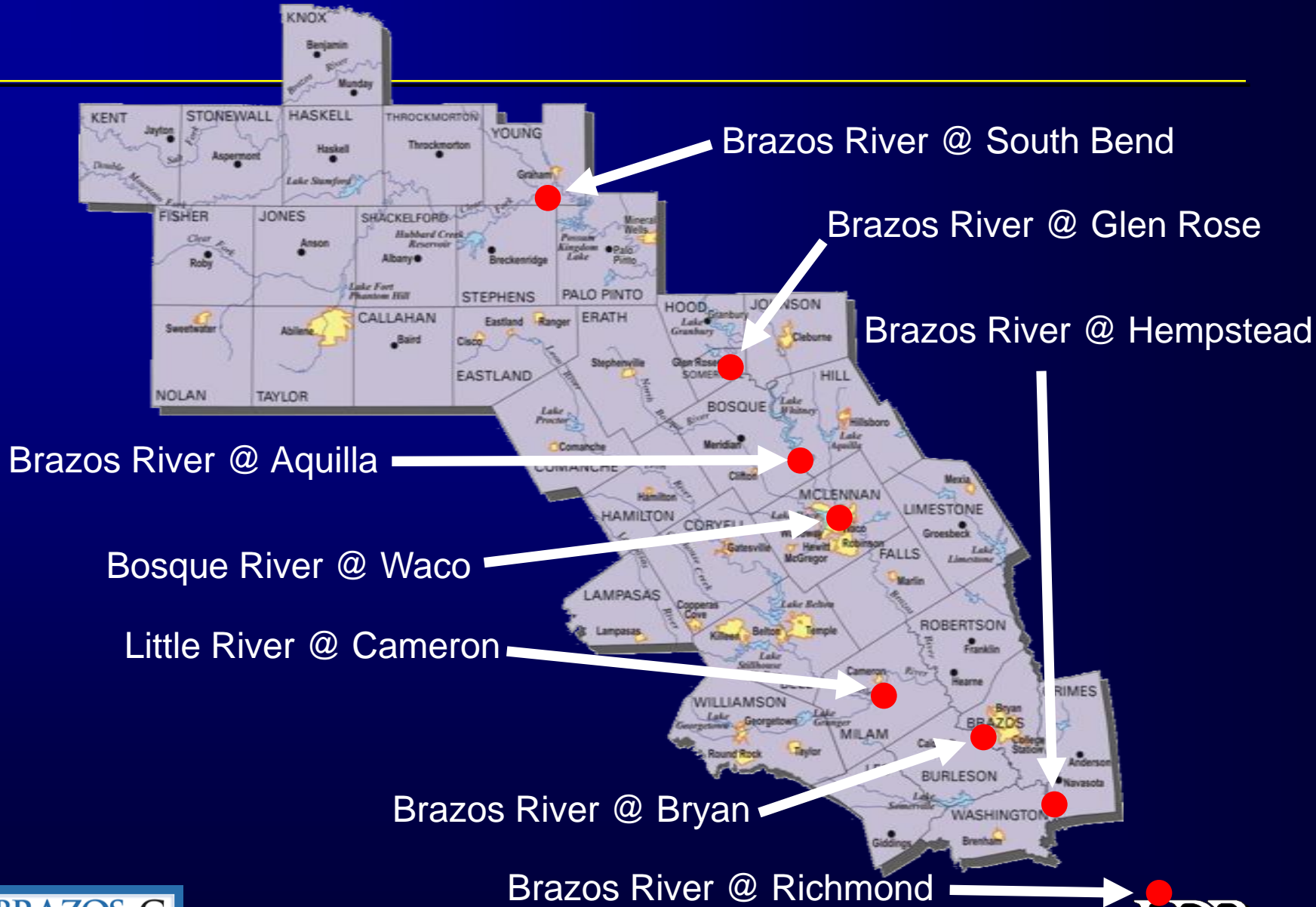


Recommended Graphical Comparisons (2)

Streamflow Frequency



Streamflow Assessment Locations



Recommendation

- ✓ **Confirm use of 2006 methods for the 2011 Plan**