

Chapter 4D

Water Management Strategy Evaluation

Water management strategies identified to meet water needs during the planning period were evaluated based on the following criteria:

- (1) Evaluation of the quantity, reliability, and cost of water delivered and treated for the end user's requirements, incorporating factors to be used in the calculation of costs as required by regional water planning;
- (2) Environmental factors including the effects of the proposed water management strategy on environmental water needs, wildlife habitat, cultural resources, water quality and effect of upstream development on bays, estuaries, and arms of the Gulf of Mexico;
- (3) Impacts on other water resources of the state including other water management strategies and groundwater surface water interrelationships;
- (4) Impacts of water management strategies on threats to agricultural and natural resources of the regional water planning area;
- (5) Impacts of the strategy on key water quality parameters;
- (6) Any other factors as deemed relevant by the regional water planning group including political feasibility, implementation issues and potential recreational impacts;
- (7) Equitable comparison and consistent application of all water management strategies the regional water planning groups determines to be potentially feasible for each water supply need;

- (8) Consideration of the provisions in Texas Water Code, § 11.085(k)(1) for interbasin transfers; and
- (9) Consideration of third party social and economic impacts resulting from voluntary redistribution of water;

The evaluation was undertaken through the development of a matrix to rate the above consideration from most desirable (1) to least desirable (5). Rating of the Environmental Factors (item 2 above) was evaluated using a separate matrix with consideration of nine factors; total acres impacted, wetland acres, environmental water needs, habitat, threatened and endangered species, cultural resources, bays and estuaries, environmental water quality and other noted factors. The evaluation matrices are included in Appendix 4D-A.