# *Section 8*
# *Policies and Recommendations*
# *[31 TAC §357.7(a)(10); 31 TAC §357.8; and 31 TAC §357.9]*

## *8.1 Agricultural Water*

**Feasibility of Meeting Irrigation Water Needs**: The SCTRWPG finds that, under current conditions, it is not economically feasible for agricultural producers to pay for additional water supplies to meet all of the projected irrigation water shortages. See Section 4C.1.2 for an analysis of economic feasibility underlying this finding of the Regional Water Planning Group.

The SCTRWPG recommends that the TWDB undertake economic studies of water management strategies that may meet irrigation needs in Texas.

**Agricultural Water Conservation Programs**: The SCTRWPG recommends restoring funding to the Agricultural Water Conservation programs provided by the TWDB.

**Water Use Information**: The SCTRWPG recommends that TWDB improve the water use information for irrigation and livestock watering categories.

## *8.2 Rural Water*

Given the increasing number of proposals to export large amounts of water, the legislature should review Section 36.122 of the Texas Water Code. Any necessary changes should allow for sufficient revenue to support high quality technical studies and should be made to ensure that districts are fully equipped to analyze and respond to such proposals, to fully consider their effect on local communities, the rural environment and economy.

## *8.3 Groundwater*

**Groundwater Management**: The SCTRWPG respects the rules and regulations of groundwater districts, just as it does those of all other state subdivisions and agencies. The SCTRWPG believes that all rules should be adopted pursuant to accepted administrative procedures based on the standards of rationality, equity and scientific evidence.

**Groundwater Sustainability**: The SCTRWPG has adopted the goal of groundwater sustainability and recommends management strategies needed to accomplish this goal. This recommendation is intended to help protect all users of those aquifers that are subject to increased withdrawals, to help preserve the long-term integrity of those aquifers, and to build

awareness of the effects of pumping on those aquifers and of their recovery capabilities. The SCTRWPG recommends that any person implementing any groundwater option or strategy identified as part of this Regional Plan consider and incorporate groundwater monitoring of both quantity and quality, recharge protection and enhancement, conservation methods and related practices, as determined to be appropriate by local groundwater districts. Where no district exists, the developer should monitor impacts and, when appropriate, take corrective action consistent with the goal of groundwater sustainability.

**Shared Groundwater Resources among Planning Regions**: In the event a Water User Group relies on a groundwater management strategy to meet the Water User Group's demand during the planning period and the strategy would have a significant impact on a groundwater resource shared among planning region(s), notice shall be provided to the region(s) of the proposed date of implementation and anticipated acre-feet per year demand on the shared groundwater resource.

**Equity in Groundwater and Surface Water Law**: The SCTRWPG recognizes a need for equity in groundwater and surface water law to facilitate the proper balance of the use of those resources. The SCTRWPG recommends that the state provide incentives to develop conjunctive use projects that more efficiently utilize groundwater and surface water.

**Land Stewardship**: The SCTRWPG encourages State support of implementing or enhancing land stewardship management practices that are shown to augment the quality and quantity of the state's surface water and groundwater resources.

**Development and Use of Groundwater**: The SCTRWPG encourages legislation requiring public or private entities planning to develop groundwater projects to provide an economic analysis of the impact to communities, instream flows, and bay and estuary systems incurred by movement of the groundwater.

**Funding of Groundwater Conservation Districts**: Given the increasing number of proposals to export large amounts of water, the Legislature should review Section 36.122 of the Texas Water Code. Any necessary changes should allow for sufficient revenue to support high quality technical studies and should be made to ensure that Groundwater Conservation Districts are fully equipped to analyze and respond to such proposals, and to fully consider their effect on local communities, the rural environment and the economy.

**Region L's Matrix Approach**: The SCTRWPG encourages the Texas Water Development Board to fund development, in general accordance with the SCTRWPG proposal

to TWDB submitted in June 2004, of a generic "Analytical Tool" that will provide a standard method for regional water planning groups, groundwater conservation districts, groundwater developers, and others to use to evaluate local hydrologic, environmental, social, and economic impacts on specific groundwater exportation/marketing proposals.

## *8.4 Surface Water*

**Surface Water Rights Monitoring and Administration**: The TCEQ should be adequately staffed and funded to ensure the legal and appropriate use of permitted surface water rights through comprehensive monitoring and administrative programs, such as the Watermaster program.

**Equity in Groundwater and Surface Water Law**: The SCTRWPG recognizes a need for equity in groundwater and surface water law to facilitate the proper balance of the use of those resources. The SCTRWPG recommends that the state provide incentives to develop conjunctive use projects that more efficiently utilize groundwater and surface water.

**Surface Water Rights and Interbasin Transfer**: The SCTRWPG considered the positive and negative impacts of certain provisions added to Chapter 11.085 of the Texas Water Code regarding Interbasin Transfers pursuant to Senate Bill 1 of the 75th Legislature. Among the negative impacts cited by some members are these:

- It imposes limitations on surface water rights permits that have previously been issued, possibly diminishing the value of some permits to the owners.
- It forces greater use of groundwater supplies, and potentially, encourages the mining of aquifers.
- It can result in construction of new reservoirs that would not be needed if seniority of rights and existing environmental flow requirements were preserved in interbasin transfers because of the need to provide reliable water supplies in the plans.

Other members of the SCTRWPG cite the following positive effects of these provisions added by Senate Bill 1.

- The junior water rights provision protects municipalities and other water users, especially in cases where the interbasin transfer of senior water rights would put junior rights at risk.
- Bays and estuaries and instream flows have added protection from the impact of water exportation.
- Establishing the seniority of basin-of-origin water rights over those used for export preserves the economic value of the resource for the future development of the basin-of-origin.

The SCTRWPG makes no specific recommendation at this time for legislative changes to Chapter 11.085 of the Texas Water Code.

**Lockhart Reservoir:** The Lockhart Reservoir is recognized as a potential supply for the City of Lockhart and others. This water management strategy may be considered as an amendment to the Regional Water Plan.

## *8.5 Conservation*

**Conservation Planning Guidelines**: Because of the central role of conservation in achieving the water supply objectives of the South Central Texas Regional Plan, the SCTRWPG has adopted the Water Conservation Implementation Task Force recommendation to establish GPCD Targets and Goals related to average annual reductions in residential indoor use. The SCTRWPG recognizes that the creation of conservation programs and the selection of specific conservation technologies is a matter of local choice and recommends that the water user groups reference the Water Conservation Best Management Practices Guide, TWDB Report 362, as an educational tool that can facilitate understanding of the importance of conservation efforts and the wide range of methods available for use.

Region L has addressed, defined, and adopted the most reasonably practical level of conservation to be:

(1) For Water Use Groups (WUGS) with per capita water use of 140 gpcd and greater in year 2000, reduce gpcd by 1 percent per year until reaching 140 gpcd, and reduced gpcd by 0.25 percent per year thereafter.
(2) For WUGS with per capita water use less than 140 gpcd in year 2000, reduce gpcd by 0.25 percent per year.

**Implementation of Water Conservation Task Force Recommendations**: SCTRWPG supports legislation for funding to implement the Water Conservation Task Force recommendations, particularly the statewide public education programs, such as Water IQ. Further, SCTRWPG supports the recommendations and legislative initiatives contained in the report of this task force.

**Irrigation Technology Center**: The State should provide additional funding for the Irrigation Technology Center, as instituted by the Texas A&M University System, in order to provide hands-on access to state-of-the-art water conservation technologies tailored to the specific urban and agricultural conservation needs of this region.

## *8.6 Innovative Strategies*

**Assistance for Alternative Water Supply Strategies**: The State should increase funding to assist water planning regions and local water entities in developing demonstration projects for alternative water supply strategies and technologies, such as, but not limited to, desalination. With this assistance, water planning regions could avoid short-term projects that may be less costly but also less desirable because of environmental and socio-economic impacts. By funding demonstration projects for alternative technologies that may not yet be cost-effective, the State can help local water management entities avoid adverse impacts to the environment, to property rights and to local socio-economic conditions. In this way, the State can play a crucial role in guiding regions to water supply solutions that meet needs while also resolving conflict. Funding to demonstrate the value of innovative long-term strategies thus can help achieve cost-saving, efficient regional water management solutions.

**Desalination**: The SCTRWPG supports the funding of a state and/or federal program for research and potential incentives to make desalination more affordable. This includes both brackish groundwater and seawater desalination. Should such incentives, technical advances, and/or other factors make a seawater desalination strategy similar to that described in Section 4C.22 sufficiently attractive to a water user group or WWP that implementation prior to year 2050 is desired, it is explicitly recognized by the SCTRWPG that such rescheduled implementation is consistent with the 2006 South Central Texas Regional Water Plan.

**Rangeland Management (Brush Management)**: The SCTRWPG encourages the Legislature to increase funding to the Texas State Soil and Water Conservation Board for the purpose of increasing brush control programs integrated with proven rangeland management practices.

**Rainwater Harvesting and Other Systems**: The SCTRWPG encourages the use of rainwater harvesting systems in both commercial and residential new development. The SCTRWPG recommends the TWDB develop programs to educate the public and building industry on the benefits of rainwater harvesting, water re-use and gray water systems. The educational programs should include distribution of materials to the building industry to encourage use of these systems.

**Weather Modification**: The SCTRWPG urges the state to continue to support the existing Weather Modification Program.

**Drought Contingency Plan**: Drought Management/Drought Contingency Planning (DM/DCP) is not yet incorporated as a recommended water management strategy in the 2006 South Central Texas Regional Water Plan. Water user groups (specifically municipal water suppliers) are, however, required to articulate DM/DCP within their TWDB management plans.

Calculations for the 2006 plan, using the TWDB socioeconomic impact analysis of unmet water needs in the region – and assuming that none of these needs would otherwise be met – resulted in unacceptable high projections of business, personal income, and tax revenue losses. There are predictions of even greater costs outside these clearly defined categories, though they are acknowledged as being more difficult to measure. Experience does not, however, support this conclusion to the extent that is would either preclude the viability of DM/DCP as a strategy or dictate its exclusion from the plan.

Among principal impacts of DM/DCPs being incorporated as a water management strategy are the following:

- that economic ramifications of stages one and two DM measures are considered to be minimal and should not be overstated in the analysis, i.e., each stage's impacts – one through four – should be evaluated independently; and
- that DM/DCP, in concert with anticipated user conservation responses to sever drought conditions, may obviate the necessity for developing water resources/supplies that carry very high unit costs.

The SCTRWPG recommends that a more thorough analysis of DM/DCP as a water management strategy be conducted during the planning interim. The experience of water suppliers who have planned and implemented DM/DCP should prove of benefit in this analysis and lead to a practical DM strategy.

## *8.7 Environmental*

**Protection of Edwards Aquifer Springflow and Downstream Water Rights**: While the plan assumes annual withdrawals of 340,000 acft from the Edwards Aquifer under drought of record conditions, it is projected that this level of pumpage will not protect springflows in all drought conditions.. A draft Habitat Conservation Plan has been completed and is currently under review by the United States Fish and Wildlife Service (USFWS). If the USFWS or other government authorities mandate reductions in pumpage from the Edwards Aquifer below

340,000 acre-feet, annually, water options and management strategies in addition to those identified in this plan will be needed to meet the projected demands of Water User Groups.

**Ecosystem Health, Quality of Life, and Growth Management for Texas**: The rapid growth occurring in South Central Texas has the potential to negatively impact quality of life. Human demands for water and infrastructure development may outstrip the ability of all of the region's resources to respond and to be sustainable. Texas should focus on these issues and evaluate land use and the health of its ecosystem in order to prepare for the future and support a sustainable quality of life for all Texans.

**Ecologically Unique Stream Segments and Unique Reservoir Sites:** The Legislature has clarified that the designation of a unique stream segment "solely means that a state agency of political subdivision of the state may not finance the actual construction of a reservoir in a specific river or stream segment." This clarification does not address the uncertainties that a unique stream segment designation made by a regional water planning group might create during the Texas Legislature's ratification process or during state or federal permitting process for projects other than reservoirs.

Until the Legislature provides further clarification regarding projects other than reservoirs, the SCTRWPG recommends that there be no designation of sites in this round of planning. However, the SCTRWPG recognizes the great importance of the issue for the protection of sites of high ecological value.

The SCTRWPG has ample evidence of the existence in this region of many streams that may deserve recognition and protection, including the list prepared by the Texas Department of Parks and Wildlife identifying 20 stream segments meeting one or more of the criteria specified in Senate Bill 1. There have been additional suggestions of sites made by members of the SCTRWPG, by many individuals through our public involvement process and by such organizations as the San Antonio River Basin Alliance, the Texas Rivers Protection Association, the San Marcos River Foundation, and the Wimberley Valley Watershed Association.

The SCTRWPG believes there should be a clear process for the development of recommendations on site designation. Such a process should include extensive public involvement and ample opportunity and resources for the assessment of all potential impacts.

**Instream Flows and Bays and Estuaries**: Legislative framework and funding are needed for improved science and diverse regional stakeholder input into the process for selection of appropriate freshwater inflow goals on an estuary-by-estuary basis. The appropriate balance of

environmental and human needs during severe drought has very significant effects on the firm yield and associated cost of potential water supply projects.

The SCTRWPG encourages completion of the Texas Instream Flow Studies Program and improvement of the State's bays and estuaries freshwater inflow studies, with special attention paid to the report of the Science Advisory Committee of the Study Commission on Water for Environmental Flows

The SCTRWPG supports an overall environmental flow strategy that facilitates change as future information becomes available, provides for a sound ecological environment, and assures dependable water supplies for human use.

The SCTRWPG requests better policy direction in the law regarding environmental flows and reuse that would streamline and provide greater predictability in the permitting process for projects.

The SCTRWPG encourages TCEQ and TWDB to evaluate the relationship between groundwater and surface water to ensure that riverine base flows derived from groundwater springs are maintained. The SCTRWPG supports a holistic approach to watershed management that considers the cumulative effects of all water uses in a basin.

**Environmental Studies:** The SCTRWPG recognizes that significant needs exist in Bexar and the surrounding counties and that new supplies need to be developed in the Guadalupe River and San Antonio River watersheds. There are issues related to environmental impacts that need further study to determine feasibility of reuse of wastewater effluent, Edwards Aquifer recharge dams, the proposed Dunlap and Siesta water supply projects, and the resulting groundwater-surface water interaction from the existing and proposed Carrizo projects. Therefore, the SCTRWPG recommends that additional environmental studies be undertaken to be able to evaluate the effects of such projects on the ecosystems that rely on inflow to San Antonio Bay and flows of the Guadalupe River and San Antonio River watersheds.

## *8.8 Providing and Financing Water and Wastewater Systems*

**Plan Implementation**: Given the unprecedented level of time and money expended in the development of Regional Water Plans across the state, the SCTRWPG urges the Legislature to act promptly to help ensure full implementation of these plans.

**Funding**: The SCTRWPG believes that State funding should be provided as a key incentive for partnership in funding from local, regional and federal governmental agencies.

The SCTRWPG encourages a more active State support in solicitation of Federal funding for development of new water supply sources, especially when the need for which is based in part upon Federal requirements, such as the Endangered Species Act.

**State Water Plan Implementation**: State support is fundamental for the successful implementation of the water resources projects in the State Water Plan resulting from the SB-1 Regional Planning Process. Specifically, new legislation to create State support for implementation of the State Plan should include the following:

- A statewide funding mechanism for projects included in the State Water Plan.
- Sufficient funding for TWDB and TCEQ to administer their programs and activities associated with planning, financing and permitting of the projects in the State Plan.

**Continuation of Regional Water Planning**: The SB-1 Planning Process is an important program, and funding should be continued to sustain the work of the Regional Water Planning Groups.

**State Position in Federal Permitting**: In the context of the federal permitting processes pertaining to water resources, all state agencies should present a single position consistent with the State's position as articulated in the State Water Plan.

The SCTRWPG supports the concept that a state agency (TWDB) be responsible for implementation of and advocacy for projects in the State Water Plan with regard to funding and permitting at the state and federal levels.

### *8.9 Data*

**Water Data Collection**: The Legislature should fully fund the cooperative, federal-state-local program of basic water data collection, including (a) Stream gages-quantity and quality; (b) Groundwater monitoring-water levels and quality; (c) Hydrographic surveys-sediment accumulation in reservoirs; (d) Water surface evaporation rates; (e) Water use data for all water user groups; and (f) Population projections.

**Access to State Water Data**: There should be adequate funding for the critical roles of TWDB and TCEQ in facilitating access to water data essential for local and regional planning and plan implementation purposes.

**Population and Water Demand Projections**: The SCTRWPG recognizes that the TWDB bases its water demand projections on patterns of population and economic growth while also permitting revisions of state data to incorporate additional information developed by the

planning regions. Nevertheless, some groups believe that the methodology puts an unfair limitation on access to water for future growth, particularly in areas that may experience more rapid change than they have in the past. The Legislature should modify the Regional Water Planning process to allow for greater flexibility and for earlier and more active involvement of the Regional Water Planning Groups in developing growth and water demand projection methodologies consistent with water availability strategies. Water demand projections used in developing the Regional Water Plan should be consensus figures arrived at by using TWDB data along with local input from the cities, counties and groundwater districts.

**Coastal Basins**: Coastal basins adjacent to major river basins are considered part of the major basins. The SCTRWPG recommends eliminating the requirement to tabulate data for these areas by county and basin boundary since the result is a set of essentially empty tables.

## *8.10 Other Issues*

**Planning for System Management Water Supplies**: System management water supplies, i.e. supplies over and above those apparently needed to meet projected demands, may be included in the plan for the following reasons: 1) to recognize both the long lead times and the uncertainty associated with risk factors that may prevent implementation of water management strategies and necessitate replacement strategies; 2) to preserve flexibility for water user groups or wholesale water suppliers to select the most feasible projects among several consistent with the Regional Plan and therefore potentially eligible for permitting and funding; 3) to serve as additional supplies in the event rules, regulations or other restrictions limit use of any planned strategies, and 4) to ensure adequate supplies in the event of a drought more severe than that which occurred historically. The plan should specify those factors affecting reliability of the recommended options and strategies and indicate what alternatives are available as possible replacements.

The amount of the management supply should be limited by consideration of the following factors: 1) potential disruptive impacts of planning for projects that have low probability of implementation; and 2) citing of specific reasons for management supplies that exceed the projected needs of the region.

**Public Education on Water**: The State should fund a state-wide program to educate the general public about water in coordination with the Agricultural Extension Service offices. The

program should produce water-related materials with special components adapted for each water planning region and should also include a component comparable to the "Major Rivers" program that would be available to the public schools through the Regional Education Service Centers and by other means.

SCTRWPG supports legislation for funding to implement the Water Conservation Task Force recommendations, particularly the statewide public education programs, such as Water IQ.

**County Authority**: Counties should have additional authority for land use planning and for regulating development based on availability and protection of water resources.

**Planning Requirements**: There should be no changes in the planning process or additional planning requirements except through the formal rule-making procedure. Contract requirements should be established and in place prior to submission of grant proposals.

**Regional Boundaries Should Foster Collaboration**: The SCTRWPG recommends that the Legislature make it very clear to all Texans that the boundaries of the regional water planning regions were drawn only to define water planning regions and that the boundaries are not intended to be barriers to prevent water transport from one region to another – nor to pit one region against another for any reason.

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