List of policy recommendations from the 2011 adopted regional water plans

Relevant for 355, 357, 358 Revision (Estimated Appropriate Section in Rules)

Region A:

1. TWDB should establish and continue to promote clear guidelines for eligibility for funding and needs assessment for very small cities, unincorporated areas. Statements to the effect that those "entities which fall under the planning limits retain eligibility for state funding assistance for water-related projects without having specific individual needs identified in the appropriate Regional Water Plan" would greatly enhance the ability of these small systems to provide their users with a safe and adequate supply of water. (Consistency of Plans)

2. Allow development of alternative near term water supply strategies for water systems that service fewer than 3,300 population. (**WMS**)

3. Clarification of relationship between drought contingency planning and regional water supply planning. It is not clear what role drought contingency planning has in the regional planning process. (WMS)

4. Include an economic impact analysis for the result of implementing water management strategies. The current planning rules provide for an economic analysis of not meeting water demands. However, there is no provision for economic analysis of implementing a water management strategy. The analysis should include impacts on water suppliers, users and major economic sectors. (WMS)

5. Brush control. TWDB guidance is needed on how to account for brush control projects in the context of a source of "new surface water" for municipal, industrial, agricultural, and other uses. The Canadian River watershed has more than 50% cover of mixed brush species that are amenable to control for rangeland improvement and water enhancement purposes. (WMS – Has been addressed in guidance to some degree or guidance clarification communication)

6. Updated analysis of surface water supply inflows and availability. The regional surface water supply has steadily decreased over a ten year period to the extent that regional lakes are at all time lows. (Supplies and Availability)

7. Adopt recognized definitions for gallons per capita per day (GPCD) proposed by the Water Conservation Advisory Council. Recognized standard definitions for GPCD will allow better communication across the state on water conservation. (**Demand projections**)

8. TCEQ should be made at least an ex-officio member of the RWPGs and be required to attend RWPG meetings to provide input on known water quality/quantity problems. (**RWPG membership**)

9. *Interbasin/Intrabasin water transfers.* Future state water plans should provide for a detailed assessment of the potential for transporting water into or out of the PWPA. (**Plan content**)

10. Salinity and brush control projects for the Canadian River and/or Red River Basin. Although there have been salinity and brush control projects recently implemented in the Canadian and Red River Basins, future State Water Plans should continue to plan for future salinity and brush control projects and their funding to continue to improve water quality and quantity in the basins. (**Plan content**)

Region B:

1. Senate Bill 1 requires future projects to be consistent with the approved regional water plan to be eligible for TWDB funding and TCEQ permitting. It is recommended that surface water uses that will not have a significant impact on the region's water supply and water supply projects that do not involve the development of or connection to a new water source should be deemed consistent with the regional water plan even though not specifically recommended in the plan. (**Plan consistency**)

2. Region B recommends that the gallons per capita per day (gpcd) calculation of water use be based on residential water use only. (**Demand projections**)

Region C:

1. A statewide TWDB/TPWD/TCEQ/RWPG working group could help address concerns. The Region C Water Planning Group recommends the formation of a working group comprised of representatives of TWDB, TPWD, TCEQ, and the sixteen water planning regions to bring clarity, purpose, and direction to the legislative mandate to "identify river and stream segments of unique ecological value. " Specifically, it is expected that the working group would:

a. Research, verify, and publicize the intent of ecologically unique river and stream segment legislation.

b. Research agency rules and recommend changes or clarifications where needed.

c. Ensure common understanding of "reservoir" as used in ecologically unique river and stream segment legislation and agency rules.

d. Identify the lateral extent of ecologically unique river and stream segment designation.

e. Seek clarification of quantitative assessment of impacts on ecologically unique river and stream segments. (Policy Recs – Unique Stream Segments and Reservoirs)

2. Allow waivers of plan amendments for entities with small strategies. (Plan Consistency)

3. Coordination between TWDB and TCEQ to determine the appropriate data and tools for use in regional water planning. The TWDB requires that the Water Availability Models (WAMs) developed under the direction of TCEQ be used in determining available surface water supplies. The models were developed for the purpose of evaluating new water rights permit applications and are not appropriate for water supply planning. The assumptions built into the WAM (full use of all existing water rights, full operation of priority calls at all times, full permitted area and capacity) do not always match the actual operations of supplies. The TWDB and TCEQ should coordinate their efforts to determine the appropriate data and tools available through the WAM program for use in regional water planning. The TWDB should allow the regional water planning groups some flexibility in applying the models made available for planning purposes. (Supplies/Availability)

4. Revise Federal Section 361(b) regulations on power plant cooling water. We encourage TWDB and TCEQ to work with the Federal government on Section 316(b) regulations to allow the efficient use and conservation of water supplies for power plants and the state. (**Supplies**)

Region D:

1. To address the issue of unique reservoirs and the accompanying property owners, industry, and local government concerns the NETRWPG would recommend that the following be instituted when a unique reservoir site is being considered and included in planning studies:

a. The required mitigation area is to be acquired from the water planning region requesting the reservoir or other such region willing to provide the mitigation area.

b. At the identification of a unique reservoir site as a water planning strategy, the property owners in the area of the unique reservoir site and the accompanying mitigation site or sites must be notified by the requesting entity of such intent.

c. At the initiation of the appropriate studies for the identified unique reservoir site, a mitigation site study shall be completed as soon as possible to identify and preliminarily map the mitigation area.

d. Property owners should be afforded compensation based on replacement value to the maximum allowed by law in addition to a fair market value approach.

e. Property owners whose properties are directly inundated by a reservoir constructed for the purpose of interbasin transfers shall have the right to receive royalties for the water stored over the property taken as an ongoing compensation.

f. Local government and other taxing entities shall have the right to direct payments in lieu of taxation for property lost and per ac-ft for waters stored in the reservoirs constructed in the NETRWPG area for transfer to other basins to replace the taxation lost due to property removed directly from the tax roles. Direct payment in lieu of taxation may differ on stored water and transferred water.

g. Local government, school districts and industry affected directly by the development of a reservoir proposed for interbasin transfer shall be aided and supported by the production of planning and remuneration for direct reduction of economic activity, resources and jobs.

h. The NETRWPG area will retain a portion of the impounded water of the developed reservoir for future use by the region. The development of reservoirs in the NETRWPG area as a future water source for other portions of the state would require interbasin transfer authorizations from the Texas Commission on Environmental Quality (TCEQ). (**WMS**)

2. The North East Texas Regional Planning Group recommends that any planning group or entity proposing a new reservoir or any other water management strategy should address the subject of mitigation in conjunction with any and all feasibility studies. A study on possible mitigation effects should be undertaken and completed in conjunction with any and all feasibility studies. Information should include estimates of mitigation, predication ratios, and other information useful to landowners potentially affected by mitigation requirements. Also, any new reservoir proposed by a planning group must be accompanied by a map of the proposed reservoir and a map of the land proposed to be mitigated including proposed acreage. (WMS)

3. TWDB rules for regional water planning require that the evaluation of interbasin transfer options include consideration of "...the need for water in the basin of origin and in the proposed receiving basin." The issue of how much water is needed in the North East Texas Water Planning Region for local use is not as simple as just comparing estimates of existing water supply to projections of future water demand. It should be remembered that the water demand projections adopted by the NETRWPG and the TWDB for development of the regional plan are based largely on an extrapolation of past growth trends. While this is a common and accepted method for forecasting future conditions, there are nonetheless significant uncertainties in the projections. Such factors suggest that the RWPG may want to review a possible policy recommendation regarding the definition of "need" in the basin of origin. Some members have also suggested broadening the test of need for interbasin transfers to consideration of projected needs throughout the *region* of origin, not just the basin of origin. (**WMS**)

4. The NETRWPG believes that the regional water planning process should provide greater flexibility in development of water demand projections. TWDB rules and guidelines regarding population and water demand projections tend to confine rural and smaller urban areas to past rates of growth without allowing for consideration of alternative scenarios for future growth and economic development initiatives. Because the region has a relatively small population and water demands, the impact of a major new water user, such as a paper mill or a power plant, could dramatically alter the water supply and demand equation at a county or even basin level. There is no mechanism in the current process to provide for these potential increases, until the five year review period. TWDB rules also build into municipal water demand projections conservation assumptions which may be unrealistic. In rural areas that already have low rates of per capita use, there often is an increase in per capita use as development takes hold in the area. Assumptions about conservation in these areas that already use far less on a per capita basis than the very large and rapidly growing urban areas could have the effect of limiting future development. There are more than 30 water user groups in the North East Texas Region with per capita usage levels well below the 115 gallons per capita per day (gpcpd) level set as the "floor" by the NETRWPG. Some usage rates are in the 70-80 gpcpd range, a sharp contrast with large urban areas where 200 gpcpd or more is not uncommon. Landscape watering, a prime target for urban water conservation programs, is much less prevalent in rural areas. Further, the housing stock is not undergoing rapid growth or replacement, thus reducing the potential impact of plumbing fixture efficiency standards. The North East Texas Regional Water Planning Group recommends that the TWDB should revise procedures for calculating water demand reduction projections contained in its conservation scenarios by recognizing a floor for the application of demand reduction for rural and small city areas where the per capita water consumption levels are already very low. (Demand projections)

5. The North East Texas Regional Water Planning Group (Region D) recommends that the Texas Legislature standardize the method used to derive the statistic known as "gpcpd" (gallons per capita per day) and also known as "municipal per capita usage". (**Demand projections**)

Region E:

1. Re-emphasis of the Planning Function of the Regional Water Planning Group and Need for More Local Planning Initiatives. The planning process increasingly focuses too heavily on meeting the technical requirements of the regional water planning process and the TAC rules, to the detriment of allowing for local planning initiatives. The role of the Regional Water Planning Group no longer seems to include "planning"; rather, it meets primarily to ratify deadlines and requirements of the TWDB. Certainly this seems to contradict the goal of Senate Bill 1. During this planning cycle in particular, the Planning Group had virtually nothing of substance to do until the last six months, during which we have had to meet monthly in order to comply with mandated TWDB deadlines. Some members of the Planning Group feel that they have become irrelevant to the planning process and that, to be blunt, they are wasting their time. Providing for more local influence of the process and reducing the numerous, standardized checklists of the requirements of the Plan would help. The planning process and the ultimate Plan must be flexible because of the unique characteristics of the border region. The FWTWPG should have the legal ability to consider all water resources available to the Region, regardless of whether or not they are located within Texas. (**Plan development/content/methodologies**)

2. Wastewater and Stormwater Planning. In this particular region because "water is water", future planning should include wastewater and stormwater. Effective stormwater planning will be beneficial to regional water resources including aquifer recharge and optimization of surface water resources. (**Supplies**)

3. Elimination of Unfunded Mandate. The current regulations of the TWDB require local entities to pay for 100 percent of the administrative costs of developing the plans. This is difficult to sell when a local government has to tell its constituents that they have to do with one less full-time deputy, a lower level of funding for the library, and no new fire truck – but that they can afford to pay for a water plan. Trying to force local "buy-in" by requiring local funding causes resentment of the process and antagonism toward the plan. The State should pay for what the State thinks is important. The current 100/100 Plan is an improvement over the original concept (pursuant to which the State was to pay for 75 percent of everything, including administration), but it is still an unfunded mandate, and is still a bad idea – no matter how good the idea being funded. (**31 TAC 355**)

4. Modification of Demand Numbers. Modification of demand numbers should be allowed further into the planning process. Demand errors may not be discovered until the supply-demand analysis is performed. Demand tables should also show different numbers based on different growth and population scenarios. The manner in which the irrigation and livestock demand numbers increase during drought scenarios is inappropriate because other factors influence the demand. For example, during a drought in Far West Texas, livestock are sold, thus reducing the overall demand on groundwater. There needs to be a better understanding of the process of how livestock, drought and water demand interact, and this understanding needs to be reflected in the demand numbers. (Demand Projections)

5. Needed Funding for Data Collection in Rural Areas. Rural areas need to be able to access State funding to gather the information needed to draft a substantive regional plan. This funding is needed for test wells, monitoring equipment, observation wells, modeling, and to obtain more data on the West Texas aquifers. Specific data-need recommendations for the rural areas are included in the "Data Needs" section. The FWTWPG should be allowed to request additional funding for the data needs and contract for the studies. (**31 TAC 355; Supplies/Availability**)

6. Plan Implementation. Implementation of the plan's recommendations must be the responsibility of the local governments, entities, and individuals within the region. The Water Planning Group is not intended to assume a supervisory or command-and-control role. The Water Planning Group's

function will be to monitor implementation and assist the local governments, entities, and individuals within the region as requested. (**WMS**)

7. State Mandated Water Planning. State mandated water planning for this region began in 1999. The water plan to be completed in 2011 will be the third round of planning. The details of water planning in this region are not changing dramatically over five year periods. Funding is needed for the implementation of the water supply projects presented in the Water Plan. (simplified planning, others?)

8. Regional Planning Cycles. Conclusions of regional planning cycles should not overlap with legislative sessions. In the current water planning cycle, the Initially Prepared Plan is due one day after the regular session closes. This makes informed and current water planning extremely difficult, as numerous water bills (e.g. SB 3) are pending that could impact regional water planning and that likely will not be resolved until the 11th hour of the session. Regional water planners should not be put in the untenable position of either having to divine the future of water law or to rely upon statutes that may change literally the day after our plan is turned into the state. Additionally, many voting and non-voting members of the FWTWPG are involved with the legislative session. Every interest represented on the FWTWPG is affected by the session, and many voting and non-voting members (especially our legislative representatives) spend all or much of the session in Austin. As a result, several of our members have difficulty even attending meetings during the session due to their legislative commitments on water and other issues. If the State wants the best regional water plan possible, then structuring the bulk of regional water planning (the final 3-6 months per planning cycle) around legislative sessions will allow greater participation of our voting and nonvoting members and also ensure that the current state of water law is known and can be applied effectively by the FWTWPG. (Adoption and Submission of RWP)

9. GMA Cycles. Another related issue is with the need for better coordination in the planning activity cycles related to the timing of due dates in the Groundwater Management Area (GMA) process, groundwater conservation district management plans, and regional and state water plans. The *managed available groundwater* (MAG) volumes determined in the GMA process for each aquifer are to be incorporated into groundwater conservation district management plans, and will be required in the regional water planning process of assessing water supply availability during the next regional planning period (2011-2016). By rescheduling the due dates in the GMA process, MAG data can be better integrated into the overall state water planning program. The following table provides a suggested timeline for coordinating the interrelated water planning functions. (Submission of plans)

Planning Process	Current Due Dates	Next Planning Cycle Due Dates	Proposed Due Dates
GMAs set DFC	2010	2015	2013
TWDB establishes MAG	2011	2016	2014
GCD Management Plans	Various*	2017	2015
Regional Water Plans	2011	2016	2016
State Water Plans	2012	2017	2017

Proposed Planning Schedule

Region F:

1. That groundwater supply available to implement regional water supply strategies within the boundaries of the region's groundwater conservation districts will be projected groundwater supply based on the districts' management goals and regulatory requirements. (Availability/WMS)

2. That no strategy for export of groundwater from a groundwater conservation district or from the region will be adopted until a comprehensive plan is in place to assure retention of adequate supplies of water within the district or region to protect existing economic enterprises including agriculture and support the foreseeable population growth and economic development so long as the groundwater conservation district or region applies the same rules and conditions, including fee structure, to both the proposed water exporter and all groundwater users residing within the borders of said district or region. (WMS)

3. That all persons or entities seeking to export a significant amount of water from a groundwater district must submit notice of their plan to the affected GWD and the Regional Water Planning Group. (Public Notice Requirements)

4. All state agencies with land within groundwater conservation districts must be subject to groundwater district rules and production limits, and must submit plans for withdrawal of groundwater to the relevant Regional Water Planning Group for consideration. (**Public Notice Requirements**)

5. The region also recognizes that the state has groundwater resources associated with state lands that may or may not be governed by local groundwater districts. Region F encourages the state to review its groundwater resources on all state owned land and how those resources should be managed to the benefit of all of Texas. (**supplies/availability?**)

6. *Planning Schedule*. The current 5-year schedule for joint groundwater planning is not synchronized very well with the 5-year schedule for developing the State Water Plan. The *managed available groundwater* (MAG) volumes determined in the GMA process for each aquifer are to be incorporated into groundwater conservation district management plans, and will be required in the regional water planning process for assessing water supply availability during the next regional planning period (2011-2016). By modifying the due dates in the GMA process, MAG data can be better integrated into the overall state water planning program. The following table provides a suggested timeline for coordinating the interrelated water planning functions that will provide a more synchronized and orderly development of planning information.

Planning Process	Current Due Dates	Next Planning Cycle Due Dates	Proposed Due Dates
GMAs set DFC	2010	2015	2013
TWDB establishes MAG	2011	2016	2014
GCD Management Plans	Various*	2017	2015
Regional Water Plans	2011	2016	2016
State Water Plans	2012	2017	2017

* Currently local plans are submitted on staggered 5-year intervals; because the MAGs will be issued in 2011 most GCDs will be resubmitting their plans in 2012

(Plan adoption and submission)

7. In addition to the coordination of the different components of the planning process, the Region F Water Planning Group questions the need and expense for planning updates every five years. In Region F, there are few options for new water supply, and the region is not experiencing rapid grow or changes in population or demands. As a result, few changes are expected for future water supply plans. Region F requests that the TWDB review the frequency for plan updates and allow the regions the option to adopt an existing water plan to meet the legislative requirements for 5-year updates if there are no significant changes to the region's recommended water management strategies. (Simplified Planning)

8. Allow Waivers of Plan Amendments for Entities with Small Strategies. Region F recommends that the Texas Water Development Board allow waivers for consistency issues for plan amendments that involve projects resulting in small amounts of additional supply. (**Plan consistency**)

9. Coordination between TWDB and TCEQ Regarding Use of the WAMs for Planning The TWDB requires that the Water Availability Models (WAMs) developed under the direction of TCEQ to be used in determining available surface water supplies. The models were developed for the purpose of evaluating new water rights permit applications and are not appropriate for water supply planning. The TWDB and TCEQ should coordinate their efforts to determine the appropriate data and tools available through the WAM program for use in regional water planning. The TWDB should allow the regional water planning groups some flexibility in applying the models made available for planning purposes. (supplies/availability)

Region G:

None directly related to 31 TAC 355, 357, 358 rule revisions.

Region H:

1. Clarify the agency rules to address consistency with the regional water plans.

Discussion: Water rights applications must be consistent with the Regional Water Plans in order to be approved. The TCEQ has interpreted this to mean that the requested water right must be directly linked to a recommended water management strategy; otherwise, the applicant has had to petition the Regional Water Planning Group (RWPG) for a plan amendment to add their permit application. RWPGs should not be required to formally adopt or amend the regional plan to include a proposed management strategy for water supply in order for new water rights applications to be evaluated by the TCEQ. This creates a situation that can deter the study of viable alternatives by agencies outside the RWPG and may ultimately block their ability to obtain permits for new supplies that the agencies need to meet their future demands. These alternatives may be preferable to existing management strategies (such as building reservoirs) that were previously recommended by the RWPG. A water right application that is not in conflict with the regional water plan (i.e., does not compete for supply allocated in the plan) should be considered consistent with the plan by the TWDB and TCEQ. If the strategy would benefit the region, it could then be added to the plan as a formal management strategy in the next five-year update, undergoing the full analysis, consideration, and Public Hearing process.

Recommendation: The Region H Water Planning Group recommends that the Agency rules be amended to clarify the consistency requirement. Only those water rights applications in conflict with the current regional water plan should be referred to the RWPG for amendment. (**Plan Consistency**)

2. Clarify the agency rules to quantify environmental impacts.

Discussion: The Regional Water Planning Guidelines require that the evaluation of potentially feasible water management strategies include a quantitative analysis of environmental factors including effects on environmental water needs, wildlife habitat, cultural resources, and effect of upstream development on bays, estuaries, and arms of the Gulf of Mexico (31TAC357.7.(a)(8)(A)). The TWDB has provided detailed guidance on specific study methods to be used in determining population, water demand, socioeconomic impacts and yield from current and proposed supply sources, but it has not provided similar guidance in the area of environmental impacts. This lack of specificity is resulting in different methods being used in different regions. Additionally, it places the planning groups at risk of needing to conduct additional analysis after state agencies review the Initially Prepared Plans, and add those results to the report after the public review period has closed.

Recommendation: The Region H Water Planning Group recommends that the TWDB determines, in conjunction with the TCEQ and TPWD, which specific environmental studies and analysis are required for each category of management strategy (i.e., new water right, new reservoir, etc.). Furthermore, the guidance should be added to the Planning Guidelines, so that RWPGs can reflect the cost of those requirements in their budgets and scopes of work. Adding environmental guidelines will also make water plans consistent across the State. (**WMS**)

Region I:

1. Flexibility in Determining Water Plan Consistency. The ETRWPG is concerned that small cities and unincorporated areas that fall under the group of "county-other" may not have specific water needs and water management strategies identified in the regional water plan due to the nature of aggregating these entities. As such there is concern that these entities may not be eligible for state funding assistance. The ETRWPG is also concerned that there is sufficient flexibility in identifying and implementing water management strategies as it pertains to permitting and funding such projects. Water suppliers need to have a full range of options as they seek to provide new water supplies for Texas' future. It is impossible to foresee all the possibilities for new water supplies in a planning process such as this, and changing circumstances can change the timing, amounts and preferred options for new supplies very quickly. The inclusion of alternate strategies in regional water planning is the first step in providing this flexibility. In addition, the ETRWPG recommends that the following steps be taken to address these concerns.

• The TWDB should add language to their guidance for funding that allows entities that fall under the planning limits to retain eligibility for state funding of water related projects without having specific needs identified in the regional water plans.

• The TWDB and the TCEQ should interpret existing legislation to give the maximum possible flexibility to water suppliers as they seek to serve the public and

provide new supplies. Changes in the timing of supply development, the order in which strategies are implemented, the amount of supply from a management strategy, or the details of a project should not be interpreted as making that project inconsistent with the regional plan.

• Willing buyer/willing seller transactions of water rights and treated water should not be controlled by this regulation. Such transactions may be beneficial to all concerned and may simply not have been foreseen in the planning process.

• The TWDB and TCEQ should make use of their ability to waive consistency requirements if local water suppliers elect strategies that differ from those in the regional plan. (**Plan Consistency**)

2. Environmental Flows. Texas is currently in a process of identifying and recommending instream flows for the 23 river basins in Texas. The Neches and Sabine River Basins are two of the first basins to begin this process. The ETRWPG acknowledges the importance of these studies for the future of its water resources and supports the efforts of the various advisory teams and stakeholders in this endeavor. The ETRWPG also recognizes the need for water for growth and economic development. There is concern among local water rights holders that a significant portion of their water supply could be reallocated to meet instream flow demands. The ETRWPG recognizes that future flow conditions in Texas' rivers and streams must be sufficient to support a sound ecological environment that is appropriate for the area. However, the ETRWPG believes it is imperative that existing water rights are protected. In addition, SB 2 and SB 3 processes that relate to environmental flows should be closely coordinated with the SB 1 planning effort, involving regional water planning. (Supplies/WMS)

Region J:

1. Require Participation of State Agencies Involved with the Planning Process

Representatives of State agencies involved in the regional planning process could effectively derail a regional plan at the end of the planning period - without attending as much as one meeting. The PWPG recommends that nonvoting members of State agencies be required to attend and provide input at every planning group meeting. If an agency's nonvoting representative does not contribute or fails to attend meetings, then that agency should not be permitted to object to or alter contents of a planning group's adopted plan. It should be noted that TWDB and TPWD staff were very active (and much appreciated) in the Plateau Region planning process. (**RWPG Membership**)

2. Training for New Regional Water Planning Group Members

The TWDB is encouraged to continue providing training opportunities for new planning group members. Planning group members provide better input to the planning process when they fully understand the requirements, schedules, and the multitude of internal components of the regional plan. (Not a rules provision, but continued section practice.)

3. Irrigation Surveys

Irrigation application is the largest use of water in the State, yet its quantification is probably the least accurate. Irrigation use is only being accurately determined in areas where groundwater conservation districts are requiring the installation of irrigation well flow meters and where

irrigation districts record surface water diversions. Elsewhere, planning group members directly involved in the agricultural industry have viewed irrigation surveys with skepticism in many counties. Nursery farms, greenhouse operations, wildlife and exotic animal food plots, and non-municipal golf courses are just a few of the irrigation activities that are often overlooked in the surveys. The TWDB is encouraged to develop a more confident means of estimating actual irrigation use. (Water demands)

4. Transient Population Impact on Water Demand

Municipal water use reports capture the total amount of water produced and distributed by the city. In concept, this volume includes water consumed by both permanent and transient populations within the community. However, the counties of the Plateau Region have a high transient influx of vacationers and hunters that frequent the more remote areas and are not likely included in the water demand estimates. Likewise, there are a high percentage of second-home owners in the rural counties that is also not accounted. Officials in the most rural counties in the Region estimate that as much as 70 percent of landowners are not permanent residents. This transient water demand likely has a significant impact on water demand estimates used by the planning group. The PWPG encourages the TWDB to consider this water-use category and develop a method for estimating its impact. (Water Demands)

5. Peak-Use Management

Drought management plans need to be developed based on peak use demand instead of annual production capabilities. The current Plan is based on drought-of-record conditions on an annual basis. While this is a good starting point in the planning process, it would be beneficial to also plan based on peak demand during a year. For example, current planning does not address water needs during the peak use period of summer months. During the summer, in many areas of the State, severe water problems may exist that are not apparent based on an annual water management plan. This results in a plan that may indicate that water supply needs are satisfied for a region, when in reality such needs may not be satisfied throughout the year. This presents a significant problem in the current planning process. (Water Demands)

6. Development of Better Methodologies for Estimating Population and Water Demand

The revision of population and demand estimates should be discussed by regional water planning groups and put before the public for several months, and then be presented to the planning groups for consideration and adoption. This will allow more time for water users within the region to hear about the planning effort and to have input to the revisions of population, water demand, and water supply. Modification of demand numbers should be allowed further into the planning process. Demand errors may not be discovered until the supply-demand analysis is performed. Some entities or water-use categories may have been overlooked early in the process and their demands need to be added later for the supply-demand analyses to match. (Water Demands)

Region K:

1. Texas Legislature and TWDB – The LCRWPG encourages the continued support for efforts by the TWCAC to develop consistent methodology for calculating GPCD or any other measurement that can successfully track water use and water savings over time. (Water Demands)

- 2. The LCRWPG continues to support action by the State to provide for the integration of water quantity (supply) and water quality planning. The TWDB, and the TCEQ should work to coordinate the regional planning process with the Texas Clean Rivers Program, which is a partnership that uses a watershed management approach to identify and evaluate water quality issues. The RWPGs are considering water quality issues during this revision to the plan and continued coordination with the Texas Clean Rivers Program is desirable. (supplies, WMS impacts)
- 3. The LCRWPG supports action by the State to structure the planning process to include environmental needs in order to get a clear picture of the amount of available water resources for all users. Environmental needs and water supply strategies should be planned for just like Agricultural, Municipal, Industrial and other uses in the state. (Water Demands)

Region L:

- 1. Water Use Information: The SCTRWPG recommends that TWDB improve the water use information for irrigation and livestock watering categories. (Water Demands)
- 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. (WMS)
- 3. 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 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. (Projections Legislative direction but what can TWDB modify?)
- 4. 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. (**Plan format**)
- 5. **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. (**WMS**)

6. **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.

Region M:

- 1. The State of Texas should consider factors other than merely population in funding the planning process in Region M because of the unique circumstances (i.e., 1944 Treaty, lowest rainfall, high tourism rates, high immigration rates) affecting water supply in the area. (??)
- 2. The State should consider revising population for future planning rounds based on the most recent data available, including census data. (**Projections**)
- 3. The State should consider revising its methodology towards Water User Groups that serve populations in more than one city, town, village, or unincorporated area. Further, the plan should only include Water User Groups that actually provide potable water to the populous. In the previous Regional Plan, population and water demand figures for Water Districts and Water Supply Corporations and the cities they serve were listed individually. Specifically, North Alamo Water Supply Corporation, East Rio Hondo Water Supply Corporation, Military Highway Water Supply Corporation, Valley Municipal Utility District No. 2, and Laguna Madre Water District had population and water demand projections, as did the cities they serve. This arrangement created confusion, and in some cases, double counting. It is proposed to list the population and water Supply Corporations as subsidiaries of these Districts/Corporations as opposed to individual WUGs. This will allow the Regional Plan to more accurately establish population and water demand figures. (Projections)
- 4. The State should fully fund the revision and update to the Water Availability Model to include data up to the year 2005, thereby allowing for the full investigation of a potential drought of record in the region from the late 1990s to the early 2000s. (**Supplies/Availability**)
- 5. The State should consider the impacts of climate change in terms of Regional Water Planning and future water supplies. (**Supplies/Availability**)
- 6. The State should continue considering the allocation of Rio Grande flows upstream of Ft. Quitman in terms of treaty compliance. (**Supplies/Availability**)

- 7. Accounting of water between the United States and Mexico pursuant to the 1944 Treaty should be consistent with the 1906 Convention, which provides that all waters measured at Fort Quitman, Texas, are 100 percent allocated to the United States. This is recommended by the "Special Study No. 1: Evaluation of Alternate Water Supply Management Strategies Regarding the use and Classification of Existing Water Rights on the Lower and Middle Rio Grande." (Supplies/Availability/WMS)
- 8. One possibility for maintaining and increasing environmental flows is the purchase of Rio Grande water rights by an environmental entity. Deposited in a trust, these water rights could be managed to produce sufficient flows throughout the region. However, this option may not be viable because of the current water rights purchase and transfer structure. In addition, because of the WUG format currently being implemented by the TWDB, no option exists to formally allocate projected water supplies for environmental use. Environmental flows in the Rio Grande could be included as a separate WUG in the next round of regional planning to ensure minimums would be met in a manner consistent with all other WUGs. (Demand projections)
- 9. The State should amend the planning process to allow for treating each irrigation district within the region as a WUG, rather than as part of "County-Other," in order to allow for development of individual water management strategies for the districts. (**Demand projections**)

Region N:

 The TWDB is urged to consider local mining projects (such as natural gas from the Eagleford shale) when developing mining water demand projections in the future for regional planning. The TWDB is urged to provide guidance on how planning groups should address local mining water projects, especially those associated with gas production from the Eagleford shale or other projects with variable, and often indeterminate production timelines. (Demand projections)

Region O:

- 1. The 2011 Llano Estacado Regional Water Plan completes the third round of regional water planning. After three rounds of planning, we have reached a point of diminishing benefits in the recognition that the 2011 Llano Estacado Regional Water Plan is primarily an update of the 2006 plan. We believe the planning process needs to be expanded to allow for the evaluation of additional region-specific planning options. This change will allow planning groups to participate more directly in the development of the most likely future supply and demand projections for the region. The current procedure requires the planning groups to focus on closing hypothetical gaps between projected water demands and supplies at various points in time, but when the group does not agree with the projections provided by the TWDB, the experiences of the past planning cycles have greatly improved the ability of the LERWPG to participate in the discussion of realistic forecast scenarios. (Planning methodology)
- 2. The next round of water planning must incorporate the desired future conditions (DFCs) that are adopted for the Groundwater Management Areas (GMAs). After the Managed Available

Groundwater (MAG) amounts are set, the GMA policies will establish the distribution of that supply over the DFC time period. That distribution of supply will replace the current projections of groundwater supply in the 2011 plan. Obviously, any changes in the planning process need to be identified early in the planning cycle to allow the RWPGs the maximum time to consider the options that best fit their regional needs. Since changes to the planning process do not require legislative action, we recommend that this review proceed now with a goal of having a revised planning process defined by the end of 2010. (supplies, planning methodology)

3. The LERWPG recommends that the planning process be reviewed by a representative stakeholder group made up of planning group members from across the state, and then revised to better capture region-specific characteristics throughout the planning process. Possible revisions may include more alternative scenario analysis on both the demand and supply side of the process. Changed conditions resulting from the potential impact of climate change and policy changes such as those made through the 2008 Farm Bill may have dramatic affects on the Llano Estacado Planning Region, and as such, should be a more fundamental component of the planning process than currently allowed. (planning methodology)

Region P:

1. LRWPG recognizes the importance of inter-regional coordination efforts in order to maintain consistency among regional plans in situations where activities in one region may impact water availability or project needs in other regions. As population growth and other development activities increase over time for much of the state, multi-regional issues and the ability of regions to cooperatively use resources will be of increasing importance. The Group recommends that the State recognize the importance of these multi-regional issues and support a greater role for inter-regional coordination in future planning rounds. (planning methodology)